

# **Caste and Entrepreneurship in India**

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## **Abstract**

It is now widely accepted that the lower castes have risen in Indian politics. Has there been a corresponding change in the economy? Using comprehensive data on enterprise ownership from the Economic Censuses of 1990, 1998 and 2005, we document substantial caste differences in entrepreneurship across India. The Scheduled Castes and Scheduled Tribes are significantly under-represented in the ownership of enterprises and the share of the workforce employed by them. These differences are widespread across all states, have decreased very modestly between 1990 and 2005, and cannot be attributed to broad differences in access to physical or human capital.

## 1. Introduction

Focused on the relationship between caste and entrepreneurship, this paper sheds light on two larger narratives about India's emerging political economy. The first narrative has to do with India's rapid economic growth rate over the past couple of decades. Whatever one's view on the reasons underlying the fast growth -- greater opening of the economy to foreign goods and capital, the demographic dividend arising from a large and growing young workforce, and the greater liberalization of economic activity within the country in the mid-1980s<sup>1</sup> -- there is concern that not all sections of society have benefited equally from economic growth, with inequality steadily rising over the past decade.<sup>2</sup> A narrative that the rich have benefitted more than the poor, the towns and cities more than the villages, the upper castes more than the lower castes has acquired salience in several quarters (Varshney 2007). There is also some concern that levels of entrepreneurship in India lag behind other countries with similar income levels (Ghani, Kerr and O'Connell 2011).

The second narrative relates to an important new discourse in Dalit politics. Concentrating on the need for "Dalit entrepreneurs", a category conspicuous by its absence in India's business history, this narrative has its philosophical and political roots in the so-called Bhopal document of 2002. Getting together in Bhopal, Madhya Pradesh, under the sponsorship of Digvijay Singh, the then Chief Minister of the state, some leading Dalit intellectuals argued that "the imagination of the post-Ambedkar Dalit movement has been shackled ...within the discourse of reservations" (Nigam 2002: 1190). Questioning the adequacy of reservations for Dalit welfare in contemporary India, these intellectuals had articulated an important challenge faced by the Dalit community in a rapidly growing Indian economy:

In the new scenario of the state's retreat, when public employment is shrinking, does it make any sense to simply reiterate the old slogan of reservations – even if it is extended to the private sector, as is now being demanded? Will the Dalits always have to remain content with the demand for such job reservations, which effectively means that they be employed as proletarians in the enterprises owned by others – in primarily upper caste concerns or those owned by the state but nevertheless controlled by the upper castes? Or must they now gird up their loins to play for fundamentally different stakes, making room for themselves in the new, free-market/global dispensation? Should they not also have their own bourgeoisie, their own millionaires and billionaires?<sup>3</sup>

Indeed, Dalit millionaires have been increasingly visible over the last several months. Articles in leading newspapers and magazines have focused on the emergence of such

millionaires (Aiyar 2011).<sup>4</sup> In January 2011, the Planning Commission invited these businessmen for a special meeting that discussed both opportunities and constraints that their businesses faced. A new Dalit Indian Chamber of Industry and Commerce has been formed.

It should be noted that the second narrative stands in considerable tension with the first. Case studies show that “the growth of Dalit entrepreneurship took off ... during the 1980s and more vigorously after the 1990s” (Jodhka 2010: 43). India’s post-1991 reforms are, thus, connected to rising economic inequalities in the first narrative, but they are also linked to the emergence of Dalit entrepreneurs in the second.

Dalit millionaires may have burst on the scene, but how far do they represent the general state of Dalit entrepreneurship in the country? More widely, what is the relationship between caste and entrepreneurship?

This is an important question. As is well known, the caste system was not only a scheme of social stratification, but also a division of labor. With each caste came a traditionally ascribed profession. Historically, there was undoubtedly some flexibility in the system (Srinivas 1966), but the flexibility was limited. It is only with the rise of democratic politics that the process of change was considerably spurred. Substantially because the lower castes constituted a majority of India’s populace, democratic politics has been a forceful ally of the lower castes in the 20<sup>th</sup> century (Rudolph and Rudolph 1967; Varshney 2000; Weiner 2001). Not all of the changes have been benign (Mehta 2003), but there is no doubt that as far as representation in state assemblies and parliament is concerned, India has gone through an OBC revolution (Jaffrelot and Kumar 2009), while the reservations for SCs and STs have ensured that the SC and ST share is substantial in representative assemblies.

Has this political revolution been accompanied by corresponding changes in the economic sphere? How has the caste map of entrepreneurs changed? On the whole, the relationship between caste and entrepreneurship remains under-researched, though a whole variety of other political economy questions concerning lower caste welfare have been studied. Some studies, for example, have shown an increasing convergence in habits and rituals across caste categories (Kapur et al 2010), but others document persistent differences in important development outcomes like consumption expenditure, education levels and access to public goods (Desai and Dubey 2011; Banerjee and Somanathan 2007). The effects of affirmative actions for SCs and STs also appear to be mixed. Pande (2003) finds that political reservations

lead to greater social expenditures and more jobs for the SCs, but not for the STs. On the other hand, Pandey (2010) and Cassan (2011) find very limited effects of such affirmative action on educational outcomes for Scheduled Castes.<sup>5</sup>

We examine the role of caste differences using a very different metric of economic development, namely the ownership of enterprises across the country. We are aware of only a handful of research attempts of this kind. Damodaran (2008), Thorat, Kundu and Sadana (2010), Jodhka (2010) and Varshney (2012) have studied some aspects of this relationship.<sup>6</sup> We build upon these studies and go beyond.

To arrive at our conclusions, we use comprehensive data from the Economic Censuses of India, which enumerate every non-agricultural enterprise in the country. Our findings reinforce the persistence of caste differences in important development outcomes. As late as 2005, Scheduled Castes and Scheduled Tribes were significantly under-represented in the ownership of private enterprises, and the employment generated by private enterprises. For instance, Scheduled Castes owned 9.8% of all enterprises in 2005, well below their 16.4% share in the total population. Such under-representation in the entrepreneurial sphere was widespread across all the large states of India, and was present in both rural and urban settings. Moreover, despite more than a decade of rapid nationwide economic growth, the share of SCs and STs in firm ownership and employment generation over the period 1990-2005 increased only very modestly.

In addition to these broad measures of entrepreneurship, there are significant differences in firm characteristics across caste categories. Enterprises owned by members of SCs and STs tend to be smaller, are less likely to employ labor from outside the family, and more likely to belong to the informal or unorganized sector. All these differences across caste categories are more pronounced in urban areas compared to rural areas, suggesting that these results cannot be attributed purely to social discrimination which we might expect to be higher in rural areas. Overall, our results highlight that SC and ST entrepreneurs face significant obstacles in entering entrepreneurship, and in expanding the scale of their enterprises. These differences in entrepreneurship are not significantly correlated with demographic or economic characteristics such as literacy rates or levels of secondary schooling or the proportion of the population engaged in farming. Neither are they attributable to variation in the choice of industries across castes, since the industry mix has been converging rapidly across caste categories. This suggests

that we need to examine more nuanced hypotheses in order to understand the reasons behind the observed facts.

We also present preliminary results on the progress of Other Backward Castes (OBCs) in enterprise ownership and employment generation. OBCs are traditionally the “middle” castes i.e. neither suffering the extreme social and economic discrimination of the Scheduled Castes, nor enjoying the social privileges of the upper castes. These castes were given access to affirmative action policies at the national level only in the 1990s, though they started receiving reservation benefits in education and government employment at the *state level* in the late 1950s and early 1960s in southern India. We find that the OBCs appear to be making significant progress in playing an important entrepreneurial role. By 2005, their share in enterprise ownership and employment generation is very much in line with their population share, having risen significantly since the 1998 wave of the Economic Census.

The rest of the paper is structured as follows: Section 2 describes our data sources; Section 3 examines caste differences in the extent of enterprise ownership and employment generation; Section 4 analyzes differences in the characteristics of enterprises; Section 5 summarizes a few international experiences with the empowerment of economically marginalized communities; and Section 6 concludes.

## **2. The Economic Census of India**

Our main data come from the Economic Censuses of India conducted by the Central Statistical Organization. The Economic Census is a complete count of all entrepreneurial units located within the geographical boundaries of the country, with the exception of those directly involved in the growing of crops (enterprises linked to agriculture, such as food processing units, are included). As such, it covers all non-agricultural enterprises in the country. It is different from other enterprise-level data sets in India (such as the Annual Survey of Industries, the National Sample Survey or the CMIE’s Prowess data base) in that it is a complete census, it covers both manufacturing and services and it includes information on enterprises in the unorganized or informal sector of the economy. The Economic Censuses provide detailed information on the location and industrial classification of each enterprise, the number of workers employed, the mix of family and hired labor, sources of finance, and the caste category of the enterprise owner.

We have access to the micro-data from the 1990, 1998 and 2005 waves of the Economic Census. The 2005 wave covered more than 42 million enterprises, employing around 99 million workers. 39% of enterprises were located in urban areas, and these urban enterprises employed 49% of all workers.<sup>7</sup> Most of our results are based on the 2005 data, but we will show some of the trends over the period 1990-2005 as well. We focus on the data from 19 large states of India, which account for 96% of India's population and 95% of all enterprises.<sup>8</sup> Since the ownership of publicly traded firms or cooperatives cannot be assigned to a specific owner's caste, our analysis focuses on the ownership of private enterprises only. For all practical purposes, thus, we are capturing the smaller firms in the economy, some of which may have the potential to grow larger in the future. Most international studies of entrepreneurship also focus on smaller or younger firms.

We supplement the data from the Economic Censuses with data on population sizes, and the proportion of Scheduled Castes and Scheduled Tribes from the 1991 and 2001 population censuses of India.<sup>9</sup> We also obtained estimates of the proportion of OBCs in each state from the 66<sup>th</sup> round of the National Sample Survey. These estimates are very close to the those in the National Election Study 2009, conducted by the Centre for the Study of Developing Societies.

### **3. Caste and Enterprise Ownership**

Our first major finding is that members of the Scheduled Castes and Scheduled Tribes are under-represented in the ownership of enterprises. The Scheduled Castes accounted for 16.4% of India's population in 2001, but owned only 9.8 % of all enterprises in 2005 which employed 8.1% of all non-farm workers (Table 1). We should note that since the majority of such enterprises are single-person enterprises (see next section), this measure of enterprise ownership is highly correlated with the extent of self-employment, and as such, might be a relatively crude measure of entrepreneurship (Ghani et al 2011). However, there is no universally accepted definition of entrepreneurship and in future work, we will investigate alternative measures. A similar pattern of under-representation is observed for Scheduled Tribes, whose members constituted 7.7% of the nation's population but owned only 3.7% of non-farm enterprises, employing 3.4% of the non-farm workforce.

Table 1 about here

These patterns are not specific to any one region or state of the country. As Figure 1 shows, the share of the non-agricultural workforce employed in SC-owned firms is lower than their population share in all states except for Assam. It is also not the case that the states which were among the earliest to have progressive movements to end caste discrimination during the first half of the 20<sup>th</sup> century (Kerala, Karnataka, Andhra Pradesh, Tamil Nadu, Maharashtra) have a lower degree of under-representation.<sup>10</sup> A similar pattern is seen for ST entrepreneurship, where even states with a particularly high degree of STs in the population appear to be equally under-represented compared to states with a lower proportion of STs in the population (Figure 2).

Figures 1 and 2 about here

In contrast to the under-representation of SC and ST communities in entrepreneurship, we find that members of the Other Backward Castes (OBC) are well represented. OBC members owned 43.5% of all enterprises in 2005, and accounted for 40% of non-farm employment (Table 1). This is very much in line with their overall population share of 43%. In most states, the share of the workforce employed in OBC-owned firms was quite close to their overall population share (Figure 3).

Figures 3 and 4 about here

Two more points ought to be noted here. That, in 2005, OBC shares of business enterprises in most states roughly corresponded with their estimated shares in the state population does not mean that OBC enterprise shares were also roughly the same across states in the 1970s and 1980s. Given how many studies we have of the changes in the caste structure of southern India in the 20<sup>th</sup> century, it is quite possible that the OBCs entered the business sector sooner in the South, compared to the North.<sup>11</sup> Unfortunately, there was no economic census taken in the early 1970s, and even after the government started collecting such economic information, the OBC caste category was not recorded separately till 1998. As a result, we cannot be statistically thorough about the hunch that OBCs entered southern businesses much

before they did so in the North. Second, the existing economic census does not identify the proprietor's caste for firms whose shares are publicly traded. Southern India has witnessed the phenomenal rise of some OBC communities to the highest corporate reaches of publicly traded firms. For example, the ascent of the Nadars, traditionally toddy-tappers placed at the very bottom of the OBC community and subjected to enormous deprivation and degradation, to a leading business community of Tamil Nadu has absolutely no parallels yet in North India.<sup>12</sup>

Coming back to the SCs and STs, the pattern of under-representation in enterprise ownership and employment generation is widespread even within states i.e. these results do not appear to be driven by a few pockets of underdevelopment. When we examine district level data, we find that the enterprise ownership share of SCs and STs is less than their population share in over 80% of all districts. Even in a state like Maharashtra, which had above-average per capita GDP, reasonably fast growth rates in the post-1990 period and a long history of progressive policies towards SCs and STs,<sup>13</sup> we find that the share of the workforce employed in SC-owned enterprises is lower than the SC population share in 25 out of 34 districts; the ST employment share is lower than the population share in 22 out of 34 districts. Despite the success of Dalit movements in Ambedkar's native Maharashtra, which made Dalits quite prominent in the political life of the state and pushed all political parties after independence to include Dalit issues in their platforms (Ahuja 2008), they remained underrepresented in entrepreneurship in the state as late as 2005. Politics and economics remained mismatched.

Another example is the case of Gujarat, which had an extremely high economic growth rate over the past decade (8.5% growth in gross state domestic product over 1999-2008, compared to 7.2% nationwide), and which showed a large increase in the share of the workforce employed in OBC-owned enterprises over the period 1998-2005 (from 22% to 39%), suggesting that caste barriers were breaking down rapidly in this state. Nevertheless, the share of the workforce employed in SC-owned enterprises remained at 7% in both 1990 and 2005, and only 3 districts showed an increase in this share over the period 1990-2005, suggesting that SCs are unable to overcome the barriers to entrepreneurship which OBCs are able to surmount.

A second major finding is that these differences in entrepreneurship persist across space and time. Table 1 shows that the share of SCs and STs in the entrepreneurial sphere is low even in urban areas, where we might expect to have lower levels of explicit caste-based discrimination. The caste differences in entrepreneurship do not appear to be disappearing over



time. The share of enterprises owned by SCs in 2005 was the same as it was in 1990, while the employment share in SC-owned enterprises increased by less than one percentage point (Table 2). The STs also show a similarly modest increase in their share of entrepreneurship over this long period (share of enterprise ownership rising from 2.6% to 3.7%; employment share rising from 2% to 3.4%).

In contrast, OBCs made significant progress over the period 1998-2005, increasing their share of firm ownership from 37.5% to 43.5%, and their share of employment from 33.8% to 40% .<sup>14</sup> However, the population shares for OBCs are estimated from a sample survey rather than the official population census (which, for the first time since 1931, will collect and release such statistics only in 2012 or 2013), and the 1990 wave of the Economic Census does not include this caste category, making these comparisons less reliable than those for SCs and STs.

Table 2 about here

#### **4. Caste Differences in Enterprise Characteristics**

One reason for Scheduled Castes and Scheduled Tribes to lag behind in employment generation could be difficulties in expanding the size of their enterprises. This can be either because of caste discrimination (members of other castes do not want to work with SCs) or because of lack of knowledge or financing constraints. All these factors can also prevent SCs from entering industries which have significant economies of scale. In this section, we examine whether firm sizes and other characteristics differ systematically across different caste categories.

##### *4.1 Caste and Enterprise Scale*

We find that firms owned by SCs and STs are smaller on average than firms owned by non SCs/STs (Table 3). Note that average firm sizes are very small overall: the average size is 2.13 for enterprises owned non SC/ST owners, 1.72 for SCs and 1.89 for STs. The gap in average firm size between SCs/STs and other castes is larger in urban areas compared to rural areas. This difference is also widespread: average firm size for SC-owned firms is smaller than the average firm size for non-SCs in all of the states.

Table 3 about here

Part of the reason for this difference in average enterprise size is the relative extent of one-person enterprises. The majority of private enterprises in India are one-person firms i.e. consist of self-employed people. 57% of enterprises owned by non SC/STs have only one person, compared to 65% for SCs. The difference in the proportion of self-employment is particularly pronounced in urban areas (50% vs 61%), though the difference is present in both rural and urban areas for SC enterprises. Interestingly, this does not appear to be a major source of the size difference between ST-owned firms and non-ST firms.

#### *4.2 Employing Outside Labor*

Are the differences in enterprise scale driven by differences in the size of networks? For instance, if SC firm owners find it easier to work with SC workers, the smaller size of the worker pool might limit the growth possibilities of enterprises. We examine this by looking at the extent to which firms employ hired labor i.e. labor from outside the family. In the overall dataset, we see that 51% of two-person and 26% of three-person firms consist purely of family labor in 2005, so that employing people from outside the family is a fairly significant step in enterprise growth.

Consistent with the small average size of enterprises, most firms in our sample do not employ any labor outside family members. 68% of enterprises owned by non SC/STs operate with only family labor. This proportion rises to 77% for SC and ST owners. More firms in urban areas hire outside labor, but the differences among caste categories are substantially larger in urban areas. For instance, 77% of non SC/ST firms and 81% of SC/ST firms hire no outside labor in rural areas, but the corresponding figures for urban areas are 56% for non SC/STs, 67% for SCs and 61% for STs. The results for ST owners is particularly interesting because the difference in the proportion of one-person firms was lower for STs compared to SCs—but these results show that ST firms face similar constraints in moving beyond family labor.

The trends over time show that, while average firm size is declining over time for all caste groups, the size gap between SC/ST firms and non-SC/STs has remained fairly stable over time. For instance, 55% of non-SC/ST firms are single-person firms in 1990, compared to 61% for SCs. The corresponding numbers for 2005 are 57% and 65%.

### *4.3 Sources of Finance*

The vast majority of enterprises in our data set—more than 90% -- do not access outside sources of finance. This is true both in urban and rural areas. Of those who do access outside sources of finance, firms owned by members of non SC/STs are slightly more likely to access institutional sources of finance (3.6% compared to 2.6% for SCs), as opposed to accessing government anti-poverty programs, moneylenders or NGOs for financing.

More than three-quarters of firms in our dataset are unregistered with any government agency, and hence belong to the “unorganized” or “informal” sector.<sup>15</sup> They are not subject to government regulations such as labor laws or environmental regulations, but they also cannot access government financing programs or other institutional sources of finance. Consistent with our results on the accessing of formal finance, we find that while 77% of enterprises owned by non SC/STs are in the unorganized sector, this proportion is more than 85% for SCs and STs. As with all other differences documented earlier, the caste differences in the extent of informality are much larger in urban areas compared to rural areas, particularly for SCs.<sup>16</sup>

### *4.4 Industry Mix*

Do the factors documented above—the smaller firm size, the greater preponderance of family labor and informality--prevent SC and ST entrepreneurs from entering certain sectors? We examine the broad categories of activity for the enterprises in our data set. Overall the differences are not large in the types of industries entered by different communities. SCs and STs are more likely to be involved in agriculture-related activities and manufacturing, while non-SC/STs are more likely to be involved in retail trade, throughout this period. But there have been important changes in the industry distribution over time: both SC and ST enterprises have a greater share in retail trade, and a lower share in manufacturing in 2005 as compared to 1990. In this sense, their industry distribution has become closer to that of non-SC/STs (Table 4). An important implication of this convergence in industry mix is that the persistent underrepresentation of SCs and STs documented earlier, and the persistently smaller firm size of SC/ST enterprises, cannot be attributed to underlying economic primitives of the industries in which these groups are involved.

Table 4 about here

#### 4.5 Why Gaps and Lags?

What might be the possible reasons for these persistent gaps in entrepreneurial activity across caste categories? We should note that outright discrimination is unlikely to be the *full answer*, since many of these differences in enterprise ownership and enterprise scale are larger in urban areas where, following Ambedkar, one expects discrimination to be lower. On the basis of his studies in Panipat and Saharanpur, Jodhka reports that caste did influence Dalit businesses negatively, but

Caste appeared to matter least in procuring supplies. Only 5% of all... respondents reported any kind of difficulties in getting supplies because of their being Dalits. 'As long as you can pay, no one cares who you are'... A large majority of our respondents...faced no caste related discrimination in getting supplies or raw materials for their businesses. This was so when the suppliers in almost all...cases were non-dalits, mostly from the locally dominant business communities, the Baniyas, Punjabis or Muslims. (Jodhka 2010: 47)

In short, while discrimination does exist, there are likely to be many other factors as well. We are basically in a multivariate explanatory space. The existing literature on entrepreneurship suggests a number of possible explanations. Perhaps SC and ST entrepreneurs lack access to capital needed to set up and grow enterprises. Or perhaps they do not have education levels high enough to become successful entrepreneurs. Maybe the growth of enterprises depends strongly on network effects, both for finding the right workers and for making links with suppliers and customers. SC and ST enterprise owners might thus be disadvantaged by their relatively smaller networks.

Many of these factors are known to be relevant in India. Banerjee and Duflo (2012) show that even formal sector firms are extremely credit-constrained in India; informal firms are likely to be even more so, despite the high rates of return to capital among small enterprises (McKenzie, de Mel and Woodruff 2008). In terms of caste differences, Scheduled Castes and Scheduled Tribes have been shown to have lower rates of land ownership (Iversen et al 2011), and long-lasting gaps in educational attainment (Desai and Dubey 2011).

Can low levels of land ownership and educational attainment explain the gaps in enterprise ownership at the state or district level? We provide preliminary evidence by regressing the share of SC/ST enterprise ownership in the state on the levels of literacy, urbanization, fraction of population engaged in farming and the fraction of landless among the farmers

(proxied by the share of agricultural labor in the farming sector, as opposed to cultivators). We do not find these variables to have much explanatory power in explaining the share of SC or ST enterprise ownership, controlling for the SC or ST population share (Table 5, panel A). Of course, one possibility is that the absence of correlations may be driven by poor measures of the underlying phenomena. For instance, literacy captures only one dimension of educational attainment; perhaps what matters for entrepreneurship is a specific type or a particular quality of education, which we are not able to measure accurately.

Further examination at the district level also shows a similar result: the variation in SC/ST enterprise ownership share across districts within a state is not significantly related to these proxy measures of access to capital and education (Table 5, Panel B). The only exception to this is that higher literacy levels do seem to be a spur to greater ST entrepreneurship.

Tables 5 about here

## **5. Entrepreneurship and Social Structure in International Perspective**

As we think further about how entrepreneurship might flourish among the SCs and STs, it might be worth briefly considering the experiences of marginalized groups in other socially diverse parts of the world. The relationship between entrepreneurship and social structure has been studied in numerous settings. A comprehensive survey is not in order here, but selected experiences are worth highlighting. These collectively validate the difficulty of marginalized groups overcoming historical barriers to becoming entrepreneurs.

Consider the Malaysian experience, for example, long chronicled by Jomo and Gomez (1999), and recently summarized in Gomez (2011). Malaysia's New Economic Policy (NEP) was the first institutionalized attempt to redress the small economic share of the numerically dominant *bumiputeras* ("sons of the soil," referring to ethnic Malays and other indigenous people), and was triggered by the race riots of May 1969, at a time when the *bumis* held only 1.5% of corporate equity. After four decades of policy attempts to increase *bumi* representation in business, the share of *bumi* ownership never rose above 21%, well short of the 30% mandated target. Most famously, Prime Minister Mahathir Mohamed tried to bet on particular *bumi* entrepreneurs but managed to create a version of crony capitalism whereby selected *bumis*

flourished, but the bulk were left behind. Further, the empires of many of the chosen few collapsed during the Asian financial crisis of 1997, and by 2003, Mahathir himself was complaining that policies to favor the *bumis* had resulted in their having developed a “crutch” mentality. His successor in 2003, Prime Minister Badawi, changed course and favored a “vendor” system whereby he planned to help small and medium enterprises by hooking them up to established corporations. This largely did not work. In 2009, current Prime Minister Najib finally backed away from the long-standing goal of 30% *bumi* ownership in several sectors, worried about deterring foreign investment in a moribund economy and the possibility of getting stuck in a so-called high middle income trap.

The Malaysian failure to redress *bumi* economic marginalization in a sense mirrors that of post-apartheid South Africa also. The emphasis on Black Economic Empowerment (BEE) has sometimes resulted in the creation of BEE business behemoths, but the empowerment of the disenfranchised has largely not been forthcoming. In response to the criticisms of BEE, the government passed the Broad Based BEE Act in 2003.<sup>17</sup> Yet, blacks’ ascent to the rarefied summits of the economic peaks remains scarce, and white skilled migration remains a perpetual fear.<sup>18</sup>

Studies such as those in Malaysia and South Africa are largely qualitative analyses of the evolution of a particular marginalized group. In the past decade, economists have tried to quantify some of the barriers to entrepreneurship, influenced by the work of De Soto (1989).<sup>19</sup> While their work generally does not focus on marginalized groups *per se*, many studies have examined cross-country determinants of entrepreneurship. In general, these studies do show that more onerous regulations deter entrepreneurship (Klapper et al 2006), that reductions in the number of procedures required to start a business help entrepreneurs (Bruhn 2010), and that increased growth opportunities lead to increased mobility from informality to the formal sector.<sup>20</sup>

Whether dismantling regulatory barriers specifically helps marginalized groups is a conjecture worth examining in detail.<sup>21</sup> Many studies suggest that marginalized groups get more of a helping hand from their own community, however construed, than they do from the top-down dismantling of generalized regulatory barriers. Kaivan Munshi’s empirical analysis illustrates the importance of social networks in finding jobs or climbing out of poverty (Munshi 2003, 2011); Iyer and Schoar (2010) show that community ties influence the types of business behavior in a controlled setting in India; Kalnins and Chung (2006) examine this matter for

Gujarati entrepreneurs in the hotel industry in the United States; Vissa (2011) demonstrates that in knowledge-intensive industries, entrepreneurs tend to privilege those who are from their own caste group and speak their own language in attempting to form a business. Chinese diasporic ties to particular locales on the mainland are well documented as well.<sup>22</sup> Perhaps the best theoretical treatment of the importance of community, though, is from several early studies in so-called ethnic enclaves, by Alejandro Portes, where he shows how communities invest in public goods to overcome barriers to entrepreneurship, particularly in the informal economy and among disadvantaged communities.<sup>23</sup>

## **6 Conclusions**

We started with an observation about how the SCs, STs and especially the OBCs have made significant progress at the level of political representation in independent India. The evidence we have presented shows that the OBCs have made progress in entrepreneurship, but SCs and STs have remained considerably under-represented in the entrepreneurial sphere. That is, for SCs and STs, political gains have not manifested themselves in greater entrepreneurial prowess. The rise of Dalit millionaires, driven in part by newer economic freedoms, does not appear representative of the broader swathes of the SC/ST population, at least until 2005. Such under-representation appears to persist even in states with very progressive policies towards SCs and STs, in states where OBCs have made considerable progress in enterprise ownership, and in urban areas where outright discrimination is lower than in rural India. Further, the patterns of SC and ST entrepreneurship are not strongly related to broad measures of educational attainment, access to land or transition away from farming.

While this is only a preliminary analysis, it does suggest that we need to think deeper about the determinants of entrepreneurship. For instance, a potential hypothesis is that the growth of enterprises depends strongly on network effects, both for finding the right workers and for making links with suppliers and customers. SC and ST enterprise owners might thus be disadvantaged by their relatively smaller networks, particularly in urban areas. Testing these kinds of hypotheses would require measuring such networks at a very local level. We see our work so far as documenting some of the basic facts about caste and entrepreneurship, and

investigating some broad patterns to provide a basis for more detailed theories and empirical tests.

## References

- Ahluwalia, I.J. (2002): “Economic Reforms in India Since 1991: Has Gradualism Worked,” *Journal of Economic Perspectives*, 16(7): 67-88.
- Ahmed, Sadiq and Ashutosh Varshney (Forthcoming): “Battles Half Won: The Political Economy of India’s Growth and Economic Policy Since Independence”, in Chetan Ghatge (ed) *The Oxford Handbook of the Indian Economy* (New York: Oxford University Press).
- Ahuja. Amit (2008): “Mobilizing Marginalized Citizens: Ethnic Parties Without Ethnic Movements”, PhD dissertation, University of Michigan, Ann Arbor: Department of Political Science.
- Aiyar, Swaminathan S. (2011): “The Unexpected Rise of Dalit Millionaires”, *The Economic Times*, July 31.
- Banerjee, Abhijit and Esther Duflo (2012): “Do Firms Want to Borrow More? Testing Credit Constraints Using a Directed Lending Program”, MIT Working Paper.
- Banerjee, Abhijit, and Rohini Somanathan (2007): “The political economy of public goods: Some evidence from India”, *Journal of Development Economics* 82(2): 287–314.
- Bruhn, Miriam (2010): “License to Sell: The Effect of Business Registration Reform on Entrepreneurial Activity in Mexico”, *Review of Economics and Statistics* (forthcoming).
- Cassan, Guilhem (2011): “The Impact of Positive Discrimination on Education in India: Evidence from a Natural Experiment”, Working Paper, Paris School of Economics.
- Damodaran, Harish (2008): *India’s New Capitalists: Caste, Business and Industry in a Modern Nation* (New Delhi: Palgrave Macmillan).
- Desai, Sonalde and Amaresh Dubey (2011): “Caste in 21<sup>st</sup> century India: Competing Narratives”, *Economic & Political Weekly* 46(11): 40-49.
- De Soto, Hernando (1989): *The Other Path: The Invisible Revolution in the Third World* (New York: HarperCollins).
- Deshpande, Ashwini (2011): *The Grammar of Caste* (Delhi: Oxford University Press).
- Djankov, Simeon, Rafael La Porta, Florencio Lopez-de-Silanes, and Andrei Shleifer (2002): “The Regulation of Entry”, *Quarterly Journal of Economics* 117(1): 1-37.



- Ghani, Ejaz, William Kerr and Stephen O'Connell (2011): "Promoting Entrepreneurship, Growth and Job Creation" in Ejaz Ghani (ed) *Reshaping Tomorrow: Is South Asia Ready for the Big Leap* (New Delhi: Oxford University Press).
- Gomez, E.T. (2011): "The Politics and Policies of Corporate Development: Race, Rents, and Redistribution in Malaysia" in Gomez. E.T. and Hall Hill (ed) *The Politics and Policies of Corporate Development: Race, Rents, and Redistribution in Malaysia* (London: Routledge Publications).
- Gomez, E.T. and Jomo K.S. (1999): *Malaysia's Political Economy: Politics, Patronage and Profits* (Cambridge: Cambridge University Press).
- Hardgrave, Robert (1970): *Nadars of Tamilnad* (Berkeley and Los Angeles: University of California Press).
- Iversen, Vegard, Adriaan Kalwij, Arjan Verschoor and Amaresh Dubey (2011): "Caste Dominance and Economic Performance in Rural India", Working Paper, Indian Statistical Institute.
- Iyer, Rajkamal and Antoinette Schoar (2010): "Are there Cultural Differences in Entrepreneurship" in Josh Lerner and Antoinette Schoar (ed) *International Differences in Entrepreneurship* (Chicago: University of Chicago Press for National Bureau of Economic Research).
- Jaffrelot, Christophe and Sanjay Kumar, ed. (2009): *Rise of the Plebeians? The Changing Face of Indian Legislative Assemblies* (London and New Delhi: Routledge).
- Jodhka, Surinder S. (2010): "Dalits in Business: Self Employed Scheduled Castes in Northwest India", *Economic and Political Weekly*, 45(11).
- Kalnins, A. and Chung, W. (2006): "Social Capital, Geography, and Survival: Gujarati Immigrant Entrepreneurs in the U.S. Lodging Industry", *Management Science* 52: 233–247.
- Kapur, Devesh, Chandra Bhan Prasad, Lant Pritchett and D Shyam Babu (2010): "Rethinking Inequality: Dalits in Uttar Pradesh in the Market Reform Era", *Economic & Political Weekly* 45(35): 39-49.
- Klapper, Leora, Luc Laeven and Raghuram Rajan (2006): "Entry Regulation as a Barrier to Entrepreneurship", *Journal of Financial Economics* 82(3): 591-629.

- Lerner, Josh and Antoinette Schoar, ed. (2010): *International Differences in Entrepreneurship* (Chicago: University of Chicago Press for National Bureau of Economic Research).
- McKenzie, David, Suresh de Mel, and Christopher Woodruff (2008): “Returns to Capital: Results from a Randomized Experiment”, *Quarterly Journal of Economics* 123(4): 1329-72.
- Mehta, Pratap Bhanu (2003): *The Burden of Democracy* (Delhi: Penguin).
- Munshi, Kaivan (2003): “Networks in the Modern Economy: Mexican Migrants in the U.S. Labor Market”, *Quarterly Journal of Economics* 118: 549–597.
- Munshi, Kaivan (2011): “Strength in Numbers: Networks as a Solution to Occupational Traps”, *Review of Economic Studies* 78: 1069–1101.
- Nigam, Aditya (2002): “In Search of a Bourgeoisie: Dalit Politics Enters a New Phase”, *Economic and Political Weekly*, 37 (13).
- Pan, Lynn (1999): *The Encyclopedia of the Chinese Overseas* (Cambridge, MA: Harvard University Press).
- Pande, Rohini (2003): “Can Mandated Political Representation Increase Policy Influence for Disadvantaged Minorities? Theory and Evidence from India”, *American Economic Review* 93(4): 1132-1151.
- Pandey, Priyanka (2010): “Service Delivery and Corruption in Public Services: How Does History Matter?” *American Economic Journal: Applied Economics*, 2(3): 190–204.
- Portes, Alejandro and Julia Sensenbrenner (1993): “Embeddedness and Immigration: Notes on the Social Determinants of Economic Action”, *American Journal of Sociology* 98 (6): 1320-1350.
- Rodrik, Dani and Arvind Subramanian (2004): “From Hindu Growth to ‘Productivity Surge’: The Mystery of the Indian Growth Transition”, IMF Working Paper 04/77.
- Saxena, Shobhan (2011): “Caste and Capital Can’t Coexist”, An Interview with Milind Kamble, *The Times of India*, October 2.
- Rudolph, Lloyd, and Susanne Rudolph (1967): *The Modernity of Tradition* (Chicago: University of Chicago Press).
- Srinivas, M.N. (1966): *Social Change in Modern India* (Berkeley and Los Angeles: University of California Press).

- Subramanian, Narendra (2000): *Ethnicity and Populist Mobilization: Political Parties, Citizens and Democracy in South India* (Delhi: Oxford University Press).
- Thorat, Sukhadeo, Debolina Kundu and Nidhi Sadana (2010): “Caste and Ownership of Private Enterprises” in Thorat, Sukadeo and Katherine Newman (ed) *Blocked by Caste: Economic Discrimination in Modern India* (New Delhi: Oxford University Press).
- Varshney, Ashutosh (2000): “Is India Becoming More Democratic?” *Journal of Asian Studies*, 59 (1).
- (2007): “India’s Democratic Challenge”, *Foreign Affairs*, March/April.
- (2012): “Two Banks of the Same River? Social Order and Entrepreneurialism in India”, in Partha Chatterjee and Ira Katznelson (ed) *Anxieties of Democracy: Tocquevillean Reflections on India and the United States* (Delhi: Oxford University Press).
- Vissa, Balagopal (2011): “A Matching Theory of Entrepreneurs’ Tie Formation Intentions and Initiation of Economic Exchange”, *Academy of Management Journal* 54(1), 137–158.
- Weiner, Myron (2001): “The Struggle for Equality: Caste in Indian Politics” in Atul Kohli (ed) *The Success of India’s Democracy* (New York: Cambridge University Press).

**Table 1. Share of Enterprises and Employment by Caste Category, 2005**

	Caste category of enterprise owner				Number of private enterprises
	General	OBC	SC	ST	
Population share	33.2%	42.7%	16.4%	7.7%	
Rural			18.2%	9.7%	
Urban			11.7%	2.2%	
Share of enterprise ownership 2005	42.9%	43.5%	9.8%	3.7%	35,951,686
Rural	36.9%	46.8%	11.5%	4.8%	21,890,552
Urban	52.3%	38.4%	7.3%	2.0%	14,061,134
Share of employment 2005	48.5%	40.0%	8.1%	3.4%	74,754,978
Rural	40.3%	45.0%	10.1%	4.7%	34,177,965
Urban	58.2%	34.1%	5.8%	1.9%	40,577,013

Source: Economic Census 2005, Population shares of SC and ST from population Census 2001, OBC population share from National Sample Survey 66th Round 2009-10.

Notes: SC population share in NSS 66th Round was 19.6% and ST population share was 8.2%.

**Table 2. Trends in Enterprise Ownership and Employment Generation by Caste Category,**

	1990	1998	2005
Share of enterprise ownership			
Non SC/ST	87.5%	87.3%	86.4%
<i>of which OBC</i>		37.5%	43.5%
SC	9.9%	8.5%	9.8%
ST	2.6%	4.2%	3.7%
Share of employment			
Non SC/ST	90.6%	89.4%	88.5%
<i>of which OBC</i>		33.8%	40.0%
SC	7.4%	6.9%	8.1%
ST	2.0%	3.8%	3.4%

Source: Economic Censuses of 1990, 1998 and 2005;  
 Data are for 19 major states of India.  
 Economic Census of 1990 did not identify OBCs.

**Table 3. Firm Scale Characteristics by Caste Category**

		Caste category of enterprise owner		
		Non SC/ST	SC	ST
Average size of enterprise	2005	2.13	1.72	1.89
	<i>Rural</i>	<i>1.89</i>	<i>1.63</i>	<i>1.79</i>
	<i>Urban</i>	<i>2.47</i>	<i>1.93</i>	<i>2.27</i>
	1998	2.37	1.88	2.09
	1990	2.59	1.86	1.95
% firms with only one person	2005	56.9%	64.7%	55.9%
	1998	52.1%	58.9%	48.4%
	1990	55.3%	60.8%	50.1%
% firms with institutional finance	2005	3.6%	2.6%	3.6%
	<i>Rural</i>	<i>3.6%</i>	<i>2.5%</i>	<i>3.3%</i>
	<i>Urban</i>	<i>3.7%</i>	<i>2.7%</i>	<i>4.5%</i>
	1998	3.0%	2.4%	2.9%
% unregistered firms	2005	77.4%	88.1%	87.4%
	<i>Rural</i>	<i>86.5%</i>	<i>92.7%</i>	<i>92.6%</i>
	<i>Urban</i>	<i>64.3%</i>	<i>76.7%</i>	<i>67.8%</i>

Source: Economic Census 2005, 1998, 1990

**Table 4. Percentage of Firms in Different Industrial Categories by Caste of Owner****2005**

	Caste category of enterprise owner		
	Non SC/ST	SC	ST
Agricultural activities	15.7%	17.2%	27.0%
Manufacturing	21.0%	23.9%	24.8%
Wholesale trade	4.2%	2.6%	2.1%
Retail trade	38.3%	35.5%	30.8%
Restaurants and hotels	3.8%	2.6%	2.8%
Transport, storage, warehousing, communications	5.2%	7.4%	4.5%
Finance, insurance, real estate and business services	3.1%	2.0%	1.8%
Community, social and personal services	4.3%	3.1%	2.8%
Other	4.6%	5.7%	3.5%

**1998**

	Caste category of enterprise		
	Non SC/ST	SC	ST
Agricultural activities	12.3%	12.9%	25.6%
Manufacturing	19.1%	25.0%	25.6%
Wholesale trade	2.6%	1.7%	1.3%
Retail trade	39.0%	31.7%	27.8%
Restaurants and hotels	4.4%	2.7%	2.6%
Transport, storage, warehousing, communications	3.7%	5.8%	3.7%
Finance, insurance, real estate and business services	2.2%	1.2%	1.3%
Community, social and personal services	15.6%	17.2%	10.6%
Other	1.1%	1.8%	1.5%

**1990**

	Caste category of enterprise		
	Non SC/ST	SC	ST
Agricultural activities	9.2%	14.1%	27.6%
Manufacturing	20.0%	29.0%	28.1%
Wholesale trade	2.3%	1.6%	0.9%
Retail trade	33.1%	23.0%	17.7%
Restaurants and hotels	8.5%	3.7%	6.1%
Transport, storage, warehousing, communications	3.0%	5.0%	2.4%
Finance, insurance, real estate and business services	1.4%	0.5%	0.3%
Community, social and personal services	17.1%	16.3%	7.6%
Other	5.4%	6.9%	9.3%

"Other" includes mining and quarrying, electricity, gas and water and construction.

Source: Economic Census 1990, 1998, 2005

**Table 5. Determinants of SC/ST Shares in Enterprise Ownership and Employment**

## Panel A: Relationship with state level characteristics of SCs/STs

	Fraction of enterprises owned by SCs	Fraction of workforce employed in SC-owned enterprises	Fraction of enterprises owned by STs	Fraction of workforce employed in ST-owned enterprises
Population SC (ST) share	0.581 *** (0.162)	0.358 ** (0.155)	0.401 *** (0.106)	0.413 *** (0.121)
% SC (ST) urban	-0.126 (0.119)	-0.155 (0.114)	-0.004 (0.209)	-0.040 (0.240)
% SC (ST) literate	0.086 (0.106)	0.089 (0.101)	0.049 (0.097)	0.049 (0.112)
% SC (ST) engaged in farming	-0.056 (0.080)	-0.008 (0.077)	-0.010 (0.163)	-0.011 (0.187)
% of landless among SC (ST) farmers	-0.052 (0.038)	-0.050 (0.036)	0.009 (0.043)	0.014 (0.049)
R-squared	0.61	0.47	0.74	0.70
Observations	18	18	16	16

## Panel B: District level relationship

	Fraction of enterprises owned by SCs	Fraction of workforce employed in SC-owned enterprises	Fraction of enterprises owned by STs	Fraction of workforce employed in ST-owned enterprises
Population SC (ST) share	0.398 *** (0.049)	0.346 *** (0.043)	0.519 *** (0.054)	0.475 *** (0.055)
Fraction urban	-0.018 (0.017)	-0.030 * (0.016)	0.003 (0.021)	-0.003 (0.022)
Fraction literate	-0.009 (0.033)	-0.030 (0.032)	0.115 ** (0.055)	0.100 * (0.058)
Fraction engaged in farming	-0.034 (0.024)	-0.028 (0.022)	0.009 (0.027)	0.004 (0.029)
Fraction of landless among farmers	-0.001 (0.017)	-0.007 (0.017)	-0.010 (0.022)	-0.014 (0.023)
R-squared	0.68	0.63	0.75	0.70
Observations	516	516	481	481

Sources: Economic Census 2005; Population Census 2001

Standard errors in parantheses, corrected for heteroskedasticity. \*\*\*, \*\* and \* indicate significance at 1%, 5% and 10% respectively. District level regressions include state fixed effects; regressions for ST limited to states and districts with non-zero ST population.





Figure 2: Employment Share of ST Enterprises

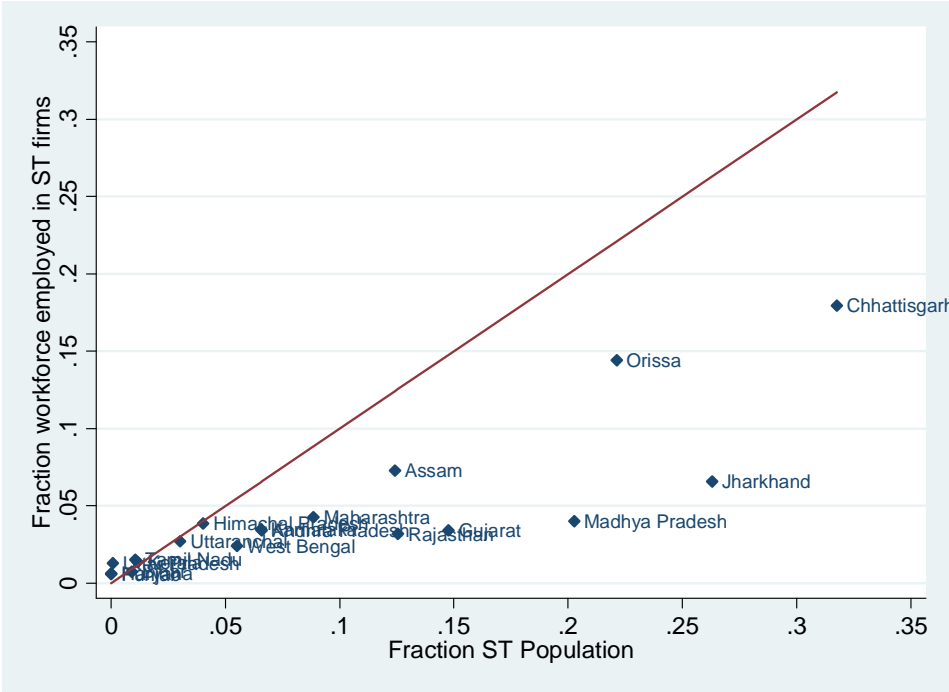
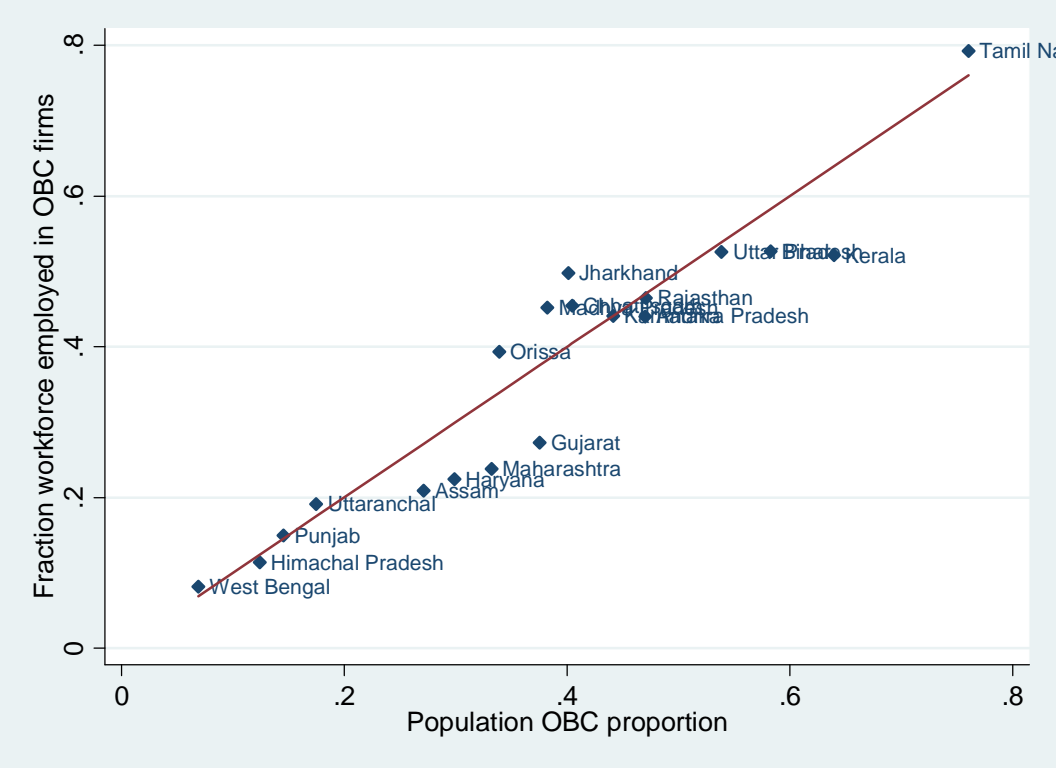


Figure 3: Employment Share of OBC Enterprises



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<sup>1</sup> See, among others, Ahmed and Varshney (*forthcoming*), Ahluwalia (2002), and Rodrik and Subramanian (2004).

<sup>2</sup> India's Gini coefficient of income inequality increased from 29.6 in 1990 to 36.8 in 2004, based on data from the World Income Inequality Database 2010

([http://www.wider.unu.edu/research/Database/en\\_GB/wiid/\\_files/79789834673192984/default/WIID2C.xls](http://www.wider.unu.edu/research/Database/en_GB/wiid/_files/79789834673192984/default/WIID2C.xls), accessed July 2011).

<sup>3</sup> We cite this key paragraph from a well-known report on the Bhopal conference published in the *Economic and Political Weekly* (Nigam 2002: 1190). It should also be noted that the rise of African American entrepreneurs in post-1965 US has served as an important political economy template for these intellectuals.

<sup>4</sup> Between July 19 and July 22, 2011, *The Economic Times* published many stories under the series entitled "The Rise of Dalit Enterprise".

<sup>5</sup> A new book by Deshpande (2011) goes over all of these questions afresh, summarizing the earlier studies as well.

<sup>6</sup> Damodaran (2008) provides narratives of how caste and business have interacted in the rise of new business families in India. Jodhka (2010) studies Dalit entrepreneurs in Panipat, Haryana, and Saharanpur, UP. Varshney (2012) asks whether the earlier breakdown of caste hierarchies in South India, compared to North India, is connected to the Southern economic resurgence since 1980. Thorat *et al* (2010) look at all-India patterns in caste background of business owners. We disaggregate the all-India data in newer categories.

<sup>7</sup> *Provisional results of Economic Census 2005*, Central Statistical Organization, Ministry of Statistics and Programme Implementation, Government of India, p 11. Obtained from <http://www.mospi.gov.in> (March 2010).

<sup>8</sup> These states are Andhra Pradesh, Assam, Bihar, Chhattisgarh, Gujarat, Haryana, Himachal Pradesh, Jharkhand, Karnataka, Kerala, Maharashtra, Madhya Pradesh, Orissa, Punjab, Rajasthan, Tamil Nadu, Uttar Pradesh, Uttarakhand and West Bengal. The excluded states are Arunachal Pradesh, Goa, Jammu & Kashmir, Manipur, Meghalaya, Mizoram, Nagaland, Sikkim and Tripura.

<sup>9</sup> The population census of India is conducted every 10 years. These dates do not coincide with the conduct of the Economic Censuses. The results of the 2011 census with regard to caste composition of the population have not been released as of June 2011.

<sup>10</sup> To be more precise, one should speak about the Madras Presidency parts of the Southern Indian states and the Bombay Presidency parts of Maharashtra. The states of Andhra Pradesh, Karnataka and Maharashtra also inherited the territories of the princely state of Hyderabad, where no such policies were instituted.

<sup>11</sup> For the erosion of Tamil caste structure, see Hardgrave 1970, Rudolph and Rudolph 1967, and Subramanian 2000.

<sup>12</sup> See Damodaran (2008) and Varshney (2012).

<sup>13</sup> Gross state domestic product in Maharashtra grew at an annualized rate of 6.6% over the period 1999-2008, slightly slower than the nationwide rate of 7.2%. Maharashtra extended political reservations in district and village councils to SCs and STs as early as 1961, when most states of India implemented this only after the Panchayati Raj constitutional amendment in 1993.

<sup>14</sup> Note that these increases are not merely a result of certain communities being granted OBC status between 1998 and 2005, such as the Jats in Rajasthan and UP. Even if we exclude UP and Rajasthan, the OBC share of enterprise ownership increased from 37.2% in 1998 to 41.6% in 2005, and the employment share increased from 33.6% to 38.3%. Jats were granted OBC status in Rajasthan in 1999, except for the districts of Bharatpur and Dhaulpur (<http://timesofindia.indiatimes.com/india/OBC-list-shot-up-by-90-since-Mandal-I/articleshow/1561919.cms>, accessed August 2010).

<sup>15</sup> Formally, these enterprises are not registered under or recognized with any of the following: the Factories Act of 1948, the State Directorate of Industries, Khadi and Village Industries Commission, Development Commissioner of handicrafts, powerlooms or handlooms, Commissioners of Textiles and Jute, the Coir Board, the Central Silk Board, the Central Excise/Sales Tax Act, the Shop & Establishment Act, the Cooperative Society/Labour Act or any other agencies.

<sup>16</sup> We are not able to examine the pattern of informality over time, since the questions on firm registration in the 1998 survey were different from those in 2005; this information is not present at all in the 1990 survey.

<sup>17</sup> The term 'black' here refers to Africans, Coloreds and Indians. Companies were more likely to win government contracts if they shared ownership with blacks, helped develop their human capital, and hired more of them, among other actions. The government gazette of January 2004 referring to the new act can be found here. <http://www.info.gov.za/view/DownloadFileAction?id=68031>, accessed October 2011.

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<sup>18</sup> “The president says it has failed,” *The Economist*, March 31, 2010. <http://www.economist.com/node/15824024> accessed October 2011.

<sup>19</sup> See Djankov et al (2002) and the Doing Business Indicators of the World Bank for these measures (<http://www.doingbusiness.org>).

<sup>20</sup> See the introductory chapter in Lerner and Schoar (2010).

<sup>21</sup> In an interview, Milind Kamble, President of the Dalit India Chamber, takes some steps in this direction (Saxena 2011).

<sup>22</sup> See, for example, Pan (1999).

<sup>23</sup> See, for example, Portes and Sensenbrenner (1993).