

**INSTITUTIONS AND
DEVELOPMENT: AN
OVERVIEW OF CASE
STUDIES
(CULLED FROM THE
LITERATURE ON
CHINA AND INDIA)**

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About Economic Development & Institutions

Institutions matter for growth and inclusive development. But despite increasing awareness of the importance of institutions on economic outcomes, there is little evidence on how positive institutional change can be achieved. The Economic Development and Institutions – EDI – research programme aims to fill this knowledge gap by working with some of the finest economic thinkers and social scientists across the globe.

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1. Domain of Discussion

Institutions are commonly defined, following North (1990) as the rules of the game that societies play which in shared understanding act as constraints on and guidelines for economic performance.

While keeping mainly to this definition, I'd expand the taxonomic domain somewhat to a slightly larger field.

Keeping still the analogy of games, we can distinguish between

- (a) the overall game context (i.e. systemic issues, or which game are we talking about?),
- (b) the rules of the game, both formal and informal,
- (c) various moves in the game (like policies) within a set of given rules.

In (a) we shall mainly concern ourselves with the capitalist framework, even though some pre-capitalist and state-socialist forms may sometimes hover in the background.

In (c) policies are, of course, different from institutions, but sometimes policies push the boundaries of the game and accumulated policy experience can contribute to how the institutional rules are shaped.

2. History of Thought Issues

Much of the recent institutional economics literature start with North (1990), or at most with Williamson (1985), of course ignoring a long tradition of institutionalist literature going all the way back to

- the German Historical School in the latter part of the 19th century,
- the role played by Marxist economics (as a major discourse on how economic institutions are shaped by technology—‘forces of production’-- and changed by collective action –‘class struggle’), and
- that by the American institutionalists (like Veblen) in the early part of the 20th century.

In the field of development economics, most discussion of institutions these days also starts with North, and then jumps to the cross-country empirical literature, the most widely cited of which is Acemoglu, Johnson and Robinson (2001).

Professional memory or attention span in Economics is always rather short, but most remarkably so in this case, as North (1990) was immediately preceded by at least two decades of vigorous economic analysis of institutions in developing countries.

It started with the literature on the age-old institution of sharecropping in the early 1970’s, followed by a proliferation of analysis of institutional arrangements in rural land, labor, credit, insurance, and some general inter-linked markets. By the early 1990’s two multi- author volumes of essays on rural institutions, edited by Bardhan (1989) and Hoff, Braverman and Stiglitz (1993), had put together and extended the results of the rich literature on rural institutions in developing countries that had come up in the preceding two decades. Another collection of essays, edited by Nabli and Nugent (1989), applied transaction cost analysis in understanding rural and urban institutions in Tunisia.

There was also a 1989 symposium on institutions and development edited by Adelman and Thorbecke for the *World Development*.

There is hardly any trace of this literature in the recent outpourings on the institutional economics of development. Even a recent survey article by Pande and Udry (2005) which starts from the cross-country literature and then moves on to their micro ‘view from below’ almost completely ignores the existence of the micro literature of just two or three decades back.

3. Three Types of Institutional Case Studies

It is now widely recognized that the vast macro- economic empirical literature on institutions on the basis of cross-country regressions is seriously flawed, largely on account of unobserved heterogeneity, use of necessarily coarse instrument variables, and poor data quality and cross-country comparability.

Besides, as Pande and Udry (2005) point out, the cross-country empirical strategy usually cannot disentangle the specific institutional channels through which an outcome is affected or the impact of institutional or historical changes on it.

In this paper we move entirely away from the cross- country regressions literature, and mainly discuss empirical case studies on institutions and development. As these studies all over the world are by now numerous, I shall confine myself to an overview of case studies from the two largest developing countries, China and India. It is not, however, a comparative study of the two countries, as in Bardhan (2013), but an account of case studies in these two large countries taken mostly separately and independently. Even in this circumscribed field I shall deal primarily with institutions at three levels:

- micro-level of the individual household or farm or firm
- meso-level of a community or social network, and
- at a somewhat larger level of governance institutions

The institutional literature (part theoretical, part descriptive, and part econometric) covering different aspects at these three levels is large, but here I shall mainly mention topics where there are some empirical case studies relating to China and India, largely bypassing the theoretical literature¹, as well as topics where there is not much of an empirical study. Also, I am obviously confining myself to institutions that have major economic consequences, leaving aside many primarily social and political institutions.

¹ For some theoretical references on the literature on institutions and development see Bardhan (1989), Mookherjee (1997), Bardhan and Udry (1999), Bardhan (2005), Acemoglu and Robinson (2008), and Besley and Ghatak (2010).

4. Micro-level Institutions

The empirical literature at the micro level mainly involves institutions in the factor markets, particularly property rights relating to land and relational arrangements in labor and other inter-linked markets. Most of the questions asked have been either about the determinants or about the consequences of particular institutions. On determinants, I shall particularly discuss three cases of micro institutions: (a) agricultural tenancy, (b) labor-tying in the employer- employee relation, and (c) interlinkage of relations in factor markets.

(a) Incidence of land-lease tenancy across farmer households

- On the basis of disaggregated National Sample Survey (NSS) data Bardhan (1984) shows that incidence of tenancy across cultivator households in rural West Bengal varies positively with access to irrigation and endowment of family labor for the household, and with the amount of normal rainfall in the district, and negatively with some index of production uncertainty (measured by yield variability around the trend line in the whole district).
- On the basis of Farm Management Survey data for the district of Hooghly in West Bengal Bardhan (1984) shows that across farms again the incidence of tenancy varies positively with irrigation and endowment of family labor, and also with ownership of bullock labor, for which data were available for this sample of farms.

(b) Labor-tying as an institution structuring Employer-employee relations

A historically important agrarian institution has been the case of long-term labor relations or contracts, where the worker is tied to a particular employer for a longish period of time, the standard cases being those of labor contracts for a year or a season, but the extreme cases bordering on debt-bondage². Such workers have coexisted with more casual, day laborers for many decades in India.

For alternative theoretical explanations of the institution in situations of voluntary contracts, see Bardhan (1983), Eswaran and Kotwal (1985), Mukherjee and Ray (1995), and Caselli (1997). Bardhan (1983) has also analyzed the variations of the incidence of such long-term 'attached' labor across agro- climatic regions in India from Agricultural Labor Enquiry and also National Sample Survey data in rural India, and also across labor households in West Bengal. It is shown that the incidence of attached labor varies positively with indicators of labor scarcity, seasonal peaks of wages, land concentration, employer-provided credit, and in general with better irrigation and rainfall in the area.

(c) Interlinkage of land, labor and credit relations

In traditional agriculture there are often cases of landlord- tenant relations intertwined with creditor-borrower relations between the same parties, or of employers hiring workers on terms that are interlocked with those on which the former provide credit (or land) to the latter. See Bardhan and Rudra (1978, 1981) for case studies of such interlinkage in a sample of 110

² For details of terms of conditions of a whole range of different types of such labor contracts from a sample of West Bengal villages, see Bardhan and Rudra (1981).

villages in West Bengal. Drawing upon the literature on interlinked markets Wang (2006) shows that such pre-existing interlinked relational contracts played an important role in the gradualist economic transition in China in the 1980's. For an overview of the theoretical analysis of the emergence and persistence of such interlinked relations when markets (particularly of credit) are imperfect or non-existent, see Bell (1988), Bardhan (1989), and Bardhan and Udry (1999).

Now on to consequences of agrarian institutions. I shall discuss three kinds of consequences of agrarian institutions: (i) those of sharecropping in India and land reforms aimed at reducing its tenurial insecurity; (ii) of transition in China to private land cultivation rights, but with considerable restrictions on security of tenure and on the operation of the land rental markets; and (iii) how some of the effects of tenurial arrangements last long after the original formal arrangements are discontinued.

(i) Impact of the institution of sharecropping on farm productivity

- Bell (1977) in his sample of farmers in Purnea district in Bihar and Shaban (1987) in ICRISAT farm-level data in the semi-arid areas of Deccan Plateau compared output and inputs between owned and sharecropped land plots on the same farms and found some inefficiency of resource use in sharecropping. Bell contrasts his findings with those of Cheung (1969) for pre-War China.
- Banerjee, Gertler and Ghatak (2002) and Bardhan and Mookherjee (2011) have studied the impact of protection of sharecropper rights against eviction by landlords in West Bengal. The former have worked with district-level data, and show that the tenancy reform program consisting of registration of tenant's rights enhancing security of tenure and improving the tenant's output share had a substantial positive effect on rice productivity. The paper ends by saying that given their aggregative (for a whole district) data they could not separate the direct and indirect effects of the reform. With more micro farm-level panel data collected in a farm management type survey from 90 sample villages over 1982-95, the latter paper can do this and show, even after controlling for endogeneity of program implementation, a significant positive impact of the reform on farm productivity. But some of the productivity effects of other ongoing programs (like that of subsidized agricultural inputs by the local village government) were much larger.

(ii) Effects of property rights institutions in a transition economy

- Lin (1992) uses province-level panel data in China to show that de-collectivization of agriculture after 1978 and granting of land use rights to farmers under the household responsibility system led to a substantial improvement in factor productivity.
- Since individual farmer's land can be administratively reallocated in Chinese villages, there is tenurial insecurity. Using a hazard model Jacoby, Li and Rozelle (2002) estimate an exogenous risk of land expropriation from plot-tenure data in 31 villages in northeast China. They find that in villages with higher expropriation risk, there is less investment in use of organic fertilizers (which, more than chemical fertilizers, have long-lasting effects on soil quality). But these effects are not quantitatively large in this part of China.

- While a land rentals market is growing in China there are still many restrictions and transaction costs of renting. Using panel data from 110 villages in three of China's poorest provinces, Deininger and Jin (2005) show how land rental markets can have bigger productivity-enhancing effects than the usual administrative reallocation of land. There is also some evidence that market transactions transfer land to those with lower initial endowments, suggesting that land rental markets may not leave out the poor.

(iii) Historical Legacy of Land Tenure Systems

- Banerjee and Iyer (2005) show the long-lasting effects of different land tenure systems in India in the British colonial period. Areas under landlord-based land tenure system have significantly lower agricultural investments and productivity, compared to areas where control rights in land were with cultivators. The former also lagged in provision of public goods (like schools and roads). These effects have persisted even after four decades of the end of colonial rule and three decades of the abolition of the landlord-based system.
- Besley et al (2016), exploiting the quasi-random assignment of linguistically similar areas to different South Indian states that subsequently varied in tenancy regulation policies, find that thirty years after the tenancy reforms, land inequality is lower in areas that saw greater intensity of reform, but the impact differs across caste groups.

I have discussed above the case studies in India and China of the determinants of some agrarian institutions and their consequences. But one general question is: in cases where the consequences are negative do they not, over time, interfere with the determinants? In other words, if an institution is dysfunctional why does it persist?

The theoretical literature on sharecropping discusses why this ancient agrarian institution survives in spite of its adverse effects on productivity (particularly in the context of credit market imperfections and the need for risk-sharing), but there is not much empirical literature on this. Similarly, the literature on interlinkage of relations shows that it can act as a barrier to entry for unlinked parties, but under imperfections of particularly the credit market interlinkage does serve a purpose under the constrained circumstances.

5. Meso-level Institutions

Above the micro-level of firms or farms there are community institutions which can have substantial effects on economic performance. Keeping to cases where empirical studies are available, I shall discuss three types of such institutions: (1) business group institutions, (2) social networks, and (3) rural, often informal, organizations for the management of the local commons (like irrigation, fisheries, forests and grazing lands).

(1) Relation-based Business Institutions

China and India have a long history of indigenous mercantile institutions of trust and commitment, based on multilateral reputation mechanisms and informal codes of conduct and enforcement. Some of these institutions have been in regular use in long-distance trade and credit.

- Many business historians—some of them referred to in the recent account by Greif and Tabellini (2015)—have shown how clan and lineage-based institutions in China have for centuries substituted for weak formal institutions, resolved private disputes, and provided local public goods and services and mutual-aid arrangements. Even in the last three decades, after economic reform started allowing private firms to thrive, what Nee and Oppen (2012) have documented and described as

‘capitalism from below’ is based in general on *guanxi* relations and intra-clan help in finance and protection of property rights from official predation. Allen, Qian and Qian (2005), on the basis of a survey of 17 firms in Zhejiang and Jiangsu provinces, have shown how in contrast to that for state enterprises, the much higher growth of private firms has been supported by alternative financing channels and governance mechanisms, such as those based on reputation and community relationships.

- In pre-colonial India Bayly (1983) cites many cases of caste-based (and sometimes even multi caste) mercantile associations and panchayats (or local tribunals or arbitration panels), which acted much like the merchant guilds and the law-merchant system respectively of medieval Europe, over a vigorous and far-flung mercantile economy. Credit instruments like the hundi (or bills of exchange), even though their negotiability was not always recognized in formal courts of law (in British India) governed trade across thousands of miles. Firms kept lists of creditable merchants whose credit notes—sahajog hundis—could expect a rapid discount in the bazaar. While Bayly writes about community institutions that flourished primarily around the so-called burgher cities of Allahabad and Benares in pre-colonial north India, Rudner (1994) studies the south Indian caste-based mercantile organization of the Nattukottai Chettiers in the colonial period, whose elaborate system of hundis over long distances (with the caste elite firms or adathis acting as the clearing houses), collective decisions on standardization of interest rates, and caste panchayats with customary sanctions provided the basis of indigenous banking networks spread out in large parts of south India and British southeast Asia.

- In clan and other community-based organizations goal congruence (and thus low opportunism) is achieved through various processes of socialization; performance evaluation takes place through the kind of subtle reading of signals that are observable by other clan members but not verifiable by a third-party authority. Punishment for breach of implicit contracts is usually through social sanctions and reputation mechanisms. Clan-based organizations are also characterized by more flexibility and ease of re-negotiation than more impersonal and formal organizations.
- On the other hand, the informal community or family-based business arrangements are constrained by too much reliance on centralized decision-making and control, internal finance, a small pool of managerial talent to draw on, a relatively small scale of operations, and in the case of large organizations a tendency to subdivide into more or less separate units, each with its own products and markets. A major problem of such community-based enforcement is that the boundaries of the community within which rewards and punishment are practiced may not be the most efficient ones and therefore may inhibit potentially profitable transactions with people outside the community. So as the scale of economic activity expands, as the need for external finance and managerial talent becomes imperative, and large sunk investments increase the temptation of one party to renege, relational implicit contracts and reputational incentives become weaker. As Li (2003) has pointed out, relation-based systems of governance may have low fixed costs (given the pre-existing social relationships among the parties and the avoidance of the elaborate legal-judicial costs, public information costs, and verification costs of more rule-based systems, but may have high and rising marginal costs (particularly of private monitoring) as business expansion involves successively weaker relational links. The latter effect will be stronger in more contract-intensive activities. Amirapu (2015) provides evidence from India that more efficiently functioning formal judicial institutions (as measured by state-level variations in the speed of courts) significantly determine growth among private manufacturing firms, particularly in more contract-intensive industries.
- The tension between information, transaction cost and co-insurance advantages of relation-based systems and the scale economies and transparency and mitigation of collusiveness advantage of formal rule-based systems is reflected in the business group literature for the corporate sector. Bertrand et al (2002) give evidence of ‘tunneling’ of value and abuse of minority shareholder interests in pyramidal business groups in India. Khanna and Yafeh (2007) on the other hand discuss some advantages of diversified business groups in the context of weak legal and judicial systems and imperfections of both capital and labor markets. Fisman and Wang (2010) point to reduction of transaction costs and risks in business groups in Chinese listed firms. With data from over 10,000 largest domestic companies in India for the period 1998-2008, Kolasa (2013) show that in industries where relationship-specific inputs are used extensively, membership in a business group helped firms overcome market imperfections associated with a poor legal environment.

(2) Social Insurance and Information Networks

- Caste, or more particularly, the sub-caste jati, has been historically the most important social network in India in the context of support in the face of all kinds of risks in Indian

villages. Munshi and Rosenzweig (2009) provide quantitative evidence on the basis of NCAER data that caste is the most important source of support, more important than banks or moneylenders, for major events such as illness and marriage, as well as for consumption smoothing in rural India. Mazzocco and Saini (2012), using ICRISAT data set, conclude that the caste rather than the village is the social unit around which insurance is organized in rural India. Even in urban India, chain migration from villages and job referrals (particularly in traditional blue-collar occupations) are on the basis of caste networks—Munshi and Rosenzweig (2006) provide evidence for this from their survey in Mumbai.

- On the basis of detailed demographic and social network data from 43 villages in south India, Banerjee et al (2013) show how a micro-finance program diffuses significantly through social networks. Cai et al (2015), using data from a randomized experiment involving 5300 households across 185 villages in China, study the influence of social networks on weather insurance adoption for rice farmers and the mechanisms through which they operate; in particular, networks are found to effectively transfer information about the functions and benefits of insurance.

(3) Institutions for Local Commons Management

- Baland et al (2010) assess degradation of forests managed by local communities (Van Panchayats (VPs)), relative to state protected and open access forests in the Indian state of Uttaranchal. It is based on ground-level ecological measures of forest quality (including canopy cover, biomass, lopping and regeneration) in forest areas adjoining a random sample of 83 villages covering the entire mid-Himalayan region in the state. It controls for unobserved village heterogeneity, possible endogeneity of management regimes and cross-forest spillovers. Controlling for these factors, VP forests are found to be 20 to 30 per cent less lopped, and similar on other dimensions. The lopping differences are greater the longer the forest has been under a VP. The results are, of course, consistent with the hypothesis that more degraded forests are more likely to be converted to a VP forest. They indicate the importance of recognizing the potential endogeneity of forest type, and attempting to understand the process by which forests are transferred to VPs. The evidence suggests that local communities are more motivated to form a VP and manage forest areas under their control more effectively when these forests are more valuable to them and become degraded. The bias that results from failing to incorporate this source of endogeneity involves significant underestimation of the benefits of VP management when forest quality is compared across VP and non-VP forest areas without controlling for relevant characteristics of these forests and the local community.
- The history of local community-level institutions for cooperation in water management in India is rather mixed. There are several documented examples of successful local community water management (although usually at a rather low level of organizational form) in different parts of the country, some of them going many hundreds of years back in history and still surviving, but there are also numerous cases of failure of institutions of cooperation, leading sometimes to an anarchical scramble for water. There are not too many quantitative studies of the determinants of such success or failure. Bardhan (2000) is one such study looking into the determinants of cooperation

in resolving water conflicts in irrigation communities, drawing upon a primary survey of 48 villages spread over 6 districts in Tamil Nadu. The study suggests that cooperative behavior in an irrigation community is by and large significantly related (negatively) to inequality of landholding, to urban or market connections (providing an exit option), and (positively) to duration of access to water, monitoring by guards, and in some cases to social homogeneity, small group size, proportional cost-sharing rule, and collective adversarial relation with other villages over water. When the rules are crafted by the village elite, the latter violates the water allocation rules less; otherwise the elite is the more frequent violator of rules. Sometimes when inflexible rules are made or enforced by the government, their violations are not necessarily inconsistent with cooperative behavior among farmers themselves. When an average farmer believes that the water rules have been crafted jointly (as opposed to by the elite or by the government) he is more likely to have a positive view of the water allocation system and about rule compliance by other farmers.

- Broadly similar results are available from a study of irrigation management in rural Yunnan in China. Ito (2012) on the basis of data collected from 104 communities shows that collective action is forthcoming in rural communities when few nonfarm job opportunities are available, the degree of income disparity is quite small, and resource restrictions are moderately problematic. Communities without local government intervention seem to outperform those with intervention. For a similar finding from canal irrigation in India, see Meinzen-Dick et al (2002).

6. Macro-level Governance Institutions

Governance institutions are very old in both countries. But the nature of their functioning and the built-in organizational features and incentives are different in many ways, and they have differential effects independent of those following from the obvious regime-type differences (one being a democracy, the other not). I can only discuss here aspects of governance where there are empirical case studies in either country. In particular I take up three aspects related to (a) internal organization of the bureaucracy, (b) accountability structure and devolution of power, and (c) the problem of abuse of governance institutions giving rise to corruption that has been an ancient bane of governance in both countries, and the organizational incentive issues involved.

(a) Career Incentives in Government Organizations

- The Chinese system of bureaucratic promotion, unlike the Indian (which is based more on seniority than on performance), gives considerable weight to the performance of the local economy that the official is in charge of (along with maintenance of political 'stability' in the area), thus combining political centralization with local bureaucratic performance incentives. Persson and Zuravskaya (2016), however, note on the basis of career background data for provincial party secretaries between 1980 and 2005, a distinction between native- born provincial leaders and outsiders: the former spend more on education and health and less on infrastructure. It is possible that the local leaders have some allegiances that compete with their career concerns outside the province. Jia, Kudamatsu and Sein (2014) show from the data on the CV's of political leaders in China between 1993 and 2009, the interesting complementary roles of political patronage connection and local growth performance in the promotion of provincial leaders. This complementarity is found to be stronger the younger the provincial leaders are relative to their connected top leaders. But while connections with their patron/mentors increase the likelihood of promotion, provincial leaders with weak local economic performance are unlikely to be promoted. The Chinese system thus allows for a rather rare combination of political loyalty and meritocracy.
- In India the autonomy of a meritocratically recruited bureaucracy is often eroded by politicians through discretionary transfers and promotion of officers. On the basis of career histories of 2800 officers in the Indian Administrative Services between 1980 and 2004 Iyer and Mani (2012) show evidence on the use of manipulative transfers of officers. Over their entire career, there is evidence that officers of high initial ability are no more likely to be assigned to important posts than other (loyal) officers. This also means that junior officers under-invest in acquiring expertise. A randomized experimental study in the police department in Rajasthan, India by Banerjee et al (2012) showed that a freeze on transfer of police staff increased police effectiveness.

(b) **Decentralization and Structures of Local Accountability of Government**—this literature has been surveyed in Bardhan (2002), Mansuri and Rao (2013), Bardhan and Mookherjee (2015) and Mookherjee (2015). I take up here only some selected key issues.

- Decentralization in delivery of public services has been advocated on grounds of better utilization of local information. A growing literature has, however, pointed to the problem of capture of local governments by the elite (including officials and intermediaries) and the frequent diversion of benefits and resources to non-target groups. Kochar (2008) shows evidence from NCAER data in rural India of how landed elites, whose profits are reduced by the schooling of the poor, have blocked investment in local public education. Anderson, Francois and Kotwal (2015) from their survey data in rural Maharashtra show how the landed elites undermine pro-poor government programs. In rural West Bengal, where some amount of land reforms had been successfully carried out, Bardhan and Mookherjee (2006) find intra-village services delivered by local governments have been relatively pro-poor, but in allocations of funds from higher-level governments poorer jurisdictions have suffered in general.
- The empirical literature suggests that the pre-conditions of local capture depend on
 - initial social and economic inequality in the local area (hence the importance of redistributive measures like land reforms and expansion of mass literacy)
 - degree of political competition in the area
 - how regular and well-functioning are the deliberative processes of local democracy (public hearings, village council meetings, etc.)—see, for example, Besley, Pande, and Rao (2005, 2012) for South Indian villages
 - how free is the flow of information about the functioning of governments, and about the entitlements and allocations at the local level—here the importance of information campaigns (and media exposure) about resources allocated to local governments and how they have been spent and audited (if there are provisions of periodic independent audits of accounts) are clear. Banerjee et al (2010) carry out experiments among slum residents in Delhi to show how the provision to them of citizen report cards (evaluating legislator performance and characteristics) improved the vote shares of better-performing incumbent politicians.
- Even when delivery of public services has been to poor people, decentralization sometimes degenerates into political clientelism by which some poor beneficiaries are selected with a view to political support in exchange, at the expense of other poor potential beneficiaries or long-term investments in public goods. More on this in the Bardhan-Mookherjee overview on clientelism written for EDI.
- Attempts at mitigation of the effects of elite capture have included political reservation of seats at local councils and their headships for disadvantaged social groups—like mandatory reservations for lower castes, tribes and women in India. The empirical literature on its impact on targeting of benefits, started with Chattopadhyay and Duflo (2004), which found significant positive effects of reservation of the position of village council head for women. The subsequent literature, including our own work—see Bardhan, Mookherjee, and Torrado (2010) and the literature cited there—has not confirmed this for the case of women, although there is evidence for political reservation for some ethnic minority groups in improving targeting of some benefits. Of course, even apart

from immediate benefits targeting, the more important consideration may be that political reservation may have effects in empowering and confidence-building in potential leaders from disadvantaged groups over a longer period, as shown in the case of women by Beaman et al (2009). The way to reconcile the apparently contrasting empirical findings in this literature may be to recognize the initial handicaps the leaders from disadvantaged groups in reserved positions suffer from, particularly in terms of information, networks, contacts with higher-up authorities and administrative experience, in all of which those leaders may gain over time and generate in themselves (and others) confidence in their leadership.

- In China decentralization has been used not just for delivery of public services but also for local business development. Jin, Qian and Weingast (2005) use data from 1982 to 1992 for approximately 30 provinces to show that fiscal decentralization was positively related to growth of per capita regional GDP and other economic outcomes. This indicates the positive incentives of decentralization, as local governments were allowed to retain a higher fraction of tax revenues collected, whereas competitive pressures from business of other localities acted as a check on rent extractions.

Compared to India Chinese decentralization has involved better modes of management of infrastructure financing and construction. In China urban infrastructure is constructed, operated, and maintained by separate companies set up by the city government, whereas in India the municipal government itself does it through its own departments. The latter are financially strapped, as they do not have much taxation power and are perpetually dependent on the state government for funds. In general the fiscal system is much more decentralized in China, where sub-provincial levels of government tend to spend nearly 60 per cent of total government expenditure, compared to less than 10 per cent in India.

But jurisdictional competition of business and mobile resources have not been enough to prevent local elite capture in China. China's more egalitarian land use rights distribution since de-collectivization may have prevented the rise of a landed oligarchy that has often captured local governments in parts of rural India. But in recent years Chinese local business in collusion with local officials has been at the root of problems of arbitrary land acquisition, toxic pollution, and violation of safety standards in factories and mines. (Incidentally, Chinese coalmine death rates are reported to be 15 times higher than that in India).

On the basis of provincial-level panel data on key state coalmines in China from 1995 to 2005, Jia and Nie (2015) provide evidence that decentralization makes collusion between official regulators and firms more likely (in Chinese media such collusion is called *guan- mei goujie*) and is correlated with increase in coalmine fatality rates. This is also consistent with the general finding of Fisman and Wang (2015) that politically connected firms in China have higher workplace fatalities, using firm-level data from different industries between 2008 and 2011. (While Jia and Nie focus on the characteristics of regulators, Fisman and Wang focus on those of firms). There is also suggestive evidence in the Jia-Nie paper that media exposure can act as a deterrent on collusion. Martinez-Bravo et al (2014) provide evidence, on the basis of village

panel data, that local officials are better controlled by local elections than by central monitoring.

(c) Abuse of Governance Institutions: Corruption

Types of Corruption

- Facilitating Corruption like speed money-- the standard kind where you pay an official to speed up your file, you pay him to do what he is supposed to do anyway
- Collusive corruption—where you pay an official to do what he is not supposed to do, i.e. the official connives at or looks the other way when goods are smuggled, taxes are evaded, income or property value is under-assessed, driver's license or various kinds of government-issued certificates are given to unqualified people, bids in public auctions are rigged, lower-quality materials are substituted in government procurement, and so on.

These cases involve collusion between the bribe-giver and the bribe-taker to evade laws, and both parties gain, thus neither is likely to report this to investigators.

Case study examples:

- Bertrand et al (2007) followed 822 applicants for driver's licenses in Delhi and carried out some experiments. 71% of those who get the license do not take the driving test and 62% of license-getters failed an independent driving test. The dangerous consequences of this kind of corruption for society are obvious.
 - Niehaus et al (2013) carried out a survey of 14,074 households in rural Karnataka to find out about the process of getting a below-poverty-line (BPL) card that makes the card-holder eligible for many of the public benefits targeted to the poor. They found that 70% of BPL card-holders were actually ineligible by official criteria, and 13% of eligible households did not have the card. Such corruption leads to large leakages in programs meant for the poor.
 - Lewis-Faupel et al (forthcoming), drawing on a random sample of road contracts issued by the state of Uttar Pradesh, India, find that in most cases corrupt officials rig the procurement process to favor a pre-determined winner of the bid.
 - Cai et al (2009) show how certain types of land auctions in China are used in collusion between the auctioneers and participants.
 - Fisman and Wei (2004) investigate tax evasion and find that the gap between reported exports from Hong Kong and the corresponding reported imports into China is increasing in tariff rates.
 - Fisman and Wang (2014) detect corruption in state asset sales by comparing prices of publicly traded assets to non-publicly traded assets.
- Bureaucratic vs. Political Corruption

Ignoring the Chinese case where the distinction between an administrator and a Party official is often blurred, and the cases in many countries of collusion between the two, it may be possible in some cases to distinguish the two types of corruption. Some economists have also made a related distinction between 'petty' and 'grand' corruption, the latter usually involving at least the complicity of politicians, while much of the economic literature is preoccupied with the former involved in mostly day-to-day administrative transactions with bureaucrats.

In India there is some circumstantial evidence— reported in Sukhtankar and Vaishnav (2015) -- that in more developed regions, as large rental opportunities open up (say in infrastructure and construction), the importance of old-style petty corruption in the regular delivery of social services declines. From conversations with builders in Gujarat and Maharashtra they also find that in building contracts compensation for favorable decisions is often demanded by officials and politicians in the form not of cash bribes, but equity stakes in the new projects.

By all accounts illicit financing of the increasingly expensive elections in India is often found to be at the root of grand corruption. The Association of Democratic Reforms reported that in 2014 70 per cent of the income of India's 6 major political parties comes from undocumented sources. Rent extraction to pay back election funding is difficult to unearth. But there are some indirect studies.

Min and Golden (2014) examine electoral cycles in electricity theft in India. Drawing upon geographically disaggregated data for the period 2000–09 in Uttar Pradesh, they document that electricity losses from public distribution utilities tend to increase in periods immediately prior to state assembly elections. Sukhtankar (2012) finds evidence of electoral cycles in input prices paid for sugarcane among politically controlled sugar mills in Maharashtra. Kapur and Vaishnav (2015) link an electoral cycle in cement consumption by builders moving with exigencies of state elections, how competitive the elections are, etc. Yadav (2011) cite from her surveys of business groups in India that 60 per cent of the groups reported corrupt selling of parliamentary votes in their sectors.

▪ Non-monetary forms of corruption:

- when connections, not direct bribes, are used to land a job or a contract (connections are sustained by social forms of 'gift exchange')
- when a politician does you a favor not in exchange of money, but, say, political support
- when an official steals not your money but time, through absenteeism or shirking—the most widely-cited evidence for absenteeism of health and education workers in India is in the paper by Chaudhuri et al (2006).

7. Many Research Gaps

North, Greif, Weingast, and others in their historical accounts of the rise of the West have shown how traditional institutions of long-distance trade and credit evolved into more complex impersonal, legal-rational institutions, drawing upon the growing sense of 'generalized morality' in society (as opposed to particularistic allegiances and sanctions), and these institutions helped in large-scale industrial development. The question is if this is the only institutional path to large-scale development in countries like China and India.

As we have suggested before, these countries have had long experience of indigenous mercantile institutions based on multilateral reputation and enforcement mechanisms, but industrial development has been rather slow until recently. Nationalist historiography has usually blamed this on colonial or neo-colonial policies. Without denying the importance of these policies and the lasting wounds of colonialism, it is nevertheless important to examine the indigenous institutional impediments to development (which may be just as valid and significant for those poor countries that do not share a colonial history).

It is possible that clan-based or caste-based organizations that serve the purpose of short-horizon trade and commerce are often not adequate for supporting the much larger risks of longer-gestation, large sunk-cost industrial investment. These organizations may have limited capacity (either in finance or specialized skills) to pool risks and mobilize the capital of the society at large in high-risk high-return industrial ventures. The technological and pecuniary externalities in investment between firms (and industries) and the 'strategic complementarities' that they give rise to are difficult to internalize and coordinate on a large scale in the under-developed private (or even state-controlled) financial markets at early stages of industrialization.

Here a great deal of case studies are needed to analyze the few instances of industrial success (more in east Asia, but some in south Asia as well) in recent history and the many cases of failure. Are there any patterns in this which have implications for institutional economics? What are the ingredients of state capacity involved in making industrial policy more of a success in east Asia than elsewhere? (The current literature on state capacity that emphasizes fiscal and military capacity is not very helpful in answering this, particularly because it does not address the capacity for resolving collective action and coordination failures).³

Further advances in the industrial policy literature have to explore the particular institutional combinations of domestic political coalitions and market structure and the design of particular policies which make the difference between success and failure, along with rigorous empirical and experimental studies to discern the link between policy and outcome. It is important to understand why historically a close state-business relationship was 'developmental' in some cases (for example, South Korea), but not in others (for example, the Philippines).

³ Acemoglu, Robinson and Torvik (2016) recently emphasized how elites may not, for strategic reasons, want political centralization, but there are many cases in developing countries where elites cannot achieve such centralization even if they want to.

Even when there are convincing cases of successful institutions fostering industrial development and ‘catch up’ with the West (and Japan) as in the case of China, some people—for example, Acemoglu and Robinson (2012)—have doubted if these institutions can deliver on innovations and ‘creative destruction’. When state support is important in industrial policy, there is always a danger that too-big-to-fail organizations (private or public) may ultimately turn into rental havens, with vested interests of incumbents in raising barriers to entry for new firms. The role of large incumbent organizations in stimulating R & D and the innovation process may also vary depending on the type of innovation one has in mind, whether it is of the ‘disruptive’ kind that challenges incumbent firms (which the US private innovators in collaboration with venture capitalists are good at and a large entrenched organization usually isn’t), or the steady ‘incremental’ kind which adds up to significant gains (the Japanese call it kaizen) which some large organizations in Germany and east Asia have excelled in. We have too few case studies on these issues in developing countries.

The literature is as yet in its infancy in understanding the forces and motivations behind formations of political coalitions and different kinds of elite bargains in different historical contexts, which underpin the process of institutional change or atrophy. Not merely should the theory be linked up with the general literature on coalitions, but more empirical analysis and historical case studies on formation and breakdowns of political coalitions will be valuable. The declining role of unions of unskilled labor in political coalitions, given the nature of technological progress and globalization in recent years, and its impact on state policy and governance and (the already weak) welfare regimes in poor countries, along with labor politics sometimes being replaced by machine politics⁴ is a neglected area that needs to be discussed in this context.

The theory of collective action in bringing about institutional change and its various determinants need to be far richer than the free-rider issues emphasized originally by Olson. For example, collective action may break down if there is a bargaining impasse on the perceived fairness of distribution of gains among different groups, and this and other distributive conflicts are likely to play a role in the political coalition formation issues mentioned above.

In the discussion of institutions of political accountability the original hope from decentralization and devolution of power tried in many developing countries has faded somewhat on account of the various capture and dysfunctionality issues discussed above. The empirical findings in the literature are mixed, primarily because the political and institutional context of decentralization and hence the design and implementation of devolution projects are widely divergent. It is time we dig a little deeper and try to decipher from micro empirical and experimental studies if there are any patterns in the jumble. Also, there are very few empirical studies which bring out clearly the contrasting benefits and costs of centralization vis-a-vis decentralization, even though that has been a primary concern in the theoretical and policy literature.

The puzzle of how the Chinese authoritarian system has been able in general to maintain some sort of a balance between patronage and political loyalty considerations in career promotion on the one hand and a reasonably competent meritocracy on the other needs

⁴ For an example of this in Argentina, see Levitsky (2003).

more analysis from historical and current case studies. This balance has been difficult to achieve in other autocracies.

Most of the case studies in the literature on institutions of local commons management do not tackle the endogeneity problems involved. More in-depth studies of such institutions can throw light into how they come into being, and how they function. This would be useful in enabling policymakers to predict the kind of circumstances where successful community management initiatives can or cannot be expected to emerge.

At the micro level, much of the empirical literature is on agrarian institutions. There is very little work in developing countries on firm-level workplace arrangements, supplier networks and credit, insurance and marketing relations in the vast informal sector, the possibility of introducing institutions of shop-floor democracy and worker participation in decision-making, how institutions of worker rights merge into those for citizen welfare rights in primarily self-employed entities, the many incentive and organizational problems in the functioning of cooperatives which have kept the cooperative movement in most developing countries rather weak (or captured), etc.

Much of the theoretical micro-level institutional literature grew out of the theory of complete or incomplete contracts. This, however, leaves out other possible forms of institutional evolutions. Many years back Menger (1883), the founder of the Austrian School of Economics, made the distinction between what he called 'organic' and 'pragmatic' institutions. In contrast with the institutions discussed in the contractarian approach, organic institutions are comparatively un-designed, and they evolve gradually as the unintended and unforeseeable result of the pursuit of individual interests. As the historian Francois Furet (1978) observed, "men make history but they do not know which one". It is thus important to research historical cases of the evolution of organic institutions in the development process. Menger's theory of the origin of money, in which self-interested actions of traders led to the evolution from a barter economy to one in which a single commodity became the universal medium of exchange, is a prime example of the evolution of an organic institution. Buchanan (1975), in his explanation of the rise of property and law, and Nozick (1974), in his discussion of the hypothetical emergence of minimal state from a Lockean state of nature, have used the idea of unintended outcomes of voluntary negotiations. On the other side of the political spectrum, Elster (1985) has given an insightful interpretation of Marxian dialectics in terms of unintended consequences in history. It is also possible to think of cases where an institution is created organically but preserved pragmatically: the actors eventually become aware of the function an institution serves for them and then consciously maintain it even though it originally came to being unintended. Taking stock of case studies of these various processes from empirical and historical data will be a useful exercise.

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