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Corruption and persistent informality: An empirical investigation for India

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ABSTRACT

India is a country characterized by a huge informal sector. At the same time, it is a country where the extent of corruption in every sector is remarkably high. Stifling bureaucratic interference and corruption at every stage of economic activities is one of the main reasons behind high participation in informal and unregulated sectors. For economies characterized by high inequality and poverty, a useful tool for the government to pacify social unrest, is to choose a lower level of governance allowing substantial corruption in the system. Based on a study of states in India, we empirically show that higher corruption is associated with higher levels of employment in the informal sector. Furthermore, our analysis shows that for higher levels of lagged state domestic product, the positive association between levels of corruption and extent of employment in the informal sector is nullified.

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1. Introduction

The role of informal sector in creating jobs in the developing world is quite well known (Agenor & Montiel, 1996; Günther & Launov, 2012; Harris-White & Sinha, 2007; Ihrig & Moe, 2004; Kar & Marjit, 2001; Marcouiller & Young, 1995; Marjit, 2003; Rauch, 1999; Zenou, 2008 etc. to name a few intriguing documents spanning two decades of research). These studies also accommodate interesting and challenging questions to understand and measure conditions of existence and growth in the informal sector and its impacts on the economy as a whole (recent contributions include, Alarcón & Zepeda, 1998; Arvin-Rad, Basu, & Willumsen, 2010; Dabla-Norris, Gradstein, & Inchauste, 2008; Evrensel, 2010; Marjit, Ghosh, & Biswas, 2007; Marjit, Mukherjee, & Kolmar, 2006; McKenzie & Sakho, 2010; etc.). The effects of various exogenous and endogenous adjustments have also been studied profusely (for example, Attanasio, Goldberg, & Pavcnik, 2004; Goldberg & Pavcnik, 2003; Marjit, 2003; etc.). The added complexity of involving informal sector in economic analyses arises typically owing to its clandestine and unrecorded characteristics and because it exists in the thin space between legality and illegality (De Soto, 2000; Dixit, 2004). Needless to say,

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any empirical investigation on informal sector is seriously constrained both by the availability of data and due to non-uniformity in the general description of what constitutes an informal sector.[1]

This study uses data for 20 major states (accounting for 95% of the population) in India and combines it with data from the country-specific corruption database (Transparency International) to find support for the hypothesis that a higher level of corruption is associated with a larger informal sector. Further, our analysis shows that if the state had higher levels of income in the past, then the present levels of corruption are associated with lower levels of employment in the informal sector. Our empirical analysis is restricted to 20 Indian states based on the availability of data. The only data source available for corruption is the Transparency International (TI) database and the number of states covered for the period 2004–2005 is 20. TI provides the most extensive report on state-wise corruption for 2004–2005 and, thus, we choose to undertake a cross-section analysis. The sample covers all the populous states in India and some of the sparsely populated states as well. We also use comparable data for some other states (particularly, from North-East India) and over other time periods to substantiate the main findings. Interestingly, the data on 'corruption perception' for 2004–05 coincides with the National Sample Survey Report on Unorganized Enterprises in India for the same time period. Besides, the collection of data on corruption is very broad based: it elicits information from all strata of the society and reflects on all perceivable forms of economic corruption in the country. Undoubtedly, availability of time series or panel data for corruption and informal enterprises in India could generate a richer analysis. However, in the absence of continuous data sets, the cross-sectional analysis provides a good starting point to motivate future research in this area.

We should mention at the very outset that this study does not claim any causation but only stresses a significant association between general corruption and employment in the informal sector. Although the study suffers from limited availability of data and/or dissimilar measurement units adopted for different survey periods, the relationship is still borne out significantly. In fact, the novel idea taken up in this paper should influence future studies when availability of data on both corruption and informality are adequate for developing countries in general. Nevertheless, in the section on robustness (section 3B) we undertake a two stage least squares (2SLS) approach to overcome endogeneity, without claiming causation.

Our motivation comes from some of the contested explanations behind growth of the informal sector in a country. A part of the literature suggests that high level of corruption could be an influential factor (Ahlin & Bose, 2007; Chaudhuri, Schneider, & Chattopadhyay, 2006; Dabla-Norris et al., 2008; Dixit, 2004; McKenzie & Sakho, 2010; etc.). Substantial corruption among law enforcement authorities, financial agencies, bureaucrats, politicians, and other regulators would essentially mean more bribery and greater rent seeking in the formal sector.[2] Consequently, the cost of creating new businesses and staying in business in the formal sector may become quite costly. Thus, informal businesses may provide viable alternatives. Moreover, this is facilitated by passive compliance from governments incapable of creating jobs commensurate with growth in the labor force. Participation and existence in informal sector replaces much of the formal transaction costs by bribes. This motivates us to explore the connections between corruption and the existence and persistence of informal sector in a developing country using the National Sample Survey Organization of India (NSSO) data on unorganized enterprisesry. In the process, we find that the state domestic product has a concave relationship with the size of or employment in the informal sector at a given level of corruption at the state level. This suggests the presence of an 'informal' Kuznets curve, which implies that at low or high levels of state domestic product the engagement in the informal sector is low, but it grows at an intermediate level of SDP till a tipping point is reached. Note that, this relation is also affected by the presence of corruption at the state level, such that more corruption raises the share of informal sector with growing SDP, reaches a maximum point and then the share of informal sector starts falling even if the level of corruption rises. In other words, beyond a critical state income level the share of the informal sector remains positive but starts declining as more formal opportunities open up through industries or services as characteristics of developed regions. It may also happen owing to stricter regulations and enforcements that accompany stages of economic development. Li, Xu, and Zou (2000) offer a parallel result in terms of the relation between corruption and inequality. Marjit et al. (2006) provided a new perspective to this literature, whereby for economies characterized by high unemployment, high inequality and poverty, the government may choose a lower level of 'good' governance.[3] This can be a conscious choice to maximize income for a large informal sector and avoid social conflicts and political disturbances.[4]

[1] Recently, two studies by the ILO and Delhi Group (2007) and the National Commission for Enterprises in the Unorganised Sector (NCEUS) (2007) have gone a long way in identifying the range and depth of informal activities in the world. The NCEUS report in particular, defines zones within which informal activities may henceforth be categorized. In some other transition countries, such as Ukraine, a rich panel data set is available for measuring informal employment and formal sector corruption (Gorodnichenko & Peter, 2007).

[2] See Saha (2001) for the relationship between red tapes and bribery in the context of a developing country.

[3] Our study does not focus exclusively on states with high inequality and poverty. It is a broad based analysis of all possible states in India for which we have concurrent data on levels of corruption and informal enterprises. While data on informal enterprises is available for previous and later cycles, 2004–05 presents the only year for which comparable state-wise data on corruption is available for India.

[4] The informal sector often emerges as an alternative to costlier formal sector production, as a means to avoid taxes, environmental strictures and labor laws (de Paula & Scheinkman, 2009; De Soto, 2000; Dixit, 2004, etc.). Prevalence of large informal sector has previously been explained via non-adherence to labor laws. For example, Industrial Disputes Act (1947) in India defines activities in pro-worker states vis-à-vis pro-labor states (Besley & Burgess, 2004). The Act was designed to offer workers in the organized sector some protection against exploitation by employers. The Act comprising of seven chapters and forty sections, specifies powers of governments – state and central, labor being a 'concurrent' subject, courts and tribunals, unions and workers and the exact procedures that have to be followed in resolving industrial disputes. States independently amended the central law and made it look pro-worker, pro-labor or neutral. In the pro-labor states upholding greater rights of labor one expects less organized firms and hence emergence of larger informal sectors. For example, the total man days lost in West Bengal is more than 60% of what has been lost country-wise between 2000 and 2008; see Appendix 4.