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# Entry Regulation, Labor Laws, and Informality

**Siddharth Sharma**

**Does the regulation of entry cause informality in the manufacturing sector of developing countries? This note presents evidence from India that suggests that a policy reform that lifted barriers to entry lessened informality. This reduction in informality was accompanied by gains in average labor productivity in the informal sector. The most likely reasons for this productivity gain appear to have been a decline in inefficient single-household firms and an increase in more efficient multi-person firms. However, the impact of entry deregulation also appears to have depended on state-level labor laws, being measurably larger in states with more pro-employer labor laws.**

Informality is endemic to firms in developing countries. For example, more than 80 percent of industrial employment in India is estimated to be in unregistered establishments.[1] It is often asserted that despite obvious gains from registering, such as better access to credit, firms choose to stay informal in order to avoid the burden of inflexible regulation. Consistent with this view, cross-country investigation reveals that informality is more prevalent in economies with greater entry regulation, and rigid labor laws (Djankov et al. 2002; Djankov and Ramalho 2009).

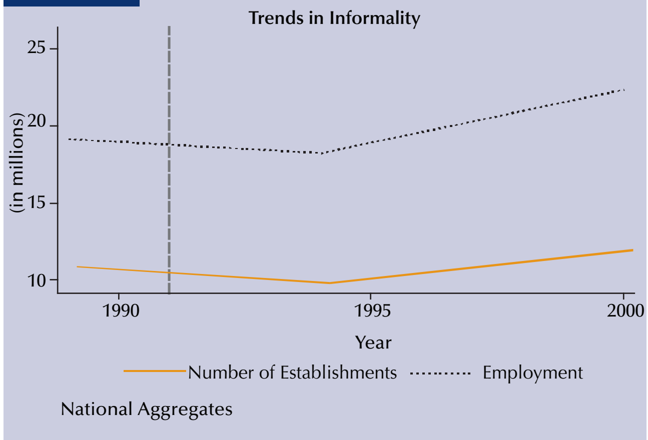
This note presents the results of a new study that uses data from large, nationally representative surveys of India's informal ("unregistered") enterprises[2] to examine how informality is linked to entry barriers and labor regulation. The point of departure for this inquiry is a major reform of entry regulation in the early 1990s. India's industrial licensing system had made it notoriously difficult to set up or expand factories in the formal sector. In 1991, the Indian government "delicensed" nearly half of all industries at a stroke. This was the first step in a program of economic liberalization in response to a macroeconomic crisis. Previous research (Aghion et al. 2008) has shown that while this reform led to growth in registered factories, the degree of this expansion differed across states because of differences in their labor laws. We will now describe the reform's effect on the informal sector, and compare it across states that differ in the flexibility of their labor laws.[3]

## Informality Declined after Entry Deregulation

Figure 1 below presents the aggregate numbers for India's informal manufacturing sector in 1988, 1994, and 2000. First, it shows that informality declined nationwide between 1988 and 1994, the survey years falling right before and after the wave of deregulation. In particular, the total number of informal enterprises fell by 10 percent, while total employment fell by 3 percent. The lower decline in employment suggests that most of this contraction was driven by people leaving self-employment, rather than closures of multi-worker informal firms.

Second, Figure 1 shows that the informal sector recovered during 1994–2000. This could be a result of other reforms that India undertook in the 1990s, reducing barriers to trade and FDI. The key difference between delicensing and other reforms is that while delicensing was largely com-

**Figure 1** Informality before and after Delicensing




*Source: Survey of Unorganized Manufacturing.*

plete by 1991, other reforms were phased in slowly, and intensified during the *late* 1990s. Had the informal sector continued to decline even after 1994, there would be reason to suspect that the 1988–94 contraction was related to reforms other than delicensing. Thus, the recovery of the informal sector in the late 1990s actually strengthens the case that the decline during 1988–1994 was an outcome of delicensing.

## The Decline in Informality Depended on Labor Laws

In India both the central and state governments have jurisdiction over labor legislation. This has caused the states to differ markedly in their labor regulation, a fact that has been linked to growth divergence across Indian states. In a prominent study, Besley and Burgess (2004) used data on state-level amendments to India's common labor law to classify each state as *pro-employer*, *neutral*, or *pro-worker*, with pro-employer states having the most flexible labor laws. They found that amendments in the direction of rigidity were associated with lower state-level growth.

**Delicensing reduced informality in flexible labor law states**

The informality surveys reveal that the effect of delicensing varied across states with different labor laws. Figure 2, Panels A and B, show how changes in informality are different across pro-employer ("flexible") and neutral/pro-worker ("inflexible") labor law states. These graphs show that the number of enterprises and employment in the informal sector declined sharply during 1988-1994, *in flexible labor law states.* Inflexible labor law states, in contrast, saw no such decline. Interestingly, this difference in growth across the two groups of states vanished during 1994-2000, which suggest that the pre-1994 divergence was the result of delicensing. Thus, compared to inflexible labor regulation states, delicensing expanded the formal sector in flexible labor law states (Aghion et al. 2008) by reallocating workers from informal to formal enterprises.

Regression analysis on data disaggregated by state and industry confirms that this pattern is statistically significant: compared to neutral labor law states, states with pro-employer labor regulation saw a 25 percent larger contraction in the number of the informal enterprises (Sharma 2009). Pro-worker states, on the other hand, evidenced the same lower level of contraction as neutral states.

## How Deregulation Improves Productivity

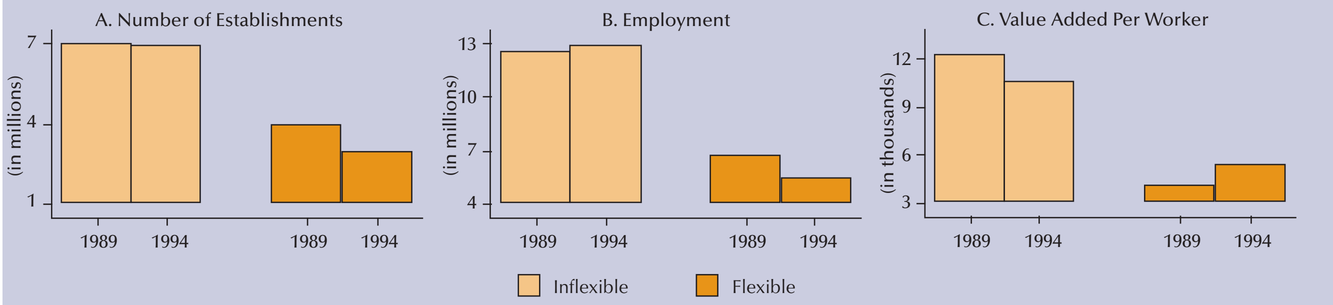
Barriers to entry allow inefficient producers to survive. Recent research shows that delicensing played a major role in increasing productivity in India's formal manufacturing sector, with estimates of productivity gains in the order of 32 percent in the deregulated industries (Chari 2009). This productivity gain in the formal sector happened in two ways. First, relaxation of capacity expansion allowed the more efficient producers to expand, which in turn forced the least efficient firms to shut down. Second, relaxation of entry increased the level of competition in the formal sector.

In Figures 1 and 2, we saw that the same reform also encouraged exit from informality. Did this have an effect on average productivity in the *informal* sector? It is held that the efficiency loss from informality is related to scale: since informal firms have to remain small in order to stay under the regulatory radar, they fail to take advantage of economies of scale. Moreover, unregistered enterprises find it difficult to access credit markets. Finally, given high transport costs, small firms might be limited to selling their products in local markets, which are easily saturated.

But to what degree do these factors matter? Perhaps the best way to answer this question is to see what happens to productivity in informal enterprises when barriers to entering the formal sector are lowered. India's delicensing "experiment" thus presents a unique opportunity to measure the productivity consequences of informality.

The results indicate that deregulation-induced exit from informality is associated with major productivity increases. Panel C in Figure 2 shows that compared to inflexible states, value added per worker in the informal sector *increased* in flexible labor law states between 1988 and 1994. Thus, the states that saw relative exits from informality also saw a relative increase in informal labor productivity. Regression estimates also indicate that compared to neutral states, value added per informal worker increased by 36 percent in pro-employer states. And in pro-worker states, which saw relative entry into informality, value added per worker fell by 18 percent (relative to neutral states).

**Figure 2** Comparing Changes in Informality across States with Inflexible and Flexible Labor Laws




*Source: Survey of Unorganized Manufacturing.*

The data also show that while flexible labor law states saw a relative decline in total informal employment, there was no corresponding relative decline in total revenue generated in the informal sector. Thus, there might be such a thing as "overcrowding" in the informal sector: as more and more informal firms crowd into the same local market, demand saturates, and prices drop sharply. Conversely, as people leave the informal sector, there is a bigger market share available to each remaining informal worker.

> **Deregulation-induced exit from informality is associated with major productivity increases**

Studies suggest that there are substantial efficiency gains in moving from the single person firm (self-employment) to multi-worker firms (Tybout 2000). In Figure 1, we saw that the contraction in the informal sector was largely driven by people leaving self-employment. This suggests that deregulation also helped raise productivity by lowering the prevalence of inefficient single-person enterprises.

## The Costs and Benefits of Labor Regulation

Most developing countries have a large population working in small, informal establishments or in self-employment. Given the extremely low productivity levels observed in the informal sector, there is a great deal of interest in designing policies that encourage a reallocation of employment to formal enterprises. The findings described in this note suggest that removing regulatory barriers to industrial entry can be successful not only in stimulating growth in the formal sector, but also in reducing informality. This happens mainly because rising labor demand in the formal sector induces people to leave less profitable self-employment.

The effect of entry deregulation on labor demand, the resulting exit from informality, and the consequent productivity improvement all depend on labor laws. In fact, the Indian experience suggests that deregulation may succeed only when labor laws are sufficiently flexible.

This complementarity between entry liberalization and the flexibility of labor regulation raises an important policy question. One of the benefits of formalizing firms is that it offers workers some degree of formal protection. In this sense, more pro-worker labor laws benefit those who are able to find formal jobs. However, labor laws that are too pro-worker may inadvertently hurt overall social protection by encouraging informality. In the informal sector there is no worker protection. This tradeoff must be considered when weighing the costs and benefits of labor regulation.

## Notes

1. This estimate is based on data from National Sample Surveys and the Annual Survey of Industries.

2. The unregistered (or unorganized) sector, by definition, consists of the self-employed, and those working in establishments with fewer than 10 workers. This note uses survey data from the 1988, 1994, and 2000 rounds of the Survey of Unorganized Manufacturing, conducted by the National Sample Survey Organization.

3. I will not present the technical details of these results in this note. Much more detail, including regression results, can be found in the more extensive Sharma (2009).

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