

Rain, Rain, Go Away: The Investment Climate, State Business Relations and Firm Performance in India

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RAIN, RAIN, GO AWAY? THE INVESTMENT CLIMATE, STATE BUSINESS RELATIONS AND FIRM PERFORMANCE IN INDIA#

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Abstract: It is commonly argued that a better investment climate reform – that is, lower distortions in the institutional, policy and regulatory environment in which firms operate - lead to discernible improvements in firm performance. In this paper, we argue that effective state business relations condition better investment climate outcomes and that the deeper institutional determinants of firm performance are the former. We examine the effect of effective state-business relations on total factor productivity (TFP) for formal and informal sector firms in India for the years 1994-95 and 2000-01, and find support for this hypothesis. We also find that the effect of state-business relations on TFP is stronger for firms in the informal sector, which suggests that effective state business relations may not only be important for growth but also for poverty reduction.

Keywords: State business relations, total factor productivity, India.

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I. INTRODUCTION

One of the key tenets of the Washington Consensus view of economic policy making is that investment climate reform – that is improvements in ‘the institutional, policy and regulatory environment in which firms operate’¹ – lead to discernible improvements in firm performance and consequently, an increase in economic growth. There has been a large empirical literature that is adduced to support the proposition that investment climate reform can lead to productivity improvements and higher economic growth. Several studies in this literature show that various indicators of a poor investment – such as power supply interruptions, high regulatory burden in the form of time firm management spend with government inspectors, corruption, and poor access to finance – have a negative effect on firm productivity and growth.² Recommendations to reform the investment climate are now an indispensable component of the standard policy advice that World Bank and the IMF offer to developing countries.

The Washington Consensus proposition that investment climate reform can lead to higher productivity and overall growth has not been without its critics. There have been two main sets of criticisms levelled at the investment climate literature. Firstly, as Moore and Schmitz (2008, p. 10) argue, “the core conceptual problem with (the) orthodoxy is that government and political power are viewed primarily as persistent threats to capital, investment and economic growth. From that perspective, the policy mission is to curtail the influence of political power through formal rules, laws and institutions. If that mission fails, politicians are expected at least to maltreat the private economy, and possibly to loot it, and thus, undercut economic growth.” Thus, there is a strong assumption in the literature that the state, by its very nature, is always predatory, and cannot be developmental in most instances of its manifestations. This is contrary to an alternate view that takes the position that ‘good growth-enhancing relations between business and government elites are possible’ (Maxfield and Schneider 1997, Harriss 2006). That collaborative state-business relations can be growth-enhancing has been reflected in a long-standing literature in political science and in political economy (e.g., Amsden 1989, Evans 1995).

¹ See Dollar et al., 2005, p. 1.

² For comprehensive surveys of the literature, see Dethier et al. (2008) and Commander and Trinn (2008).

A second criticism of the investment climate literature is that it confuses cause and effect by focusing on the outcomes of effective state action, rather than the underlying structural factors that determine these outcomes (Carlin et al. 2008). Thus, better quality provision of electricity or lower corruption is more likely to occur when governments have a strong interest in promoting private sector development, and when they signal their commitment to the growth of the private sector via better public good provision and a lower degree of rent seeking activities. An important limitation of focusing on the outcomes of effective state action, rather than their determinants, is that very often, and particularly in recent years, there has been an improvement in investment climate indicators in many developing countries without a corresponding improvement in economic performance (Commander and Trinn 2008). We would argue that this is due to governments not being credible in their signalling to the private sector that they are really interested in the growth of the latter, or where new formal institutions have brought into place when the informal institutions are not complementary to these formal institutions (Steer and Sen 2008). As an opposite case, there have been instances of developing countries (such as China and Vietnam) where there has been a surge in private sector investment and growth without an ostensible improvement in investment climate measures (Moore and Scmitz 2008). This again in our view is due to the possibility that investors are more interested in the state's overall commitment to growth oriented outcomes, and that the latter may over-ride certain weaknesses in the investment climate such as insecurity of formal property rights and high degrees of corruption.

In this paper, we dig deeper into the determinants of better investment climate outcomes by focusing on their underlying causes, which we argue are effective state business relations. In our view, a synergistic relationship between the state and the business sector, which is based on strong and well organised states and private sector associations, is more likely to lead to the provision of public goods such as roads and electricity, and a lower regulatory burden on the private sector. In the next section, we argue why this is the case, and why effective state business relations may improve firm performance, and hence, overall economic welfare.

Our empirical context is India, which provides us a fertile empirical ground to examine the relationship between effective state business relations and economic performance at the micro level. Given India's federal political structure, we would expect to see wide variations in the manner Indian state governments interact with the

business sector. Given the nature of economic reforms in India, which has been gradualist since their onset in the 1980s, and the political space these reforms provided to state governments to follow their own paths with specific economic policies (within certain constraints), we would expect significant time variation in effective state business relations across Indian states.³

The second advantage of using India as a case-study is the availability of firm-level data both for the formal/organised and the informal/unorganised sectors. We have access to unit record data from the Annual Survey of Industries (ASI) and the National Sample Survey Organisation (NSSO) for the formal/organised and the informal/unorganised sectors respectively for the years 1994-95 and 2000-01. As we will argue later in the paper, the availability of data by the sector in which the firm belongs to (formal vs informal) allows us to examine the impact of effective state-business relations on firms of all sizes and whether the firm is registered or not. This also allows us to trace out the equity dimensions of effective state business relations.

The rest of the paper is in six sections. In the next section, we set out the theoretical argument why effective state business relations matter for economic performance. In Section III, we describe the measure of state-business relations in India, drawing from the work of Cali, Mitra and Purohit (2009). Section IV describes the firm-level data and presents some descriptive statistics. Section V proposes the methodology. Section VI presents the results. Section VII concludes.

³ Dollar et al. (2002) examine the effects of standard investment climate variables on firm productivity across states in India and find that less reliable power supply and inferior internet connectivity in poor investment climate states account for a quarter of the TFP differences across states and that a tenth of the differences reflect greater regulatory burden in the same states. Using a more expanded sample of firms which includes Bangladesh, China and Pakistan, Dollar et al. (2005) obtain similar results.

II. WHY DO EFFECTIVE STATE-BUSINESS RELATIONS MATTER FOR FIRM PERFORMANCE?

The literature on state-business relations takes the following elements as essential characteristics of effective state-business relations (see Maxfield and Schneider (1997), Chapter 1).

- *Transparency*: the flow of accurate and reliable information, both ways, between business and government.
- *Reciprocity*: the capacity and autonomy of state actions to secure improved performance in return for subsidies.
- *Credibility*: when capitalists are able to believe what state actors say.

Effective SBRs as characterised above can affect firm performance through fulfilling a number of economic functions. Firstly, they can help to solve information related market and co-ordination failures in areas such as skill development or infrastructure provision. For instance, business associations or government departments may co-ordinate and disperse information among stakeholders.

Secondly, effective SBRs provide a check and balance function on government policies and tax and expenditure plans. Thus, effective SBRs may help to ensure that the provision of infrastructure is appropriate and of good quality. The design of effective government policies and regulations depends, among other things, on input from and consultation with the private sector. Regular sharing of information between the state and businesses ensures that private sector objectives are met with public action and that local level issues are fed into higher level policy processes. The private sector can identify constraints, opportunities, and possible policy options for creating incentives, lowering investment risks, and reducing the cost of doing business. More efficient institutions and rules and regulations might be achieved through policy advocacy which could reduce the costs and risks faced by firms and enhance productivity.

Finally, effective state-business relations and membership of business association may help to reduce policy uncertainty. Firms operate in an uncertain environment and frequently face risk and resource shortages. They undertake decisions concerning technology, inputs, and production facilities based on anticipated market conditions and profitability. Uncertainty can have significant negative effects on investment, when investment involves large sunk and irreversible costs and there is the option to delay the decision to make the investment until further information becomes available (Dixit and Pindyck 1994). Businesses that have a better relation with government may be able to anticipate policy decisions.

Hisahiro (2005) argues that various forms of information and resources, which are dispersed among entities in the public and private sector, need to be integrated in a more sophisticated way to jointly coordinate policies and provide better public services. It is this combination of insulation and connectedness that minimises the risks and enhances the effectiveness of economic policies. Hence, appropriate government capacity and policy, which is necessary to support private sector development and promote economic growth, can be enabled by good state–business relations and productive public-private sector dialogue.

Thus, effective state-business relations can enhance firm performance by positively affecting the two proximate determinants of firm growth – the rate of factor accumulation and the growth of total factor productivity. Greater transparency in the flow of information between state actors and the business sector leads both to a better allocation of investments by the business sector to their most productive uses and, by reducing policy uncertainty in the minds of investors, a higher rate of investment. Higher credibility of state actions lead to less problems of time and dynamic inconsistency of government policies, providing a more favourable environment for investment to occur. Reciprocity ensures improved performance by private sector actors in return for subsidies and the provision of public goods, contributing to higher productivity growth.

In summary, effective state-business relations can mitigate both market failures and government failures which are pervasive in most developing countries, and by doing so, bring about an increase in the performance of firms.⁴

III. MEASURING STATE BUSINESS RELATIONS IN INDIA

Te Velde (2006) was the pioneering study to develop measures of SBRs quality. He argues that an SBR index should have four components, which reflect the main aspects of effective SBRs:

- 1) the way in which the private sector is organised vis-à-vis the public sector;
- 2) the way in which the public sector is organised vis-à-vis the private sector;
- 3) the practice and institutionalisation of SBRs;
- 4) the avoidance of harmful collusive behaviour between the two sectors.

Each of the aspects mentioned above is captured through a SBR sub-index which in turn is derived from data on variables reflecting the mentioned aspects. The various SBR sub-indices are then combined to arrive at an overall index of SBR. Cali, Mitra and Purohit (CMP, 2009) measure SBR along the above four dimensions for 15 Indian states using both primary and secondary data. We describe below the manner CMP operationalise the measurement of SBR in India.

The role of the private sector in SBR

CMP measure the role of the private sector via the quality and effectiveness of the umbrella business association and two sector based business associations, as follows:

- a) Whether the private sector association has a **website** or not: The variable takes a value of zero in any year in which the organisation does not have a website and 1 otherwise. This is likely to proxy for the quality of the organisational structure as well as its outside visibility. Evidence from their fieldwork

⁴ See Qureshi and Te Velde 2007 and Sen and Te Velde 2009 for evidence that improvements in state business relations improve economic performance both at the micro and macro levels, for Sub Saharan Africa.

confirms that organisations appearing to be more structured and organised have had an active website in place for a longer time.

- b) How frequently the website is updated: Again, this captures the efficiency of internal processes (which makes frequent updates possible) as well as the level of activity of the organisation. The need for updating the website more frequently should increase with the intensity of the organisation's activity.
- c) The variable *office_premise*, takes the value of 1 if the office is owned and 0 otherwise. This variable proxies the level of the organisation's resources as well as the extent to which the association is willing to invest in costly physical assets.

The role of the public sector in SBR

CMP measure the role of the public sector in SBR by the presence of state owned or state participated productive corporations, which are investment promotion agencies, Financial, Infrastructure Development and Tourism Development Corporations. These represent important types of pro-business engagements with benefits for all sectors. They construct a cumulative sub-index ranging in value between 0 and 1 which is the average of four dummy variables, one for each organisation. At any point of time the dummy for an organisation takes the value of 1 if it is in place and 0 otherwise.

CMP also assess the role of the public sector via the governments' signalling of their relative priorities through the allocation of public resources. In their work, they focus on two types of state **revenue expenditures**: expenditure on economic services as a ratio of total government expenditures and expenditure on industries as a ratio of total expenditures on economic services.

The interaction between states and businesses

CMP measure the interaction between state governments and the business sector in two ways::

a) **Index of labour regulation:**

This is the index constructed by Besley and Burgess (2004). The authors score each state level act on labour regulation as anti-worker (assigning -1), pro-worker (1) or neutral (0). In this way they produce a yearly cumulative index which may proxy for the relative effectiveness of the mentioned aspect of SBR. The argument is that more effective SBRs would allow employers to be more influential affecting on government policies and would get reflected in more pro-employer labour market regulation.

b) **Stamp Duty:**

As a measure of distortionary taxation at the state level, we use the level of stamp duty over time.

Mechanisms to avoid collusive behaviour

CMP use the following measures to capture the transparency of SBRs:

- a) The gross output of firms belonging to **delicensed industries** as a proportion of total industrial GDP (data on delicensing from Aghion et al., 2006; data on firms by sector in the Annual Survey of Industries): The License Raj was a system of centralised controls regulating entry and production activity. Delicensing introduced competition and reduced rent-seeking by corporations entrenched with public powers. As the decision of what industries to delicense was made at the central level, this effectively provides an exogenous source of change in the possible extent of collusive behaviour at the state level.
- b) Whether the private sector umbrella association has a **regular publication** informing its members. This measure proxies for the transparency of the organisation's activities. Higher transparency would be associated with lower probability of collusive behaviour which may harm business not entrenched with public authorities. As in the case of the organisation's website, the

frequency with which the publication is produced and distributed would also determine the level of transparency in the association's activities.

As CMP correctly argue, the indices constructed through these variables have two main advantages over the traditional investment climate indicators. First, they cover a larger time span than any other indicators on India states. This allows one to examine the evolution of the relevant economic institution over different periods. Second, by not being based on firms' perceptions, they avoid the measurement error problem typical of subjective survey response data. Bertrand and Mullainathan (2001) argue that the likely causal correlation of this measurement error with dependent variables may generate biased estimated coefficients. Carlin et al. (2006) explain along these lines the problem of interpreting the coefficients of standard cross-country regressions where a productivity or income measure is regressed on subjective constraints.

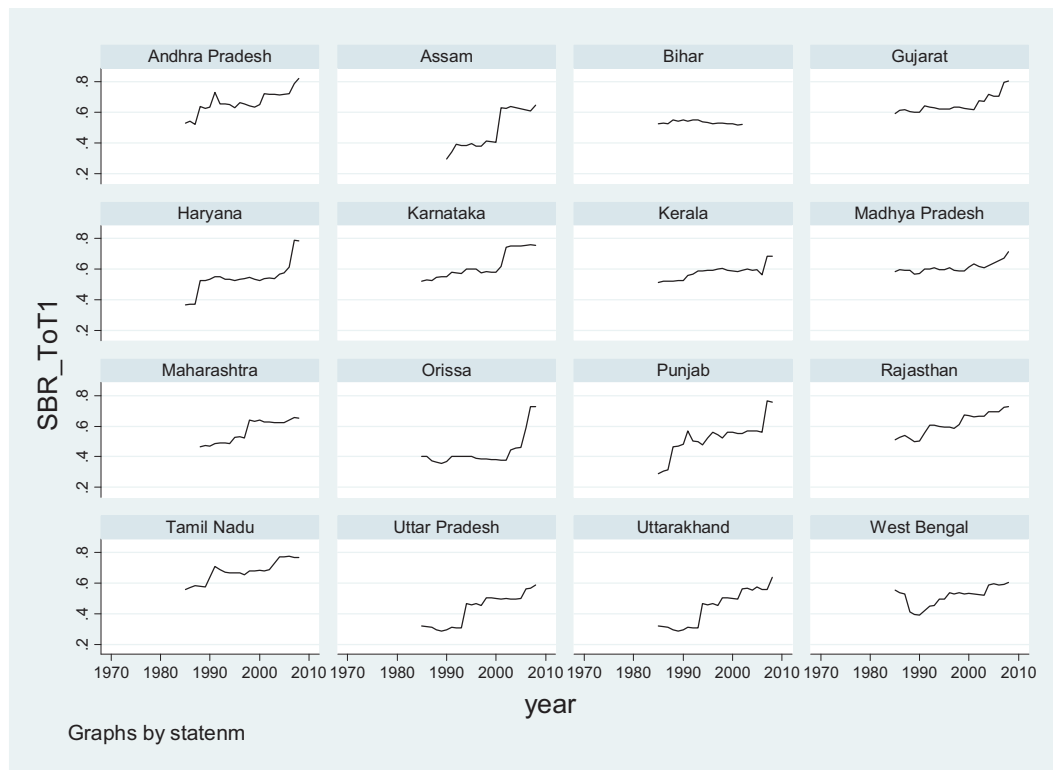
To capture indicators of all four dimensions of the composite SBR index (Private Sector, Public Sector, SBR Practice, and anti-collusive behaviour), CMP conducted structured and semi-structured interviews with business associations in each state and state government officials from the industry department of almost every state. Some data was also collected from secondary sources. The data used in the construction of SBR index was a time series for 16 states of India for 1975 - 2008.

There are three separate weighting processes involved in the construction of the SBR index. First, those private sector variables for which data are available for the mentioned three associations in each state need to be weighted to generate an aggregate private sector variable. CMP have experimented with different types of weights to limit the degree of subjectivity in this weighting decision, thus effectively generating different variants of the variables. We use two different weighting procedures in this paper: SBR1 - which uses only the apex body values (i.e. assigning the weight of 1 to the apex body and 0 to the sectoral associations) and SBR2 - which gives equal weights (1/3 to the apex and two sectoral associations).

The second weighting choice concerns the evolution of measures of the four sub-indices. As it is difficult to have a strong argument against equal weighting of each variable in the absence of clear evidence about the relative importance of the

associated variables, CMP use equal weights for the different components of the SBR measure. We call these two different measures of SBR, SBR 1 and SBR 2.

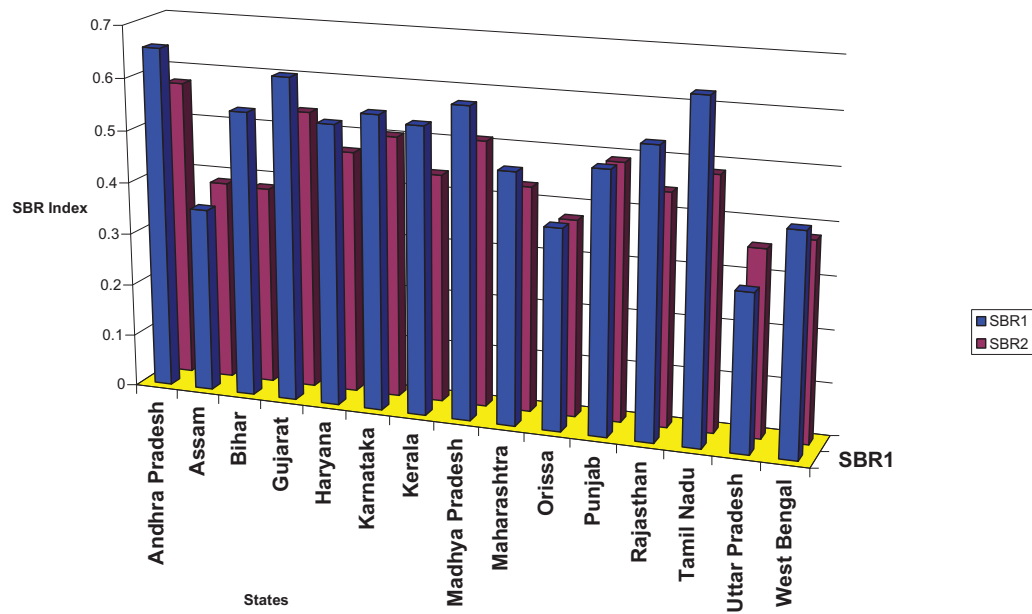
Figure 1 captures movements of state-wise SBR 1 measures in the period 1975-2007.



From **Figure 1**, we can infer that the SBRs of Southern regional states (Andhra Pradesh, Karnataka, TN, and Kerala) show similar movements and generally show an upward trend. The initial values of the SBR index for Karnataka and Tamil Nadu are relatively higher than those of other states. However, in Andhra Pradesh the SBR index has moved the fastest among all the southern states. Kerala has shown significant improvement only recently. Amongst Bimaru States (Bihar, MP, Rajasthan, Uttar Pradesh), in Bihar and Madhya Pradesh there has not been much improvement over time. In the case of West Bengal, the SBR index started at a relatively high value, went into deep decline in the late 1980s with recovery starting only in the mid 1990s.

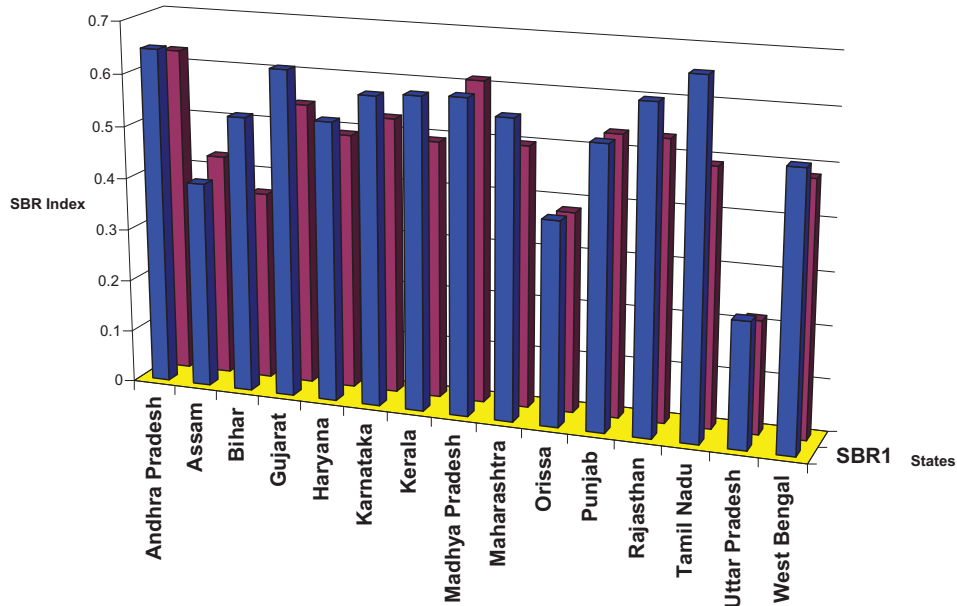
In Figures 2 and 3, we present the period averaged SBR 1 and SBR 2 measures for 1988-1993 and 1994-2000. As is clear, there are strong differences in the effectiveness of state business relations across Indian states. These differences seem to have persisted over time.

Figure 2: State Business Relations, 1988-1993, across Indian states



Source: CMP (2009)

Figure 2: State Business Relations, 1994-2000, across Indian states



IV. DATA AND SUMMARY STATISTICS

Data:

We use unit level data for both the formal/organized and informal/unorganized sectors for three years – 1994/95 and 2000/01. The former is collected under Annual Survey of Industries (ASI) by the Central Statistical Organisation (CSO) and the latter by National Sample Survey Organisation (NSSO). The choice of years is governed by the fact that the NSSO carried out surveys during these years only.

The NSSO is the agency that collects information on various aspects of the enterprises/units in the informal/unorganised manufacturing sector quinquennially. A stratified sampling procedure is adopted to identify the sample enterprises and the surveys cover all the Indian states and Union Territories (UTs).⁵ The survey gives information on selected indicators – output, labour, capital, materials, profit, ownership, etc. at the unit level for the three categories of manufacturing enterprises – own-account (OAME), directory (DME) and non-directory (NDME). DME employs 6 or more persons with at least one hired worker, NDMEs employ less than six persons with at least one hired worker and OAME employs only family labour. The ASI is the census survey of all the formal (registered) manufacturing units for all the industries across all the states. The data is collected every year from all the units registered under the Indian Factories Act of 1948.⁶ CSO is the agency that collects information on various aspects of the functioning units. The information collected include - gross output, number of workers, gross fixed assets, electricity and materials consumed, ownership, profit etc. at the unit level. The data are in the form of repeated cross-sections, and not panel data. This is because the CSO and NSSO do not reveal the identity of the firm/plant in the unit record data and in the case of the NSSO, do not necessarily survey the same firm in its quinquennial surveys.

⁵ For instance, 2000-01 survey covered the whole of the India except (i) Leh and Kargil districts of Jammu and Kashmir, (ii) villages situated beyond 5 Kms. of bus route in the state of Nagaland and (iii) inaccessible villages of Andaman and Nicobar.

⁶ The enterprises which employ less than 20 workers without the use of electricity or 10 workers with the use of the use of electricity or are not producing hazardous substances (such as chemicals) fall under the unorganized/informal sector, as these are firms that are not required to register with the authorities under the Indian Factories Act of 1948.

Summary Statistics:

Table 1 summarises the descriptive statistics of the two rounds -1994-95 and 2000-01. For the 1994-95 round, we have data on over 160,000 firms. For the 2000-01 round, we have data on over 149,000 firms.⁷ For the 1994-95 round, 32 per cent of the firms belong to the formal sector. For the 2000-01 round, 22 per cent of the firms belong to the formal sector. There is a wide variation in value added, capital stock and employment for the firms in our sample for both rounds. We also observe that the summary statistics on value added, capital stock and employment are not very different for the two rounds.

Table 1. Summary Statistics

VARIABLES	NUMBER OF OBSERVATIONS	MEAN	STD DEV	MIN	MAX
1994-1995 ROUND					
Log GVA	163425	11.18	2.70	1.38	24.27
Log Capital Stock	166381	11.02	2.91	0.69	24.93
Log Employment	166556	1.99	1.60	0.69	11.93
ASI	169226	0.32	0.46	0	1
Log SBR1	169226	-0.70	0.26	-1.21	-0.42
Log SBR2	169226	-0.82	0.16	-1.04	-0.56
2000-20001 ROUND					
Log GVA	149136	11.44	2.28	1.10	24.22
Log Capital Stock	151041	11.65	2.52	0.69	24.79
Log Employment	151014	1.67	1.32	0.69	10.63
ASI	159117	0.22	0.41	0	1
Log SBR1	159117	-0.67	0.33	-1.43	-0.40
Log SBR2	159117	-0.80	0.32	-1.54	-0.47

⁷ We drop all firms with zero or negative employment or output or capital stock.

V. METHODOLOGY

Our variable of interest is the measure of state-business relations that we described in Section III and its effect on total factor productivity (TFP). To test the effect of SBR on TFP, we run augmented production functions as follows:

$$Y_{isj} = a_0 + a_1 K_{isj} + a_2 L_{isj} + a_3 SBR_s + a_4 SBR * DUMTYPE_{sj} + \delta_i + e_{isj} \quad (1)$$

Where i is industry, s is state and j is firm.

Y is gross value added, K is capital stock, L is total number of employees, SBR is our measure of state business relations, $DUMTYPE$ is a dummy variable measuring whether firm belongs to the formal/organised sector ($DUMTYPE=1$ if firm belongs to the formal sector, 0 if not), δ_i are industry fixed effects and e is the error term.

We would expect that a_3 is positive and significant. In addition, we would also like to examine whether effective state business relations matter more for firms in a particular sector, whether in the formal or informal sector. We are agnostic on what we may expect with respect to the sign of a_4 . Certain dimensions of effective SBRs such as more organised private sector organisations or pro-worker labour regulation may matter for firms in the formal/organised sector. On the other hand, other dimensions of effective SBRs such as greater government spending on the industrial sector may matter more for firms in the informal sector, who would be more reliant on basic infrastructure such as a reliable power supply than the larger firms in the formal sector.

The industry fixed effects capture industry-specific differences in technology which would be correlated with TFP. They also capture other industry specific differences which would affect TFP such as differences in market structure and trade orientation. To handle reverse causality issues, we use period averaged SBR for 1988-

1993 to examine its impact on TFP in 1994-95, and period averaged SBR for 1994-2000 to examine its impact on TFP in 2000-01. We estimate equation (1) using Least Squares, and with robust heteroskedasticity constant standard errors.

VI. RESULTS

Table 2 presents the results for the 1994-95 round. In Col. (1), we begin with the estimation of the basic production function. In Col. (2), we include our variable of interest – the SBR measure. The coefficient on the SBR measure is positive and significant at the 1 per cent level. A one per cent increase in the measure leads to a 20 per cent increase in TFP. In Col. (3), we include industry fixed effects with no change in the results. In Col. (4), we include the interaction term between the SBR measure and a dummy variable which takes the value one when the firm is in the formal sector. We find that the interaction term is negative and significant, suggesting that firms in the informal sector benefit more from improved state-business relations. This is analogous to the finding of Dollar et al. (2005) in the investment climate empirical literature that small firms seem to benefit more from a better investment climate. In Col. (5), we substitute the SBR 1 measure with the SBR 2 measure as a robustness test, and in Col. (6), we include a similar interaction term between SBR and the dummy variable for the firm belonging to the formal sector. We find that there is no change in our results – in fact, the effect of SBR on TFP is higher with the alternate measure of SBR.

In Table 3, we re-do the empirical analysis using the 2000-01 round of the ASI and NSSO instead of the 1994-95 round. We obtain very similar results as with the 1994-95 round, and we find that the SBR measure has a significant positive effect on TFP, even with the inclusion of industry fixed effects. The striking aspect of our results is that the coefficients on SBR1 and SBR2, both when included by themselves, and with the interaction terms, are almost identical to the results obtained in Table 2. The results are therefore robust to alternate measures of SBR, the inclusion of industry fixed effects and different periods of the analysis.

Table 2. Regression Results, 1994-1995 Round

Variables	Col. (1)	Col. (2)	Col. (3)	Col. (4)	Col. (5)	Col. (6)
Constant	5.20*** (0.017)	5.12*** (0.019)	6.49*** (0.026)	5.85*** (0.020)	5.43 (130.0)	5.25 (121.0)
Log Capital Stock	0.36*** (0.002)	0.36*** (0.002)	0.29*** (0.002)	0.28*** (0.002)	0.29*** (0.002)	0.28*** (0.002)
Log Employment	1.02*** (0.004)	1.02*** (0.004)	1.08*** (0.004)	0.93*** (0.004)	1.07*** (0.004)	0.89*** (0.004)
Log SBR1	--	0.09*** (0.028)	0.13*** (0.009)	0.35*** (0.006)	--	--
Log SBR1*DUMTYPE	--	--	--	-1.01*** (0.014)	--	--
Log SBR2	--	--	--	--	0.15*** (0.015)	0.38*** (0.014)
Log SBR2*DUMTYPE	--	--	--	--	--	-1.10*** (0.014)
R-square	0.88	0.88	0.90	0.90	0.90	0.90
Industry Fixed Effects?	No	No	Yes	Yes	Yes	Yes
Number of Observations	160561	160561	160561	160561	160561	160561

(Notes: a) *** significant at the 1 per cent, b) standard errors | in brackets)

Table 3. Regression Results, 2000-2001 Round

Variables	Col. (1)	Col. (2)	Col. (3)	Col. (4)	Col. (5)	Col. (6)
Constant	5.23*** (0.020)	5.34*** (0.020)	5.34*** (0.020)	5.34*** (0.020)	5.81*** (0.026)	5.92*** (0.026)
Log Capital Stock	0.41*** (0.002)	0.40*** (0.002)	0.34*** (0.002)	0.33*** (0.002)	0.34*** (0.002)	0.34*** (0.002)
Log Employment	0.93*** (0.003)	0.93*** (0.003)	0.99*** (0.003)	0.91*** (0.003)	0.99*** (0.004)	0.90*** (0.004)
Log SBR1	--	0.12*** (0.006)	0.13*** (0.009)	0.20*** (0.006)	--	--
Log SBR1*DUMTYPE	--	--	--	-0.74*** (0.014)	--	--
Log SBR2	--	--	--	--	0.10*** (0.006)	0.16*** (0.006)
Log SBR2*DUMTYPE	--	--	--	--	--	-0.68*** (0.012)
R-square	0.87	0.87	0.88	0.88	0.87	0.88
Industry Fixed Effects?	No	No	Yes	Yes	Yes	Yes
Number of Observations	148422	148422	1484370	148422	148370	148370

(Notes: a) *** significant at the 1 per cent, b) standard errors | in brackets)

VII. CONCLUSIONS

It is commonly argued that a better investment climate reform – that is, lower distortions in the institutional, policy and regulatory environment in which firms operate - lead to discernible improvements in firm performance. In this paper, we argue that effective state business relations condition better investment climate outcomes and that the deeper institutional determinants of firm performance are the former. We examine the effect of effective state-business relations on total factor productivity (TFP) for formal and informal sector firms in India for the years 1994-95 and 2000-01, and find support for this hypothesis. We also find that the effect of state-business relations on TFP is stronger for firms in the informal sector, which suggests that effective state business relations may not only important for growth but also for poverty reduction.

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