

How Important are Finance Constraints to Firm Growth in the Informal Manufacturing Sector in India?



In brief

- Household firms (OAEMs), where a single family owns, manages and provides the labour are the dominant type of firm in the informal manufacturing sector in India, outnumbering firms which employ non-family labour (NDMEs and DMEs - depending on firm size, the former with 5 or fewer employees and the latter more than 5).
- NDMEs and DMEs are on average twice as productive as OAEMs, as they are able to draw on a wider pool of labour and skills than what is available.
- This study investigates what inhibits firm growth in the informal manufacturing sector.
- One factor affecting firm growth from OAEM to NDME or DME is the difficulty firms face in accessing external finance, which could pay for labour, raw materials and investments in machinery.
- About 36% of firms across 3 rounds of surveys since 2000 have reported that they face a finance constraint on their operations; the majority of these firms are OAEMs.
- The authors find persuasive evidence that finance constraints play an important role in firm transition across the range of firm types. A change in the status of a firm from being finance constrained to not being financially constrained increases the likelihood of a firm making the transition from OAEMs to NDMEs or DMEs by 24.3%. The finance constraint bites more in the NDME-DME transition than the OAEM-NDME transition.
- Due to the weakening of branch licensing after the 1991 economic reforms, the Indian government should consider counter-acting policies that provide incentives for financial intermediaries to lend to informal sector enterprises.

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Family ownership is the ubiquitous form of firm ownership in India in the manufacturing sector. Much of the focus in academic writings and policy discussions is on the large family owned firms such as the Birlas and Tatas. However, there are also another set of family owned manufacturing firms, and these are household enterprises in the informal manufacturing sector. Household enterprises (called Own Account Manufacturing Enterprises in India or OAMEs in short), where a single family owns and manages the firm, as well as provides the labour, are by the predominant type of firms in the informal manufacturing sector. They vastly out-number firms which employ non-family labour (called Non-Directory Manufacturing Establishments (NDMEs) or Directory Manufacturing Establishments (DMEs), depending on the number of non-family paid workers employed, with NDMEs employing 5 or less paid Directed and Organised by workers, and DMEs employing 6 or more paid workers). However, NDMEs and DMEs are significantly more productive than OAMEs, with labour productivities, on average, being twice or more than that of OAMEs.

The difference in productivity is not surprising: NDMEs and DMEs would be able to draw in specialised workers with more skills and training than what is available in the family. By being able to expand their employment outside the family, NDMEs and DMEs would be larger in size and would be able to reap economies of scale (though limited for a typical firm size in the informal sector) and hence, be more productive. The productivity benefits of greater access to specialised skills and higher ability through employing non-family workers for the small family owned firms in the informal sector is similar qualitatively to the productivity benefits of bringing in managerial talent from the outside the family for the larger family owned firms such as the Birlas and Tatas. The puzzle here is: given the productivity benefits of employing non-family labour, why do so few OAMEs seem to make the transition to NDMEs and then on to DMEs? What constrains firm growth in the informal manufacturing sector?

Constraints to firm growth

One important factor that can explain the lack of mobility of household enterprises to larger enterprises employing non-family paid labour is the difficulty that firms in the informal sector face in accessing external finance. External funds are needed to pay non-family labour, to purchase raw materials as inputs and to make complementary investments in machinery and structures as the firm grows in size. Firms of all sizes in the informal sector are reliant on external funds both from institutional and non-institutional sources. For example, in 2005-2006, for OAMEs, the proportion of loans outstanding from term-lending institutions, banks and societies in total loans was 47.7 per cent, while for NDMEs and DMEs, it was 58.0 and 58.8 per cent respectively.¹ Friends and relatives provided 21 per cent of all loans to OAMEs, and the corresponding figures for NDMEs and DMEs were 10.7 and 8.2 per cent respectively. Money lenders provided 16.4 per cent of all loans to

1. Based on calculations using the National Sample Survey Organisation's survey of the unorganised manufacturing sector for 2005-2006.

OAMEs, and the corresponding figures for NDMEs and DMEs were 12.8 and 10.0 per cent respectively. Therefore, while firms of all types in the informal sector are reliant on both institutional and non-institutional lenders, the extent of borrowing from institutional sources is larger for non-household enterprises as compared to household enterprises, as one may expect. While finance constraints on investment and firm growth have been found to be present for small firms, both in developed and developing countries (Beck. and Demirgüç-Kunt 2006, Ayyagiri et al. 2008), we would expect that finance constraints would be particularly important for firms in the informal sector, given the information problems that are more likely to be present for informal firms which do not have credit histories and adequate collateral to offer to lenders, especially banks and co-operative societies.

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How important is access to external finance for firm transition from household enterprises to non-household enterprises in the informal manufacturing sector? Raj and Sen (2012) use unit record data from three rounds of the large nationally representative surveys of manufacturing firms in the informal sector undertaken by the National Sample Survey Organisation (NSSO) to address this question. These three rounds are available for the years 2000-01, 2005-05 and 2010-11.² The surveys ask individual firms whether they face constraints in accessing external finance.³ About 36 per cent of firms report that they face a finance constraint on their operations, with the overwhelming majority of these firms being OAMEs. But this does not in itself establish that finance constraints are crucial determinants of firm growth in the informal manufacturing sector in India. It is quite possible that lenders favour the larger firms, which are non- household enterprises, who are more likely to offer collateral and are more profitable than household enterprises. In this case, the perceived constraint to borrowing that OAMEs seem to face more than NDMEs and DMEs may well be demand determined, and therefore, cannot be seen as an independent factor to explain the lack of firm transition from household enterprises to non-household enterprises.

Findings

To disentangle demand side factors from supply side factors in the lending decision, Raj and Sen model the supply side factors that may explain why institutional lenders such as banks and co-operatives may prefer to be based on some districts instead of others. These factors could be access to major transportation networks such as a National Highway or a Broad Gauge train line, or the availability of higher education facilities. Using these factors as supply-side determinants of the lending decision, Raj and Sen then estimate regression models that attempt to explain why some firms make the transition from OAMEs to NDMEs and then on to DMEs, and why other firms do not. They find persuasive evidence that the difficulty that firms face in accessing external finance plays an important role in firm transition across the range of firm types in the informal manufacturing sector in India, and

2. There are a total of 294736 firms in the three firms, and the rounds are repeated cross-sections.

3. The last round does not directly ask this question, but asks firms which are the two most important constraints they face.

“Financial development in a given district exerts a powerful positive effect on the likelihood that more firms in that district will have made the transition “

acts as a significant constraint to small firm growth. A change in the status of the firm from being finance constrained to not being finance constrained will increase the likelihood that the firm will make the transition from household enterprises to non-household enterprises by 24.3 per cent. Interestingly, Raj and Sen find the finance constraint seems to bite more in the NDME-DME transition (that is, as the non-household firm increases in size) than in the OAME-NDME transition. Using district level panel data for 364 districts in India from 1995-2010 to complement their unit level analysis, they find that financial development in a given district (in the form of bank offices and bank accounts per capita) exerts a powerful positive effect on the likelihood that more firms in that district will have made the transition from household enterprises to non-household enterprises.

The finding that finance constraints matter for firm transition and growth in the informal sector and that financial development exerts a strong positive effect on the ability of OAMEs to grow into NDMEs and DMEs has important implications for policy.

Ideas for Growth

While the Indian government actively promoted an equitable spread of financial institutions till 1991 under a system of branch licensing policy for nationalised commercial banks which made it mandatory for these banks to open branches in rural and semi-urban areas and remote regions of the country, this policy has been considerably weakened since the financial liberalisation enacted as part of the 1991 economic reforms. Such a weakening of branch licensing policy could have a negative effect on firm transition in the informal sector, especially if commercial banks and other institutional lenders are withdrawing their offices from the more remote regions and districts. In this case, there would need for a counter-vailing set of policy measures that provide incentives for financial intermediaries to lend to informal sector enterprises as well as a greater emphasis on state-backed micro-finance initiatives.

References

Ayyagari, M., Demircuc-Kunt, A. and Maksimovic, V. (2008), How Important Are Financing Constraints? The Role of Finance in the Business Environment, *The World Bank Economic Review*, 22, 483-516.

Beck, T. and Demirgüç-Kunt, A. (2006), Small and Medium- Size Enterprises, Access to Finance as Growth Constraint, *Journal of Banking and Finance* 30, 2931-43.

Raj, Rajesh S.N. and Kunal Sen (2012), How Important are Credit Constraints for Small Firm Growth? Evidence from the Indian Informal Manufacturing Sector?, Final Report to the IGC Central India Programme.

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