



VICIOUS CIRCLE DUE TO INFORMAL LENDING: EVALUATING THE EFFECT OF HIGH-INTEREST RATE CREDITS ON THE GROWTH MATRIX OF INDIAN MSMEs

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Abstract

Purpose: This research work intends to know the effects of high interest rates of credits from the informal sector of finance. The impact of high interest rates is being observed on the growth matrix of “micro, small, and medium enterprises (MSMEs).” And also, in the absence of digital footprints and proper documentation records, difficulties are being faced by MSMEs to take credit from formal financial institutions. Various government initiatives are also being introduced to solve the problem of financial exclusion for MSMEs.

Methodology: This work is based on descriptive analysis, and data is being collected from secondary sources. Those secondary sources of data include prior literature work already done, RBI circulars, the MSME dashboard database, the Udyam registration portal database, SIDBI pulse reports, RBI UK Sinha committee reports, and the MSME newsletter.

Findings: The results indicated that depending on the informal credit financing method turns out to be a “survival tool” rather than a “growth tool.” This situation places MSMEs into a “vicious circle” where interest rates on credits from informal sectors are ten times higher than the formal sector of financing at their benchmark rates. These high credit costs are named as “geographical cost” due to the reasons of monopoly rent and risk premium. And situations like these are more visible in underserved areas where the cost of informal interest reaches up to 36%. Further, the problem of “collateral crunch” is being mitigated by the cash-flow-based financing and CGTMSE guarantee that offers up to 90% of the amount, protection against the default.

Contribution: This study contributes to the understanding of problems that are being faced by MSME enterprises during fund collection, offering actionable insights for government policymakers and MSME owners aiming to foster their economic growth. It provides information regarding addressing the barriers faced by enterprises in the acquisition of funds from the informal sector and the unavailability of credibility as per formal lending institutions.

Keywords: Informal lending, “MSMEs (micro, small, and medium enterprises)”, formal lending structure, high interest rates, business growth, informal lending trap, regulatory environment and growth.

INTRODUCTION

“MSMEs (Micro, Small, and Medium enterprises)” are an important pillar of our Indian economy. Micro, small, and medium enterprises are categorized as per their own specific limits of investment, and those limits are being shown in Figure 1, which shows the current limit of investment and turnover limit. Through this it can be categorized in Micro, Small and Medium enterprises.



Figure 1 MSME investment and turnover limit

Current MSME classification (Effective April 1, 2025)

Enterprise Category	Investment Limit	Turnover Limit
Micro Enterprises	Up to ₹2.5 crore	Up to ₹10 crore
Small Enterprises	Up to ₹25 crore	Up to ₹100 crore
Medium Enterprises	Up to ₹125 crore	Up to ₹500 crore

Source: (Small Industries Development Bank of India (SIDBI), 2025) ⁸⁹

The maximum number of employments is being generated from this sector. They are the major contributors towards our Indian GDP. MSMEs contribute 30.1% of India's GDP, 35.4% of manufacturing, and 45.73% of exports in our country (Press Information Bureau (PIB) Mumbai, 2025). Even after contributing this much to the Indian economy, MSMEs still remain on the backstage during the access of funds from formal sectors because of the absence of digital footprints, documentation records, and lack of immovable or movable property for collateral security. This is the reason enterprises are trapped in the vicious circle of acquiring loans at high interest rates and earnings are being utilized in paying off those hefty amounts of loans.

Amid the growing concern of financial inclusiveness for MSME sectors .The government has introduced various initiatives for their growth opportunities that include MSMEs getting registered in Udyam registration, GeM (Government e-Marketplace), TReDS (Trade Receivables Discounting System), and PM Vishwakarma to provide credit support of 1 lakh + 2 lakh at a concessional rate of 5% (Press Information Bureau (PIB), 2026)⁸⁸. As discussed in the work of (Malcom Athaide, 2020)⁸⁸, the MSMEs face a distinct problem of a 'financing gap' because of high interest rates charged by informal lenders. This process is followed because of acute information asymmetry; because these enterprises often lack formal accounting documents, digital footprints, and collateral properties that are shown as 'informationally opaque.' This opaqueness causes credit rationing by formal banks, leading MSMEs to accept high-interest informal credit for their survival and to bridge their funding deficits.

The Micro, Small, and Medium Enterprises (MSME) sector serves as a vital pillar for India's socio-economic development, significantly contributing towards industrial output and employment; still, it remains underserved by formal financial institutions. Macro-level initiatives are expanding the reach of formal banking services, yet a “backstage” problem exists. Firms are facing a credit rationing problem in the acquisition of funds because of inherent limitations and institutional rigidity (Devmurari, 2026)⁸⁸. In the work of (Chitsimran, 2022)⁸⁷, it was discussed that even though there is a revolutionary role of MSMEs in developing economies, there is a dual-sided struggle. Enterprises find it difficult to obtain formal credit from financial institutions, and banks as well are concurrently finding it risky to lend to the sector. This will create a ‘deadlock’ in between them. And because of the formal credit gap, MSMEs are forced to rely on the acquisition of funds from the informal sector. The author argues that this is not a healthy option, as high-interest loans lack regulation, and it will also hinder long-term growth rather than supporting it. One major hindrance is that there is a lack of information about SME borrowers, causing them to be less reliable for formal financial sectors on loan disbursement. Whereas Figure 2 shows that the risk perception of lenders will decrease if there is a proper collateral registry being done for immovable assets. And these immovable assets are being held by MSMEs.



Figure 2 Effect after the collateral registry

Figure 3. Banks' lending to MSME prior to the introduction of the registry.

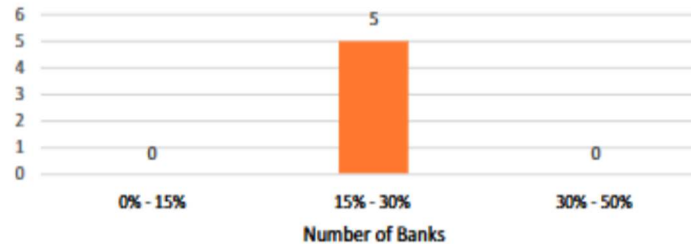


Figure 4. Banks' lending to MSME after the introduction of the registry.

Source: Authors' Calculation based on Survey responses, 2020



based on Survey responses, 2020

Source: Adapted from "The effect of a movable collateral registry on MSME access to finance: Evidence from Malawi".

In the work of (Pendame & Akotey, 2023)⁸⁸, the primary obstacle identified in the formal credit market is the “dead capital” being held by small enterprises. Their valuable assets are seen as economically invisible because of institutional barriers. The problem lies in the traditional banking sector's reliance on fixed collateral security for credit disbursement, especially immovable assets such as land and buildings. And these immovable assets are hardly possessed by MSME sectors, thus creating an inherent bias for small-scale borrowers. To bridge this particular gap, the author proposes an institutionalization of a movable collateral registry as a solution. That will allow MSMEs to take advantage of “movables”—such as taking credit on equipment, inventory, and receivables. Figure 2 shows that the registry significantly reduces the risk perception of formal lenders, which will lower the entry barriers for small-scale firms and will also provide a sustainable alternative to high-cost informal credit.

LITERATURE REVIEW

In the work of (Adewuyi, et al., 2023)⁸⁷ show that underserved populations can be financially included with the help of the integration of artificial intelligence (AI) and data analytics. In traditional credit scoring, due to a lack of financial histories of small businesses, these small businesses were excluded from access to finance in the emerging market itself. But in the case of AI-driven models, these models include mobile phone usage, social media activity, e-commerce behavior, utility payments, and geospatial data; with the help of these, new landscapes are being built for the credit assessment. With the help of these models, dynamic credit scoring is done on a real-time basis with more accuracy. This helps in precision, speed, and scalability of credit assessments and helps in reducing operational costs, increasing financial outreach, and democratizing access to funds. The inclusion of AI and data analytics can help bridge the gap for credit access, enhance financial equity, and also help to drive inclusive economic growth.



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(Bekti, 2024)⁸⁷. This study is about micro, small, and medium enterprises, which we will call MSMEs. MSMEs need three things to grow: money to help them support new ideas and rules. When MSMEs get money, they can use it to try new things and make their businesses bigger. Also, if the rules are good, it can really help them grow faster. The study found that when MSMEs get money to try innovative things and have good rules, they are more likely to get bigger.

(Choudhury & Goswami, 2019)⁸⁷. This journal article examines the lack of access to funding for micro, small, and medium enterprises (MSMEs). It reviews MSMEs' role in economic development and examines the main obstacles and the factors that contribute to them. The study identifies key reasons behind these challenges to MSME growth. MSMEs often struggle to get financial credits from formal institutions, leading them to rely on the informal lending sector. However, depending entirely on informal sources is detrimental to their growth. The article also analyzes factors influencing MSME lending, such as market competitiveness, legal frameworks, credit policies, and informational asymmetries concerning SME borrowers, including firm characteristics and size.

(Devmurari, 2026)⁸⁸. This article shows that the financial inclusion of MSMEs is under a relentless financing gap, with an estimation of approx. \$230 billion, primarily because of information asymmetry and also a traditional way of reliance on collateral-oriented lending models. Whereas MSMEs are contributing 30% of India's GDP, still they face a problem of credit rationing that leads small firms to opt for pecking order theory. It makes them rely on internal sources of funds initially, then on informal-based lending rather than subsequently opting for external finance. In this research to bridge this barrier, the India stack, the account aggregator framework, and the DPI are being shown, which will facilitate a shift to cash flow-based underwriting. Along with it, there is still a concern regarding the inclusion-stability nexus, meaning that rapid credit expansion will intimidate financial stability, and also the digital divide suggests that mere access to technology is not enough when firms are unaware about its utilization.

(Joshi & Thakran, 2025)⁸⁸. This paper examines the credit access challenges faced by MSMEs in the Delhi NCR region and assesses their effects on business performance, employment generation, and innovation. To address credit inaccessibility, the paper analyzes the role of financial institutions and the potential of ICT (Information and Communication Technology) to bridge the credit access gap for MSMEs. The study finds that only a small share of funds is provided to MSMEs, despite their major contribution to GDP growth. Government schemes are also underutilized for the benefit of enterprises. ICT-driven adoption will drive growth, but uneven adoption, digital illiteracy, and cybersecurity risks remain significant challenges. This paper highlights the urgent need for simplified lending processes, financial and digital literacy interventions, and integrated policy frameworks that align with traditional banking and fintech innovations.

(Patra & Chhatoi, 2026)⁸⁸. This article is focused on the global landscape of research about Micro, Small, and Medium Enterprises (MSMEs). They had undergone a certain transformation post-pandemic 2020. This paper focuses on the business recovery and sustainability of MSMEs. Prior Bibliometric evidence shows that this field is currently flourishing in developing nations like India and Indonesia and rising as a dominant hub. The academic work has shifted from conceptual and theoretical prior to 2015 towards a more recent prominence on resilience, sustainability, and adaptability. However, those literatures fail to address the immediate financial hurdles, such as operational expense recovery and the threat of financial mismanagement. To bridge a gap from the theoretical to industrial level, this paper is directed towards entrepreneurship in gender inclusivity, impact on workforce dynamics due to digitalization, and also a cross-disciplinary collaboration between academia and industry to encourage innovation-motivated business models.

(Pendame & Akotey, 2023)⁸⁸. This research work explores if the introduction of a collateral registry leads to an increase in the access of funds for MSMEs. As the finding shows, there is only a marginal increase in access to credit. A study shows that real immovable property as collateral and the ability to repay the loan are the major considerations for banks to decide whether to lend funds to MSMEs.



(Gupta, 2025)⁸⁸. The following paper shows the effect of monetary policy on the lending of the SME sector in India along with South Africa. It shows mainly the fluctuation in interest rates. Its main focus is on the monetary transmission mechanism of bank lending. In the findings, this particular research work shows that SME lending is less changeable because of interest rate changes in India as compared to South Africa. And also, enterprises should have proper knowledge of the effectiveness of monetary policy so that it would help to enhance proper access to credit for SMEs.

OBJECTIVES

1. Analyzing the impact of loan borrowing from the informal credit channels.
2. Identifying the reasons for high interest being charged on credit lending by informal credit channels.
3. Evaluating the need for collateral-based lending and proper documentation recordings.
4. Assessing the Financial and structural benefits derived by Micro, Small, and Medium Enterprises by getting themselves registered in the “Udyam Registration Portal”.

METHODOLOGY

In this study, we tried to measure the transition of MSMEs in India for the acquisition of funds from Informal sources to the formal Udyam ecosystem. This research employed a descriptive and analytical approach. We compared the changes in structural and financial models from 2020 to 2026. A comprehensive analysis of secondary sources of information is done.

DATA COLLECTION AND SOURCES

The foundation of a study is based on a thorough literature review. For high validity and reliability, data are collected from secondary sources that include government databases and statutory authorities. The chosen information was:

- **Regulatory Framework:** Official circulars of RBI and RBI’s FAQ on CGTMSE (credit guarantee fund trust for micro and small enterprises) and PSL (priority sector lending).
- **Reports:** RBI’s UK Sinha committee report, MSME SIDBI Pulse report, MSME Outlook survey.
- **National statistics:** Economic Survey, Historical credit patterns in India- NSSO 73rd round report.
- **Live web portals:** Udyam registration dashboard, MSME Samadhaan portal (delayed payment), and MSME Sambandh (Public procurement) portal.

ANALYTICAL FRAMEWORK

The study uses descriptive analysis, to provide insight on the “vicious trap” of informal credits and the final impacts of formalization. The analysis is done by:

- **Comparison between formal interest rates:** comparison is done in between RBI’s repo rates and informal “geographical taxes” and “monopoly rents” in underserved areas.
- **Trend analysis:** To assess the effectiveness of the Udyam Portal, follow the trend of MSME registrations from the 2020 baseline to the May 2026 current scenario.
- **Synthesis Analysis:** Assessing earlier studies (Dutta, 2025)⁸⁸ (Vidyarani & Mallick, 2025)⁸⁹ among others, to understand the shift in perspective from asset-based to project-viability based loan disbursement.

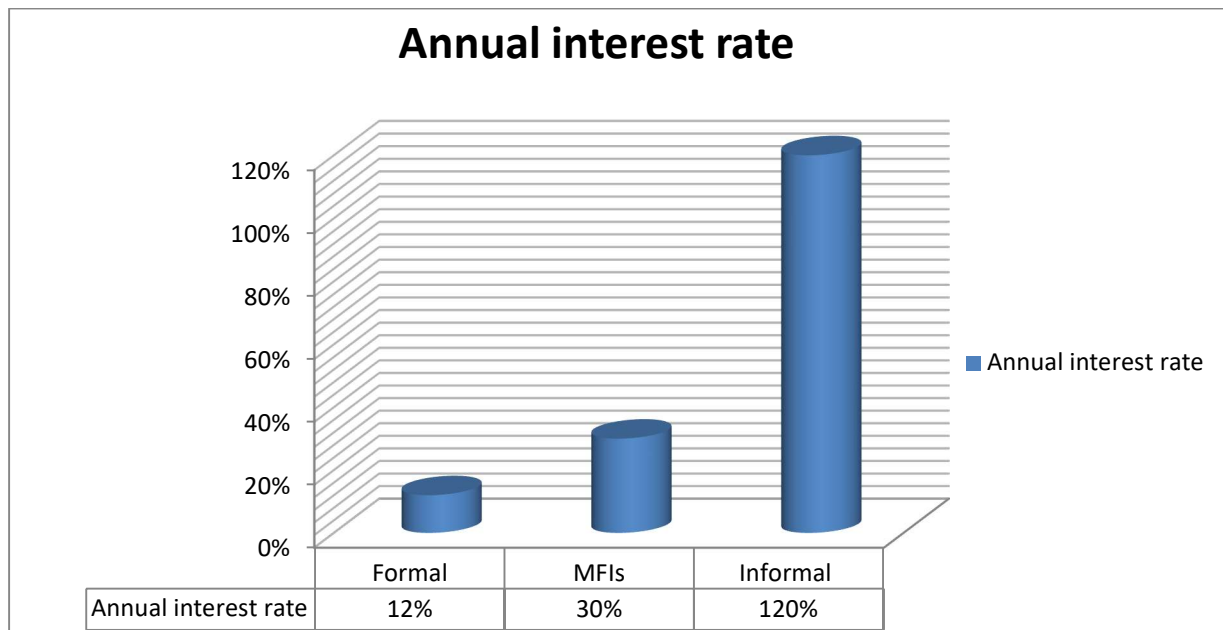


ANALYSIS AND DISCUSSION

Impact of loan borrowing from the informal credit channel

Access to loans is easier from informal sectors as compared to the formal ones. As in the informal sectors, there is less documentation being involved, and due to that, informal sectors charge high interest rates for credit. This is properly being shown in Figure 3. From informal sectors more loans are being disbursed, but they charge interest 10x higher than the formal sectors. Whereas formal sectors grant credit only after proper documentation is being done and due to that their interest rate is also lesser than the informal sectors.

Figure 3 Interest rate charged for availing credit from different sectors



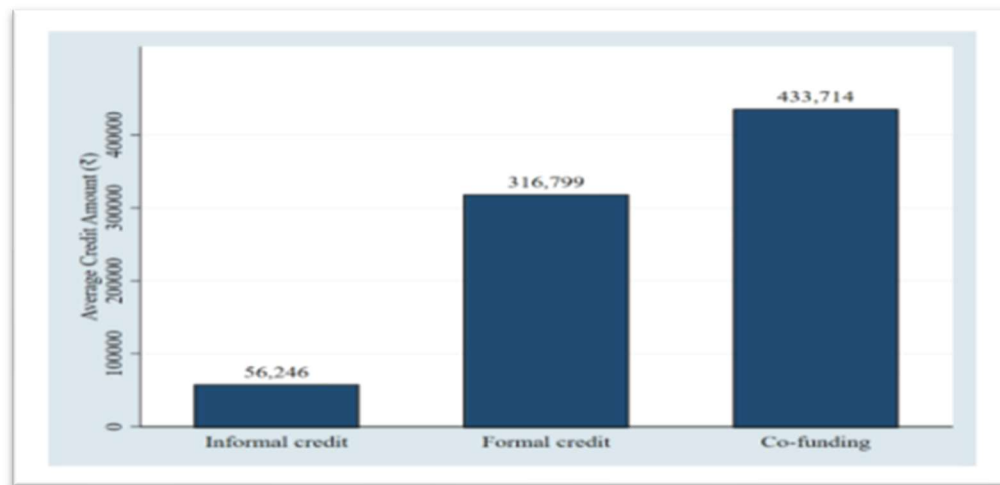
Source: (Dutta, 2025)⁸⁸

As per figure 3, it shows there is a stark disparity in between formal and informal sectors of lending. This serves as a primary reason for the 'vicious circle trap' for borrowers. Formal sector interest rates that are anchored by RBI's repo rate and PSL (Priority sector lending) are in between 8% and 12% per annum, whereas for informal sectors, it operates in a whole different realm. As per the work of (Dutta, 2025)⁸⁸, it was discussed that in Uttar Pradesh access to loans from the formal sector will cause an interest range of about 8%-12%, whereas for the informal sector, even if a loan is acquired from an employer, it will be 10x costlier than the formal sector. This process properly explains that the entrepreneur is working and earning to pay off their interest rate amount rather than for the growth of their business. It explains that informal credit is a 'survival tool' and not a 'growth tool.' Under the heavy weight of informal debt, MSMEs had to undergo a 'distress sale' of their own personal assets (land and jewelry) to pay those interest amounts. As a corrective measure for this informal lending trap, the (Reserve Bank of India (RBI), 2026 (Amended and formally notified on February 9, 2026; effective for loans sanctioned or renewed on or after April 1, 2026))⁸⁸ has amended an increase in the collateral-free credit up to Rs 20 lakh. This approach of the RBI is rather psychological along with financial. It will remove the fear of young entrepreneurs to reach formal banking institutions. This policy signals towards cash flow-based lending instead of 'how much you own'-based. Whereas in the work of (Vidharani & Mallick, 2025)⁸⁹, it shows that the growth of MSMEs will show a positive growth when, instead



of relying on only one source of finance, i.e., rather formal or informal, an enterprise can opt for co-funding. Co-funding is taking credit from both sources' formal and informal sectors. Firms opting for co-funding for loan acquisition show, comparatively, much more growth than the firms opting for loans from one source only. As shown in Figure 4, the amount of credit availed from different credit disbursement forms varies. That are from informal ways, formal ones, and co-funding. This figure shows the maximum amount of credit is disbursed from co-funding, and MSMEs are mainly opting for this form of credit.

Figure 4 Credit availed from the following ways



Source: (Vidyarani & Mallick, 2025)⁸⁹ | Average credit amount by type of credit among MSMEs in India in 2015–16. As per the reports of NSSO 73rd round, the values are based on weighted sampling.

Figure 4 shows the amount of loan taken from the above mentioned sector. And among these loan disbursement forms, co-funding shows the maximum amount of the loan was disbursed. As per the author, firms opting for co-funding get the benefits of both formal and informal, this leads towards the growth of enterprises. So, instead of relying on one source, if credit is taken from various sources, it will distribute the risk and will show the maximum potential of growth.

Reasons for high interest being charged on credit lending by informal credit channels.

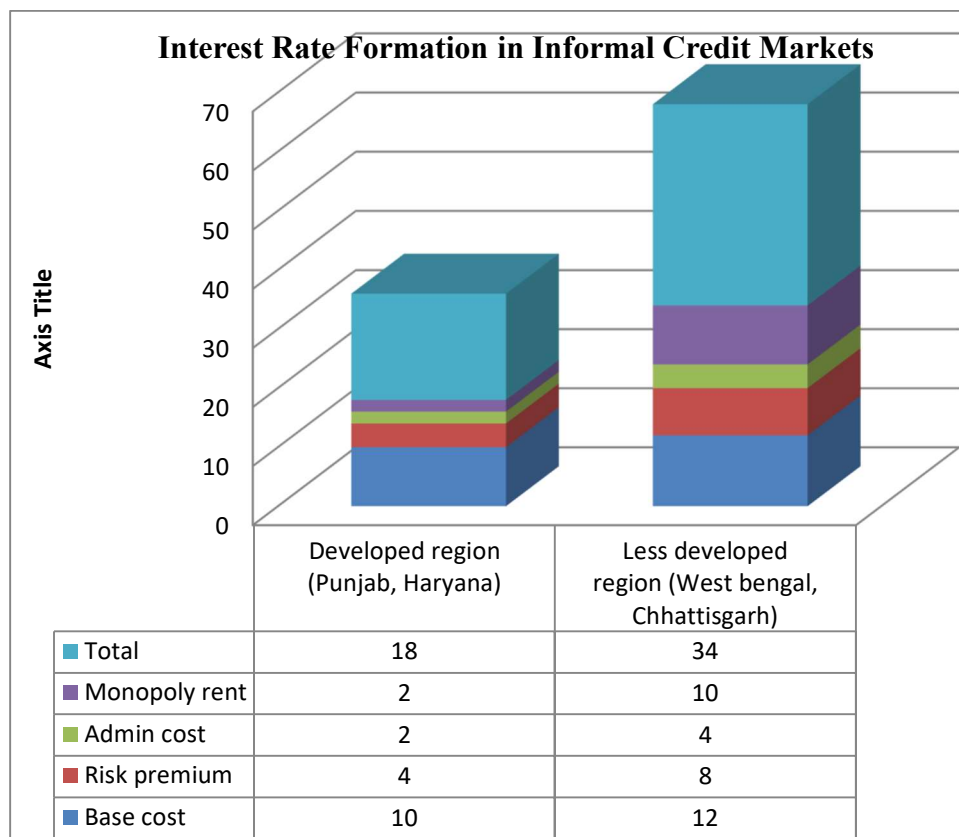
As per (Bhattacharjee & Rajeev, 2010)⁸⁷, interest rates fluctuate due to plenty of reasons. Some of them are mentioned by the author. The author wants to convey that in the informal credit market, interest rate formation is largely a human narration of adjusted risk assessment and leveraged bargaining. In less developed regions, lenders frequently act as monopolists and take advantage of the local credit shortage to impose harsh terms on borrowers who have no other option than to take credit from these informal moneylenders. The use of collateral further demonstrates this power dynamic; lenders in competitive areas view security as a comforting safety net that lowers risk and interest rates. But those in underdeveloped areas might see it as a sign of borrower desperation or even as a chance to seize assets. Because lenders frequently impose a “risk premium” on borrowers they do not know personally or on those whose lack of education keeps them from looking for better markets. Information asymmetry also penalizes the borrowers.

Remarkably, informal lenders may raise their rates in response to the growth of formal banking because they believe that a borrower with more options is at a greater risk to intentionally default on a private debt. In the end, lenders discriminate based on a borrower's social and economic status, giving stable, independent contractors “loyalty discounts” while charging



hefty “urgency premiums” to those whose immediate survival demands prevent them from negotiating. In figure 5, it shows that due to a complete lack of formal banking competition, businesses in less developed regions must pay interest rates that are almost twice as high as those of developed regions, frequently reaching 36%. This graph shows the harsh reality of the “geographical tax” paid by MSMEs. By breaking down the interest stack, we can observe that although the base cost of funds stays comparatively constant, the layers that stand for “monopoly rent” and “risk premium” grow rapidly in underserved areas, indicating a market where local lenders take advantage of the borrower's lack of options. It finally reveals a systematic structural failure: the most susceptible enterprises are left with no option but to endure the biggest capital costs due to their location, signifying that informal loan channels are not only costly; they are predatory in their inefficiency.

Figure 5 Interest rate formation in Informal credit Markets



Source: (Bhattacharjee & Rajeev, 2010)⁸⁷

Need for collateral-based lending and proper documentation recordings

The “collateral crunch” is a structural reality where MSMEs often do not possess the high-value tangible assets, such as urban real estate or industrial land. Traditional banking institutions require backing debt with some collateral to reduce their risk, and it remains a major obstacle to MSMEs accessing formal credit. This lack of assets pushes many business owners into the informal credit trap, where they trade financial transparency for fast liquidity but at high interest rates. However, the (Credit Guarantee Fund Trust for Micro and Small Enterprises (CGTMSE), 2025 (Updated via Circular No. 251/2024-25, effective April 1, 2025))⁸⁷ regulatory structure provides a tactical shift in this story. The RBI has effectively shifted the focus from “asset ownership” to “project viability” by using the CGTMSE (Credit Guarantee Fund Trust for Micro and

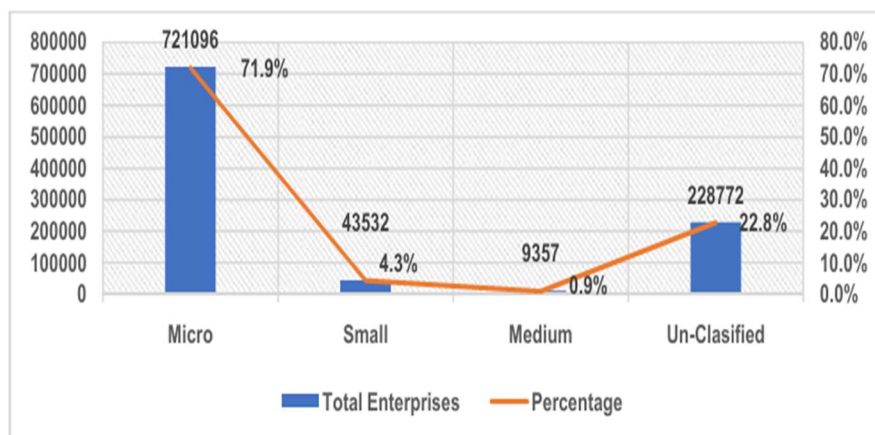


Small Enterprises) and asking banks to ease collateral norms for loans up to RS 10 Lakh. Under this CGTMSE method, the government acts as a proxy guarantee and covers up to 90% of the default risk (Credit Guarantee Fund Trust for Micro and Small Enterprises (CGTMSE), 2025 (Updated via Circular No. 251/2024-25, effective April 1, 2025))⁸⁷. Thus, the key problem for today's MSMEs is no longer the absence of assets but the absence of official financial records and proper documentation, which are now needed to access government-backed, collateral-free finance. As per (Nanyondo, et al., 2014)⁸⁸, the accessibility of proper documentation and the underlying quality of financial statements are essential for small and medium-sized businesses (SMEs) to attract external investment. The reason for this is that the organized documentation of financial data makes it possible for lenders to accurately anticipate the levels of risk and assess the potential viability of loan applicants. The organized and systematic documentation of financial data is a vital link between the company and financial institutions. Maintaining top-notch paperwork is beneficial, because it reduces information asymmetry, which occurs when necessary details are not known to all parties. That reduces the apparent risk for banks and may even reduce the overall cost of financing. Transparent financial statements also give banks the information they need to make informed decisions about cash flows, revenue projections, and collateral.

Financial and structural benefits derived by micro, small, and medium enterprises by getting themselves registered in the "Udyam Registration Portal."

Udyam registration is one of the important pillars of our modern Indian economic policy, i.e., converting the MSMEs from the informal to the formal sector. This is a fundamental change along with the administrative reform. It helps small enterprises to interact with the governmental and financial institutions. As shown in figure 6 and figure 7, the initial implementation of the Udyam portal in 2020 to the established landscape of 2026 from an emerging baseline of 721,096 micro-registrations in 2020 to 78,897,394 units in 2026 signifies a paradigm change in the formalization of the Indian MSME sector. This accelerated growth has led to millions of businesses successfully entering the formal sector as recorded on the (Ministry of Micro, Small and Medium Enterprises, 2026)⁸⁸. Now these enterprises are using the Udyam ID as a "Golden Key" to avail of valuable government assistance. By registering, these enterprises have transitioned from the vulnerabilities of the informal economy to a protected status under the MSMED Act. Now they have statutory rights to priority participation in public procurement through the GeM portal, collateral-free credit through CGTMSE, and delayed payment redressal.

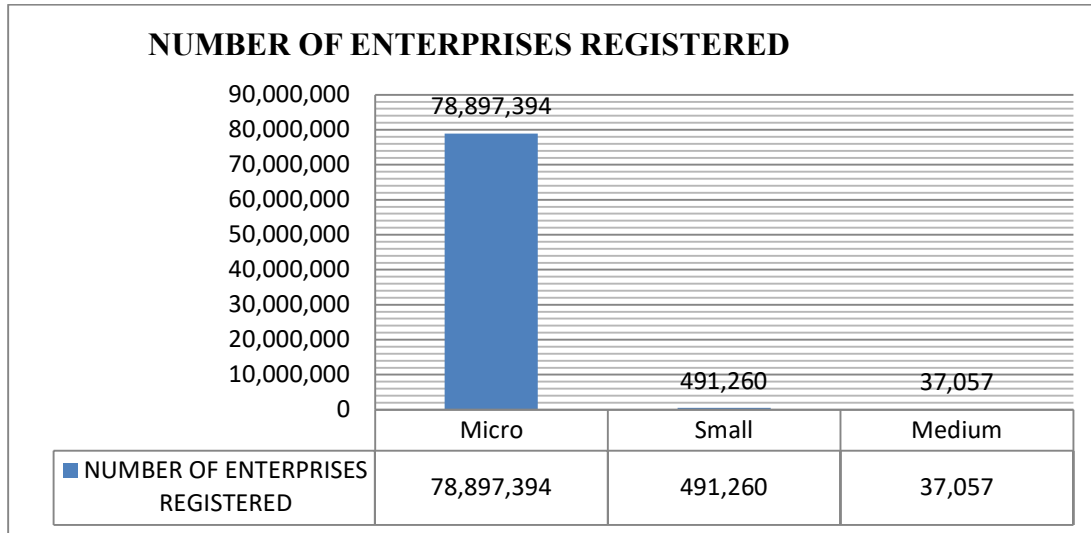
Figure 6 MSMEs registered in initial phase of Udyam registration



SOURCE: (Development Commissioner (MSME), 2020)⁸⁷



Figure 7 No. of MSMEs registered in 2026



SOURCE: (Ministry of Micro, Small and Medium Enterprises, 2026)⁸⁸

Financial benefits and structural benefits derived from Udyam registration:

Government initiatives and policy helped MSMEs to get them registered in Udyam. And through this registration of MSMEs, they can opt for the financial and structural benefits derived from this controlled registration. Some of the benefits are mentioned here:

Financial benefits:

- **Priority sector lending (PSL)** - As per the (Reserve Bank of India, 2025)⁸⁸, it states that for the purpose of priority sector lending to microenterprises. Udyam registration acts as a mandatory tool. This registration will cause the classification of loans under the 7.5% micro-enterprise sub-target. It ensures that registered enterprises can get credit approval faster and also at concessional interest rates. This formalization helps enterprises to move from informal debt with high costs to formalized credit at concessional rates.
- **Credit Guarantee Fund Trust (CGTMSE)**- (Reserve Bank of India, 2025)⁸⁸ Under the CGTMSE scheme of government, registered MSMEs can get a collateral-free loan up to the limit of Rs 10 lakh. Through this third-party guarantee, security of personal assets can be eliminated. It helps entrepreneurs to get funding for their growth and innovation solely based on the registration on Udyam.

Structural benefits:

- **Public Procurement Policy (Sambandh portal)** - (Ministry of Micro, Small, and Medium Enterprises, 2018)⁸⁸ Enterprises registered under Udyam gain access to a reserved market. Under this structural preference, central ministry, state ministry, and PSUs are mandated to acquire at least 25% of their annual requirements from MSEs. Through this structural way, the government tried to ensure a steady B2G (business to government) stream of revenue. It helps small units to compete with large-scale enterprises.
- **Delayed Payment Protection (Samadhaan)**—Udyam-registered entities are empowered legally via the MSMED Act, 2006. This structural shield provides MSMEs with a right to get their payments within 45 days. Through this portal,



MSMEs can recover the amount due with triple the interest rate that is being charged by the RBI. (Ministry of Law and Justice, 2006)⁸⁸ With the help of the Samadhaan portal, liquidity of small businesses will remain protected, causing timely cash flow and lowering operational risk.

LIMITATIONS OF THE STUDY

The major shortcoming of this study is that it heavily relies on secondary sources of data. This implies that outcomes might not be able to provide insights on the required level of analysis. The work was carried out using prior research work, government records, and the Udyam portal. Thus, the precision and accuracy of the data are acquired by the primary sources, i.e., the MSME ministry or NSSO, and this will show how reliable these findings are.

Likewise, primary qualitative data from MSME owner's interviews and fieldwork is not included. The lack of primary data from "the ground level" shows that there are some real-world issues. These issues restrict entrepreneurs in their activities, and it remains invisible. Even theoretical advantages of formalization have been properly stated throughout this article. But one can argue that without a direct viewpoint, it is difficult to fully understand the social and economic limitations on formalization.

Further, the study's geographical homogeneity fails to take into consideration of the unique characteristics of India's industrial environment. No detailed comparison is done between states; even problems like geographical tax was identified in Uttar Pradesh. This is an important shortcoming, as each state and its specialized industries have different level of formalization.

Finally, the issue of personal selection bias arises for the selection of digital data collection from Udyam portal dashboard. Enterprises that want to get formalized and are having some level of digital literacy gets unnoticed. Due to their lack on digital registration, these underprivileged and "deeply informal" enterprises are, as a result, "digitally invisible".

FUTURE SCOPE OF THE STUDY

Further research can be done by employing both qualitative and quantitative methods for thorough study. The true picture of the study can be presented through interviews and surveys of MSME owners along with the study using secondary data sources. In order to assess whether programs like PSL and CGTMSE are beneficial of enterprises, primary data collection is must.

Moreover, many possibilities exist to know how formalization affects different MSME environment subsectors. Future researchers may use more sector-wise approach, like the impact of formalization on high-growth startups, handloom sectors, and food processors. The current study is done on broader aspect of MSME. These sector-wise assessments are important to identify whether they need any particular treatment as industry-specific or the same as any other industry.

Also, future work can be done on identifying the relationship between online registration and creditworthiness of enterprises. For this, further research can be done by monitoring enterprises for five to ten years to determine whether registering in Udyam will enhance their credit score.

In the context of emerging technologies, AI's role together with auditing technologies should be studied. This will help to identify and rectify the delayed payment issues. And before the issue gets on the Samadhaan portal, it will get resolved in enterprise itself.

Subsequently, it is necessary to analyze the educational and psychological barriers to adoption, specifically the mediation effect of digital literacy. In this scenario, future work can be done to identify whether the extent of digital competence held



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by rural entrepreneurs serves as an important mediator between government policy announcements and the successful adoption of platforms like Udyam. This will serve as necessary information to policymakers on how to integrate the current digital technology with human-based capability development.

CONCLUSION:

As per the analysis conducted in this paper, in order to ensure continuous economic growth, the MSME business sector has reached a crucial stage. Here an evolution from an informal to a formal finance system is not just an option but a necessity. Despite the informal sector providing immediate cash flow, it charges a “geographical tax” in the form of aggressive interest rates. These interest rates on informal credits function for a survival strategy rather than a growth strategy. This analysis makes it readily apparent that high-cost expenses from the informal credit sectors are both a cost and structural issue.

In contrast, an assessment of the years 2020-2026 shows that the Udyam Registration Portal has evolved into an innovative organizational platform. It was possible due to government initiatives like CGTMSE and RBI priority sector lending policy. These government initiatives have significantly changed the standards for loan eligibility. It shows the transition from asset-ownership-based lending towards cash-flow-based lending and project viability. Once the structural barriers are removed, microenterprises are willing to formally establish themselves, as evidenced by the sharp increase in registrations that surpasses 7.88 crore by 2026.

In essence, an Udyam registration is a “digital passport” that provides a business with the protection it needs under the law. In the Samadhaan portal security is being provided in the form of immediate receipt of payments. And in the case of the Sambandh portal, it offers access to the market. Real financial resilience was made possible because of this security and access that was being provided by government. To completely break the “vicious circle” of informal financing and empower even the smallest of units to make the most of their Udyam status profitably, enterprises need to maintain proper documentation and enable digital literacy among them.

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