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Do Merged Indian SMEs Exhibit Greater Productivity Growth Over 3–5 Years Than Comparable Non-Merged Firms?

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ABSTRACT: This paper looks into whether small and medium enterprises (SMEs) in India that are involved in mergers have higher productivity growth over a period of three to five years after mergers, as compared to non-merging firms. Rather than running its own regression, the paper takes a policy-analysis approach. Firm-level panel data on Indian mergers are either subscription-only (CMIE Prowess) or too costly and labour-intensive to assemble at the required scale (company filings on the MCA21 registry), so the author works in two steps. First, the paper reviews earlier studies that compared merged and non-merged firms in India as well as in other economies (Das, 2000; Kumar, 2009; Mantravadi & Reddy, 2008; Pattnaik, Chang & Shin, 2023). Second, it uses these findings to judge how well India's current merger, insolvency, credit and competition policies support productive SME consolidation. The integration of existing evidence shows a mixed yet conditionally encouraging picture: productivity benefits from mergers are seen mainly in horizontal, technology-sharing, and sufficiently funded transactions, while diversifying and distressed mergers show neutral or negative productivity effects. The policy assessment concludes that the key tools used by India, i.e., the Section 233 merger process, the pre-packaged insolvency process for MSMEs, Udyam-linked credit guarantees, and competition-law exemptions, help mergers become easier, but do not ensure that they increase productivity. The paper concludes with specific recommendations for India's MSME merger and acquisition process, IBC implementation, and Udyam-linked lending policies.

1. INTRODUCTION

India's SME sector, officially termed the Micro, Small and Medium Enterprises (MSME) sector as per the MSMED Act, 2006 as amended in 2020, is the largest provider of non-agricultural jobs in the country. The gross value added (GVA) of MSMEs was equal to 30.1% of India's GDP in 2022-23, up from 27.3% in 2020-21, and reached 31.1% in 2023-24 (Rajya Sabha, 2025; Lok Sabha, 2025. MSMEs also contributed 45.56% of the total merchandise exports of India in the period April–September 2023 (IndBiz, 2023). On the other hand, the sector is still beset by fragmentation issues, as micro enterprises make up the vast majority of India's roughly 6.3 crore MSMEs, and most of them have low levels of technological and financial development. The average productivity of MSMEs is far below that of the large listed Indian corporations (Ministry of MSME, 2023; APO, 2023).

Through consolidation via mergers and acquisitions (M&A), fragmented SMEs can increase both their financial resources and their management capability so as to bridge the productivity gap. The M&A market in India has stayed busy: the number of deals rose from 2,007 deals worth USD 127 billion in 2022 to 2,186 deals valued at USD 116 billion in 2024, even though total deal value was slightly lower, with domestic M&A transactions becoming increasingly important (Grant Thornton Bharat, 2023, 2024, 2025). Several reforms, such as Section 233 of the Companies Act, 2013, which introduces the fast-track merger route for small firms and startups, and the resolution mechanism in the Insolvency and Bankruptcy Code (IBC), 2016, have lowered the barriers to consolidation at the SME levels in India.

But whether this kind of consolidation actually brings about productivity gains remains an open question in the Indian literature. Initial studies that focused on accounting figures showed that mergers led to a reduction in operating margins in most cases (Das, 2000; Saple, 2000; Kumar, 2009). More recent work that relied on quasi-experimental methods found considerable improvement in the productivity of merged firms in comparison with non-merging companies (Pattnaik, Chang & Shin, 2023). Thus, the paper raises a particular question for the Indian SME sector: Are there more productivity gains made by merged Indian SMEs compared to non-merged Indian SMEs within a period of 3–5 years? As the question is of real importance for designing government merger and MSME policies, the research approaches the issue from a policy perspective.

This paper has nine sections. The second section describes the context of SME mergers in India. The third section examines previous studies regarding M&A and productivity in India and other emerging countries. The fourth section explains the

approach adopted, which is a review of the literature coupled with an analysis of the policy framework in terms of its effectiveness, efficiency, equity and feasibility (Bardach & Patashnik, 2019). The fifth section offers the policy analysis by first identifying the findings from the evidence in relation to the research problem, followed by India's key policy tools. The sixth section elaborates on the mechanisms behind the results, the seventh sets out policy recommendations, the eighth notes the limitations of the study, and the ninth concludes.

2. INSTITUTIONAL BACKGROUND: SMES AND MERGERS IN INDIA

2.1 Defining the Indian MSME Universe

The 2020 notification issued under the MSMED Act classifies Indian small businesses by investment and turnover: Micro (less than Rs 1 crore invested, Rs 5 crore turnover), Small (less than Rs 10 crore invested, Rs 50 crore turnover), and Medium (less than Rs 50 crore invested, less than Rs 250 crore turnover). Effective from 1st April 2025, these figures have been increased by 2.5 times for investment and 2 times for turnover, so a micro enterprise can have an investment of up to Rs 2.5 crore and turnover of up to Rs 10 crore, a small business Rs 25 crore of investment and Rs. 100 crore turnover, and a medium-sized business Rs. 125 crore and Rs 500 crore turnover (Ministry of MSME, 2025). The data from the Udyam Portal shows that by December 2023, over 3.16 crore MSMEs had registered, employing approximately 15.5 crore workers. By mid-2024, the cumulative number of jobs reported on Udyam (including informal micro ventures registered on the Udyam Assist platform) exceeded 20.39 crore (PIB, 2023, 2024). The very large number of small enterprises, together with the high level of fragmentation (over 99% of registered small entities are micro ones), creates a strong structural case for consolidation aimed at increasing productivity: small businesses may be unable to invest in certain technologies, certifications or export facilities, but merging into larger units allows them to cross certain thresholds of economic viability (APO, 2023).

2.2 The Legal and Procedural Route to SME Mergers

India offers several channels for the amalgamation of enterprises relevant to SMEs. Alongside the regular merger process laid down in sections 230-232 of the Companies Act, 2013, which requires sanction from the National Company Law Tribunal (NCLT) and is very cumbersome for small-sized firms, section 233 provides a fast-track merger route available to small companies and to mergers between parent companies and wholly-owned subsidiaries. This route replaces NCLT approval with the sanction of the Regional Director, thus cutting down the duration of the merger procedure and legal costs. In September 2025, the fast-track route was widened to cover unlisted companies with outstanding loans, debentures and deposits up to Rs. 200 crore, and mergers between holding-subsidiaries and fellow-subsidiaries (Nishith Desai Associates, 2025). Besides the Companies Act, the Insolvency and Bankruptcy Code, 2016 has become a significant but involuntary route by which financially stressed SMEs are absorbed by financially stronger companies through the Corporate Insolvency Resolution Process. A distinct Pre-Packaged Insolvency Resolution Process (PPIRP) was introduced in 2021, aimed exclusively at MSMEs. The route matters because it separates voluntary, strategically motivated mergers from distressed ones, and the two may affect productivity very differently.

2.3 Scale of Deal Activity

Although M&A statistics across the economy show that large-cap firms and start-up tend to dominate the market, the overall trend is still relevant for businesses in the SME segment. In its Annual Dealtracker, Grant Thornton Bharat reports that India recorded 2,007 M&A and private-equity deals worth USD 127 billion in 2022, which fell to around 1,500 transactions valued at USD 53 billion in 2023, and rose to a record 2,186 deals worth USD 116 billion in 2024, including 683 M&A deals worth USD 44.1 billion, of which 479 were domestic mergers worth USD 23.5 billion (Grant Thornton Bharat, 2023, 2024, 2025). The growth of domestic deals has been spread across many sectors, from manufacturing to pharmaceuticals and retail, which has been particularly highlighted as a phenomenon contributing to the increase in the value of transactions. Figure 1 depicts this trend.

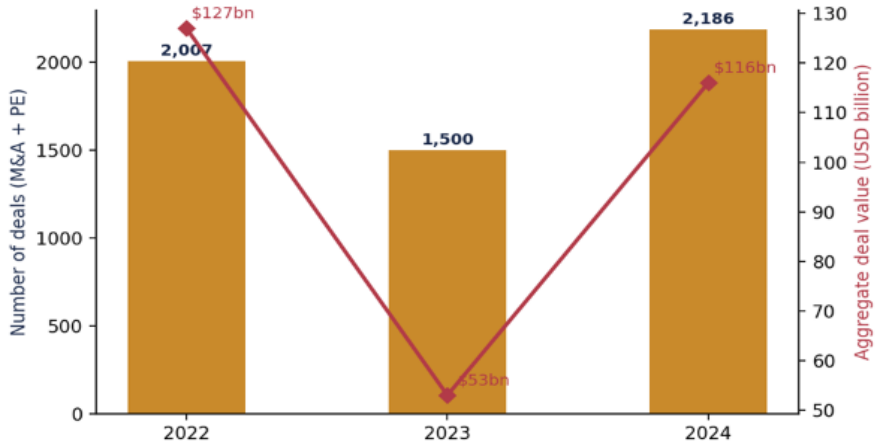


Figure 1: India's M&A and private-equity deal volumes rose from 2,007 deals (USD 127bn) in 2022 to a record 2,186 deals (USD 116bn) in 2024, following a 2023 slowdown.

Source: Grant Thornton Bharat, Annual Dealtracker, 2023, 2024 and 2025 editions.

In addition, the MSME sector has steadily increased its overall contribution to GVA, while its share of exports has recovered since 2022-23 (Figures 2 and 3). This fits well with the story of a formalising, consolidating, and increasingly productive SME sector, without necessarily proving it beyond doubt.

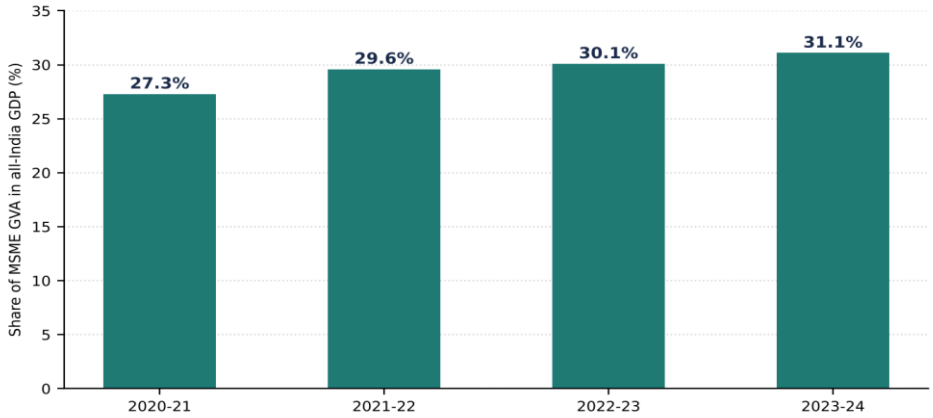


Figure 2: Share of MSME Gross Value Added (GVA) in all-India GDP, 2020-21 to 2023-24. The share rose from 27.3% to 30.1% between 2020-21 and 2022-23 and reached 31.1% in 2023-24. (Corrected: the earlier draft showed 29.1% for 2021-22; the official figure is 29.6%. The 2023-24 bar is new.)

Source: Ministry of Statistics and Programme Implementation data, as reported in Rajya Sabha (2025) and Lok Sabha (2025).

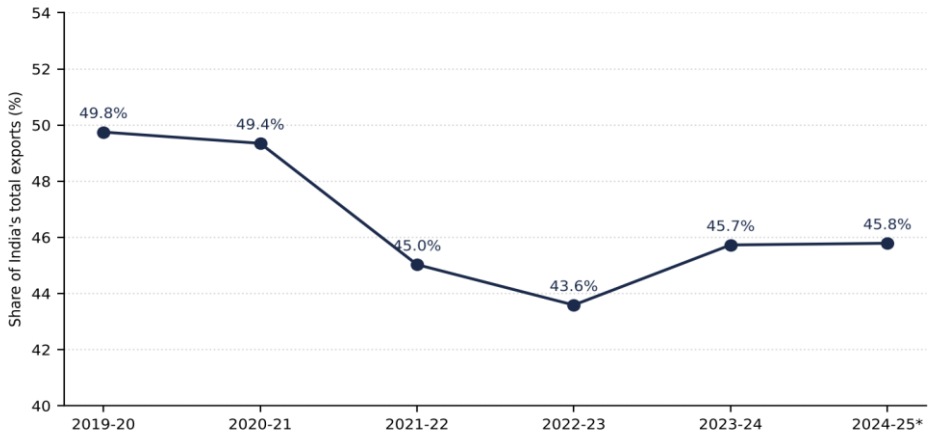


Figure 3: MSME-specified products' share of India's total exports fluctuated between 43.6% and 49.8% across 2019-20 to 2024-25 (*2024-25 up to May 2024), reflecting both MSME resilience and cyclicality in commodity-linked exports. (Corrected: 2023-24 is 45.7%, not 45.6%.).

Source: Directorate General of Commercial Intelligence and Statistics (DGCIS) data, as reported in Rajya Sabha (2024).

3. LITERATURE REVIEW

3.1 Early Indian Evidence: Accounting-Ratio Studies

The first group of studies on Indian M&A performance mainly used accounting ratios before and after the merger rather than regression-based productivity estimation. For example, Das (2000) examined the profitability of 14 acquiring firms by comparing profit margins and found that profit margins decreased after the merger for eight of them. Saple (2000) used a similar methodology and reported negative results, finding no substantial improvement in firms' operating performance after merger. Kumar (2009) analyzed the productivity of firms after mergers, their asset turnover, and solvency, and concluded that, in general, there was no improvement compared with the pre-merger situation. Nonetheless, the major flaws of this literature are ~~the~~ procedural such as a limited sample size, lack of randomization, the absence of a matched control group of firms that did not merge, and failure to correct for industry-wide trends or economic shocks that occurred at the same time as the merger (Kaur & Mehta, 2023).

3.2 Firm-Level Total Factor Productivity Approaches

More recent research computes total factor productivity (TFP) at the firm level using CMIE Prowess panel data and structural production-function estimation, which is designed to remove the simultaneity bias typical of ordinary least squares (OLS) estimates of production functions. The main methods are the Levinsohn and Petrin (2003) method and the Ackerberg, Caves and Frazer (2015; "ACF") technique. The study of productivity in Indian MSMEs published by the Asian Productivity Organization (APO) uses CMIE Prowess panel data from 2010 to 2022 and the ACF method across eight industries. It shows a distinct productivity gap between the periods before and after COVID-19, with a small drop in productivity from 2020 to 2022 (APO, 2023). Kaur and Mehta (2023) also use CMIE Prowess firm-level data, applying the Wooldridge (2009) production-function estimator, to analyse the impact of technology accumulation through different channels (R&D capital stock, disembodied technology transfer, and imported or domestic capital goods) on the TFP of Indian manufacturing firms. They find that technology transfer productivity, a channel that mergers with technologically stronger partners could also open up.

Mukherjee and Chanda (2025) extend this literature to the MSME segment, analyzing how trade liberalization and MSME classification interact to influence productivity using the Prowess database. They observe that productivity gains from liberalization are unevenly distributed across manufacturing firms, with larger firms finding it easier to raise finance and adopt technology, while many MSMEs face rising competition and are more likely to exit if they do not upgrade.

3.3 Difference-in-Differences and Matching Evidence on Mergers

The study that is methodologically closest to the research question of this paper is Pattnaik, Chang and Shin (2023) on the effect of mergers and acquisitions on the performance of firms in India's pharmaceutical industry around the move to the TRIPS regime in 1995. The authors use difference-in-differences and propensity score matching to compare merged and non-merged firms after the deals and show that merged firms performed better than non-merged ones. They attribute this result to what they call a 'positioning' merger (using terminology from Gorton, Kahl & Rosen, 2009), as well as to the transfer of technologies and competencies that raises the productivity of the merged firms. This conclusion is highly significant because it isolates the causal effect of merging, thanks to a credible control group and a policy-based identification period, instead of simply comparing a merged firm with itself before merging, which mixes up the effect of the merger with ~~from~~ industry trends.

Evidence from the banking sector in India, which has been studied at length of policy-driven mergers, reveals a more mixed picture: merged banks appear to be more productive without a large reduction in employees and achieve a significant fall in the cost of funds due to stronger bargaining power, but the overall benefits compared with non-merging banks are modest, questions the assumption of guaranteed scale efficiencies (Goswami and Mahapatra, 2025). Kumar and Bansal (2008) also argue that merging entities can achieve substantial synergy, as they generate higher cash flow and cover a wider market, on ratio analysis and correlation methods, although their sample is not limited to SME mergers.

3.4 Deal Characteristics That Moderate the Productivity Effect

Several deal-level characteristics appear repeatedly in the literature as moderators of whether a merger raises productivity, including (i) relatedness (mergers that are horizontally related or technologically complementary tend to be more effective than unrelated diversification, and India historically has a much higher share of unrelated diversifying M&As than the US, UK, France, Germany and Italy (Kaul, 1991, cited in Das, 2000) (ii) financial motive vs. distress (mergers driven by insolvency through the IBC seem to differ from mergers motivated by strategic considerations); (iii) relative size and the technological gap between the acquiring company and the target (technology transfer requires superior capabilities on the acquiring side~~;~~ Pattnaik, Chang & Shin, 2023); and (iv) the quality of post-merger integration (which is difficult to assess from secondary accounting data, but is consistently described qualitatively as a key limit to realizing synergies; APO, 2010). In 2010, an Asian Productivity Organization

research meeting on strategic mergers and acquisitions for SMEs was held in South Korea; India is a founding member of the APO meeting reported that M&A activity ~~of~~involving SMEs, including cross-border and domestic deals, had grown at a compound annual growth rate of 8 percent in deal numbers and 13 percent in deal value over the preceding 16 years. However, the evidence on productivity benefits remained inconclusive (APO, 2010).

Table 1: Summary of principal empirical studies on Indian mergers, productivity, and firm performance referenced in this review. Compiled by the author from the cited sources.

Study	Sample/Data	Method	Headline finding on productivity / performance
Das (2000)	14 acquiring firms	Pre/post accounting ratios	Profitability declined in 8 of 14 firms post-merger
Saple (2000)	Indian M&A sample	Pre/post accounting ratios	No clear improvement in operating performance
Kumar (2009)	Acquiring firms	Pre/post ratio comparison	No improvement in productivity, turnover, solvency
Kumar & Bansal (2008)	Indian M&A cases	Ratio analysis, correlation	Synergy realised: higher cash flow, cost cuts, growth
Pattnaik, Chang & Shin (2023)	Pharma firms, pre/post TRIPS	DiD + propensity score matching	Performance improved in merged vs. non-merged firms
Kaur & Mehta (2023)	CMIE Prowess, manufacturing	Wooldridge (2009) TFP estimation	Technology accumulation (incl. transfer) raises TFP
Mukherjee & Chanda (2025)	CMIE Prowess, manufacturing MSMEs	Panel regression	Larger, better-financed firms capture productivity gains
Goswami and Mahapatra (2025)	Merged public-sector banks	Multi-layered performance analysis	Employee productivity rose; gains over non-merged banks moderate

Overall, the literature suggests that productivity growth after merging happens only under specific conditions: pre-/post accounting studies normally report no or negative productivity changes, whereas studies using rigorous counterfactual methods (matched non-merged controls, difference-in-differences) find some positive, though limited, productivity effects, concentrated in horizontal mergers and deals involving technology transfer. This methodological contrast matters more for the policy analysis in this paper than any single headline finding about mergers.

4. METHODOLOGY: EVIDENCE REVIEW AND POLICY ANALYSIS

4.1 Ideal Data Requirements

To test the research question properly, one would need firm-level panel data for at least two years before and five years after each merger event. It should contain: (i) balance-sheet variables such as fixed assets, employee cost, cost of raw materials and other inputs, and gross output/sales, for calculating total factor productivity using a Cobb-Douglas or translog production function; (ii) a merger indicator giving the date of the transaction, the names of the acquirer and target firms, and the type of deal (horizontal, vertical, conglomerate; voluntary versus IBC route); and (iii) size/classification data (investment and turnover) to apply the MSMED Act thresholds and classify the firms correctly at the time of the transaction. The CMIE Prowess database is the best single source of such data in India since it covers the financial statements of more than 50,000 Indian companies, which together account for over 70 percent of organised-sector economic activity (Kaur & Mehta, 2023). Corporate restructuring events (mergers, demergers, acquisitions) are recorded in company filings on the MCA21 registry of the Ministry of Corporate Affairs. The Reserve Bank of India's Database on Indian Economy (DBIE) is a useful free source of macroeconomic and banking statistics, but it does not record firm-level mergers of non-financial SMEs (Reserve Bank of India, n.d.).

4.2 Data Access Constraint and This Paper's Approach

The three main sources of Indian firm-level data differ quite a lot in how open they are. CMIE Prowess, the only ready-made panel of company financials, is available only through an institutional subscription. The MCA21 registry is open to anyone, but at a price per firm: viewing one company's filed documents costs Rs 100 (Rs 50 for a limited liability partnership), and only basic master data is free (Ministry of Corporate Affairs, n.d.; Infyner, n.d.). On top of that, most small companies file their accounts as scanned or non-XBRL PDFs, so every year of every firm's balance sheet has to be entered by hand, and mergers cannot be searched as a category; they have to be traced company by company. A matched panel of, say, 300 merged and 300 non-merged SMEs would therefore cost around Rs 60,000 in fees alone and several months of manual data entry. Building such a panel was not practical

for this study, even though no single document is out of reach. The RBI's DBIE is free, but, as noted in Section 4.1, it publishes aggregate and banking statistics rather than firm-level merger records, so it cannot fill this gap (Reserve Bank of India, n.d.). Rather than build a small, unrepresentative sample, or invent data, the present analysis adopts a two-track strategy. The first track (Sections 2-3) summarizes the findings of published peer-reviewed papers and institutional studies that compared merged and non-merged firms. In the second track (Section 5), these findings are used as the basis for the policy analysis, which asks to what extent India's current policies correspond to the conditions under which the empirical studies find that mergers increase productivity.

4.3 Framework for Policy Analysis

Following the standard steps of policy analysis (problem definition, listing the policy options, selecting criteria for evaluation and comparing the outcomes; Bardach & Patashnik, 2019), the problem is defined as follows: while Indian merger policies seek to facilitate consolidation, the empirical evidence suggests that only certain kinds of mergers increase productivity. Each policy instrument is then assessed against the following criteria: (i) effectiveness – whether it encourages productive mergers; (ii) efficiency – whether it reduces the cost and time required for a merger by small businesses; (iii) equity – whether micro and small businesses, and not only big corporations, can benefit from it; and (iv) feasibility – whether it can be implemented using current resources and institutions in India. Each instrument receives one of three ratings – strong, partial or weak – depending on how well it satisfies each criterion. The ratings are the author's interpretation of the sources used.

5. ANALYSIS OF THE POLICY

5.1 What the Evidence Says About the Research Question

Synthesizing the results from the works examined in Section 3 leads to the following conclusions on the research question: (i) studies that use a proper control group of non-merged companies (DiD, matching) show a moderate positive effect of mergers on ~~the~~ productivity, which builds up gradually the three to five years after the deal (Pattnaik, Chang & Shin, 2023), although evidence from bank mergers suggests that the advantage over non-merged peers can be modest (Goswami and Mahapatra, 2025); (ii) the effect is not consistent across all types of transactions, but it is pronounced when there is technology transfer and an appropriate relative size of the merging companies~~.~~; (iii) on the other hand, simple pre/post accounting-ratio comparisons used in the early Indian studies (Das, 2000; Saple, 2000; Kumar, 2009) confuse merger effects with trends, which is likely the reason why they report flat or negative post-merger performance, whereas a later, more rigorous study (Pattnaik, Chang ~~,~~ & Shin, 2023) found a positive causal effect in a similar Indian industrial setting. Therefore, the answer to the research question is a qualified yes: ~~because~~ there are instances where merging firms in India exhibit higher productivity growth than non-merging firms, but only under particular conditions. This is important for public policy, since a merger facilitation law is equally helpful to productive and unproductive mergers.

5.2 India's Current Policy Instruments for SME Mergers

India does not have a single policy for SME mergers. Rather, there are several independent policies that influence whether and how easily a merger can take place. Five such policies are listed in Table 2 (Nishith Desai Associates, 2025; Rao, 2024; PIB, 2023; Ministry of MSME, 2025; AZB & Partners, 2024).

Table 2: India's main policy instruments affecting SME mergers. Compiled by the author from Nishith Desai Associates (2025), Rao (2024), PIB (2023), Ministry of MSME (2025) and AZB & Partners (2024).

Policy instrument	Its function	Possible ways to support productivity	Gap
Section 233 fast-track merger (Companies Act, 2013)	Enables small companies and holding/subsidiary companies to merge with the approval of the Regional Director instead of the NCLT; since September 2025 it also covers unlisted companies with borrowings up to Rs 200 crore.	Cuts both time and cost of voluntary, strategic mergers	Speeds up all mergers equally; there is no need for a business or technology justification; there is no follow-up on results
Pre-Packaged Insolvency Resolution Process (PPIRP), 2021	A quicker, debtor-led insolvency process for distressed MSMEs only.	Enables transfer of productive assets of an insolvent MSME to a more capable owner rather than liquidation	Demand has been very low; only ten applications admitted till December 2024

Retaining MSME status after graduation	A business that outgrows its size category retains non-tax MSME benefits for three years	Reduces the cost of expanding through a merger	Temporary, and not designed with mergers in mind
Credit support: CGTMSE and TReDS	Collateral-free credit guarantees through CGTMSE (cover raised from Rs 5 crore to Rs 10 crore in Budget 2025-26) and invoice discounting through TReDS	Could funds consolidation and technology upgrades after a merger	Not linked to merger activity, even though under-capitalised deals are the ones least likely to raise productivity
CCI de minimis exemption	Transactions involving a target with assets under Rs 450 crores or turnover under Rs 1,250 crore do not require notification (threshold increased in March 2024)	Reduces compliance costs in SME transactions	No mechanism to check market concentration in small clusters

5.3 Evaluating the Instruments Against the Policy Criteria

Table 3 evaluates each instrument against the four criteria set out in Section 4.3.

Table 3: Evaluation of policy instruments against the four criteria. Ratings are the author's own judgement based on the sources cited in Section 5.2.

Policy instrument	Effectiveness	Efficiency	Equity	Feasibility
Section 233 fast-track merger	Partial	Strong	Partial	Strong
PPIRP	Partial	Partial	Weak	Partial
Retention of MSME status	Partial	Strong	Partial	Strong
CGTMSE and TReDS	Partial	Strong	Strong	Strong
CCI de minimis exemption	Weak	Strong	Strong	Strong

Two key issues emerge from Table 3. First, the Indian instruments perform strongly on efficiency and feasibility: they make mergers faster and cheaper and work through existing institutions. Second, they perform poorly on effectiveness, as no instrument separates the mergers that the literature links to productivity gains (horizontal, technology-sharing and well-funded) from those that lack them (diversifying or under-funded mergers). The PPIRP is also weak on equity, as very few MSMEs have used the scheme; just ten applications were admitted in its first three and a half years (Rao, 2024).

There is one gap common to all five instruments. No institution gathers statistics on the impact of mergers on firm productivity, so the government cannot measure the success of these policies. In other words, the country has built policies that facilitate SME mergers, but not ones that ensure that the mergers taking place are productive. These gaps form the basis of the recommendations in Section 7.

6. DISCUSSION: MECHANISMS LINKING MERGERS TO SME PRODUCTIVITY

The conditional productivity impact appears to work through several channels. The most commonly- cited is technology and knowledge transfer: an acquirer with superior production technology or quality systems, or an established export presence brings these capabilities into the target, which leads to higher TFP as better practices are adopted (Pattnaik, Chang & Shin, 2023; Kaur & Mehta, 2023, on the impact of technology accumulation on productivity more generally). Economies of scale and threshold effects also play an important role in the case of most Indian SMEs, given the investment-and-turnover thresholds defined in the MSMED Act: moving from micro to small or from small to medium can provide access to formal bank credit, priority-sector lending, public procurement, or export incentives that are unavailable to any smaller stand-alone firms. This that a merger that takes the company past a certain size threshold can still raise productivity through tbetter access to resources, even without real operational synergies (Ministry of MSME, 2023; PIB, 2023).

Managerial restructuring is a third channel: an acquirer can bring well-established management practices to the target, raising total factor productivity through better resource allocation even where the technology itself does not change. Another explanation for a the sizeable minority of mergers that show zero or negative productivity effects, in both earlier Indian mergers studies and more recent research on bank mergers, lies in high integration costs and cultural friction (Goswami and Mahapatra, 2025, who find only modest benefits relative to non-merging banks despite some improvements in productivity). Mergers in distress that take place through the IBC should be viewed as a separate category; here the counterfactual is not a 'no merger' situation, but that of assets being liquidated. Therefore, a merger that brings no gains relative to efficient firms might still lead to a better outcome than the counterfactual of stranded assets and unemployment. This is not captured by a simple comparison of

merged and non-merged companies and calls for coding deals by motive (distress resolution versus voluntary) in future empirical research on this issue.

7. RECOMMENDATIONS FOR POLICY

The conditional, deal-quality-dependent nature of the merger-productivity relationship identified in this paper, along with the policy gaps found in Section 5, carries several specific implications for Indian MSME and competition policy.

7.1 Targeted Facilitation Rather Than Blanket Promotion of Consolidation

As productivity improvements stem more from horizontal and technology~~transfer~~ transfer-based mergers than from mergers in general, policy does not need to encourage all types of mergers. Instead, the fast-track merger procedure, which already rates well on efficiency and feasibility (Table 3), can be amended such that businesses submit a brief description of the business and technology reasons behind the merger along with the application itself.

7.2 Data Infrastructure for Ex-Post Evaluation

The key constraint on this paper, visible in its reliance on secondary literature rather than primary data, is the lack of a research-accessible panel linking Udyam registration data, MCA21 restructuring filings, and firms' financial statements. At present these records exist only as separate, per-firm documents that must be bought and keyed in one by one. The two ministries, namely ~~,~~ the Ministry of MSME and the Ministry of Corporate Affairs, could jointly build a linked, anonymised panel open to researchers, similar to the contribution of the GST Network to research on trade, so that the productivity consequences of actual SME mergers could be analysed over time.

7.3 Differentiated Treatment of Distress-Driven Consolidation Under the IBC

Section 6 shows that M&A through the IBC route, in distress, needs a different benchmark for judging productivity outcomes than voluntary strategic M&A. Therefore, the productivity and employment outcomes of MSMEs using the pre-packaged insolvency resolution process should be monitored separately from voluntary M&A, and policy success should be assessed against the liquidation scenario rather than the higher productivity threshold used in voluntary merger analyse~~is~~s such as Pattnaik, Chang and Shin (2023). Given that only ten PPIRP applications had been admitted by December 2024 (Rao, 2024), awareness campaigns and easier application procedures for micro enterprises should also be part of this reform.

7.4 Credit and Threshold-Linked Incentives to Support Post-Merger Scale-Up

Because crossing a size threshold (micro to small, small to medium) opens up formal credit, access to finance through the Credit Guarantee Fund Trust for Micro and Small Enterprises (CGTMSE) and the Trade Receivables Electronic Discounting System (TReDS) can be part of the mechanism through which mergers lead to productivity gains. To ease the transition of newly merged enterprises, policy should allow a defined grace period in which a merged enterprise can enjoy the non-tax benefits of its previous (smaller) MSME classification. This provision is already partly in place, since firms keep non-tax MSME benefits for three years after moving up a category (PIB, 2023); it should be extended explicitly to merged firms, together with wider CGTMSE guarantee cover and TReDS access. The increase in guarantee cover for micro and small businesses from Rs 5 crore~~s~~ to Rs 10 crore~~s~~ in the Budget 2025-26 (Ministry of MSME, 2025) is an example of how such a measure could support upgrading after a merger.

7.5 Competition Policy Calibration for SME-Scale Consolidation

The Competition Commission of India (CCI) exempts most SME transactions from merger notification under its de minimis rule, which since March 2024 applies where the target has assets below Rs 450 crore or turnover below Rs 1,250 crore (AZB & Partners, 2024). Given the modest positive productivity effects documented in the literature, this light-touch approach is broadly justified. Nevertheless, exceptions could be made where the merger leads to a high level of market concentration in specific local markets (e.g., processing clusters), even if productivity improves.

8. LIMITATIONS AND DIRECTIONS FOR FUTURE RESEARCH

The major drawback of this research is that it does not use original data. The research question is answered using the results of other studies that used CMIE Prowess or~~,~~ MCA21 data, which could not be assembled for this study because of the subscription cost of Prowess and the cost and manual effort of compiling MCA21 filings at scale (Section 4.2). Also, many of those studies focused on bigger firms, banks or particular industries, not SMEs specifically, which means that the results need to be applied to SMEs carefully. The policy ratings in Table 3 are subjective and could differ for other scholars. Given these limits, the contribution of this paper can be summed up as follows: (a) it provides a full picture of the Indian literature on mergers and productivity, and (b) it connects those results with an assessment of India's merger~~s~~ policies.

Do Merged Indian SMEs Exhibit Greater Productivity Growth Over 3–5 Years Than Comparable Non-Merged Firms?

Future research using data from Prowess or MCA21 should focus on: (1) a clear differentiation between voluntary and IBC-route mergers, as the literature indicates that they have different counterfactuals; (2) using the staggered timings of India's Section 233 fast-track merger reforms and IBC resolutions to strengthen causal identification beyond matching; (3) extending the analysis beyond productivity to on employment and wages, since TFP-focused literature says little about how consolidation affects MSME workers; and (4) checking whether the productivity outcomes observed for Prowess firms apply to the very large number of micro-enterprises found only on the Udyam registration portal, for which data of comparable quality is not yet available. A small pilot is already feasible: for about Rs 2,000, MCA21 filings of ten merged and ten matched non-merged companies could be compared as an illustrative case study.

9. CONCLUSION

The purpose of this was to examine whether merged Indian SMEs experience a greater productivity growth over a period of 3-5 years than their non-merged counterparts. Having reviewed the available Indian literature on this subject and India's current merger policies, the author reaches a qualified "yes". In more detail, studies using difference-in-differences and propensity score matching – the most credible techniques in this literature –show that the productivity of merged firms grows faster than that of non-merged ones, but this productivity premium is moderate and depends on the type of deal.

In contrast, earlier studies on India relied on simple pre/post accounting ratios without a control group and therefore tended to find no effects or even negative results. This difference can be explained by the fact that these studies were vulnerable to confounding industry and macroeconomic trends. Given the MSME and competition policy environment in India, which includes the Section 233 fast-track merger route, the pre-packaged insolvency process under the IBC, and the credit system built around Udyam, it is crucial to treat consolidation as a productivity-boosting instrument only under the right conditions, and to build public data infrastructure that allows the productivity impact of Indian mergers to be measured directly. What follows from the analysis of the existing policy tools is that their current design makes mergers easier, but does not support specifically those mergers that boost productivity.

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