

Institutions in Informal Markets

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Instituties in informele markten

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CHAPTER ONE: LAW, DEVELOPMENT AND INSTITUTIONS - A VIEW THROUGH INFORMAL MARKETS

1. Law and Development (L&D) and Informality

Sir William Arthur Lewis, recipient of the 1979 Nobel Memorial Prize for Economics, in his seminal 1954 paper, developed a model of capital accumulation and economic growth which showed that growth in a developing economy happens through the transitioning of labor from subsistence to the capitalist sector (Lewis, 1954). He suggested that unlimited labor in the traditional (informal) sector, such as casual workers, petty traders or agriculturists, for example, would eventually be absorbed by the growing industrial (capitalist) sector and disappear in time.

Contrary to this, when the International Labor Organization (ILO) sent its first employment mission to Kenya in 1972, it observed that the traditional, informal sector has not only persisted, but expanded (ILO, 1972). Today, ILO data indicates that the informal sector around the world has been growing steadily as more economies have begun to liberalize. According to its recent estimates, the informal economy provides employment to 71% of non-agricultural workers in sub-Saharan Africa, 71% in Asia, 51% in Latin America and 47% in Middle East and North Africa, and almost 93% in India.

The informal or unorganized sector is comprised of all activities and income generation that fall outside of the ambit of governmental regulation, taxation and social security. The sector also exhibits a lack of legal protection in the form of contracts, property rights and registered enterprises. While the informal economy could be an important safeguard against impoverishment and low employment in the formal sector, it comes at the price of fiscal losses, labor vulnerability, low productivity and poor economies of scale. Furthermore, informal economies are often associated with low average incomes, poverty and low-levels of development indicators.

Given their size and prevalence, informal markets offer a unique entry point to understanding the context of law and development (L&D). Whether law is important for development has become one of the most widely researched areas of legal theory in recent times (Thomas, 2011). One side argues why appropriate legal frameworks of contract and property rights are efficient and therefore crucial for economic development (Mahoney, 2001). While critics on the other side have employed ideas of legal pluralism, cultural determinism and historical materialism to illustrate how the divergent social and political conditions of developed and developing countries actually disregard the law's impact on development (Trubek and Galanter, 1974). Issues of implementation problems

(Kleinfeld, 2006; Golub, 2006 and Carothers, 2006), path dependency models (North, 1990), high cost of exercising reforms (Carothers, 2006), political resistance (Rittich, 2006), cultural disjoints (Dam, 2006) and informal institutional growth (Fandl, 2008) also pose strong challenge to the idea that law is necessary or important for development. Nonetheless, Donor agencies like the UNDP, Ford Foundation, USAID and others had been infatuated with this idea of rule/role of law in state-building since the 1970s. This has also been seen in the World Bank's aggressive emphasis on law as a medium for development, spending more than a billion dollars over a quarter century on legal reform with little achievement.

Trubek and Santos (2006) show that the phoenix of L&D died and rose twice, and now its third avatar is underway. One of the reasons of failure of the first two 'moments of L&D' – and it is important to keep evaluating the intellectual history of legal thought to eschew repeating the same errors – is the divorcing of local contexts from the imported best practices. Law, by definition, creates labels and categories. These new labels, if disjointed from the existing local and old institutions, may be ineffective. As such, for L&D to be successful, it is important that local, informal institutions be kept in mind (North, 1990; Rodrik, 2000).

Informal markets are fascinating sites to study informal institutions and their private ordering. However, despite the ubiquitous nature of informal markets in developing and poor countries, literature focusing on informal markets has been disproportionately small. Largely driven by development economists who often argue for eliminating government bottlenecks or offering social security to vulnerable informal workers, policy prescriptions have not been of great help in addressing the vulnerability of workers operating in informal markets or improving their productivity and scale. Other efforts by urban planners, anthropologists, sociologists and occasionally legal academics is noteworthy, yet, innovative imagination is missing. One of the reasons for lack of creative engagements with informal markets, is the dearth of good empirical studies. Due to a lack of documented data and the secret nature of their organizational knowledge, identifying and estimating market dynamics is a tall order. Most data collected has been qualitative and ethnographic in its scope (Ellickson, 1991; West, 1997; Bernstein, 1992) or sometimes historic (Greif, 1993).

1.1 Contribution to the Existing Literature

This book adds value to the literature in two directions. Firstly, using informal markets as the phenomenon, I examine the idea of law and its influence on development. This I hope will yield an informed judgment about the possibility of creating an alternative legal order that is more

hospitable to those inhabiting informal spaces and useful for drawing general answers to legal reforms and policy-making questions in third world countries. It is important to understand that informal markets are socially constructed and not separate from socio-economic developments. In this thesis, I sought to chart the contradiction between the plurality of informal markets on the one hand and the singularity of law on the other, with an eye to locate where they intersect. Informal markets present unique examples of legal vacuums, which have their own environment and climate. Studying that environment can help us qualify the need for law. Therefore, I chose to conduct select empirical inquiries in India using institutional analysis to articulate what institutions are embedded within informal markets so as to understand their private ordering.

Secondly, I attempted to excavate embedded institutions through an ethnographic examination of such markets. This requires the observation to come through case studies and interviews, through which I have shown how research on informal markets necessitates an empirical perspective. Given the ingenious ways in which these markets work and in the absence of reliable data, rather than shifting the focus towards qualitative study, one must toil to collect the data. And in doing so for informal markets in this study, I show the need to abandon universalizing problems and solutions in economic vocabulary.

Thirdly, I view informality rather liberally. Contemporary understanding of informal markets owes much to their description by Western scholars who have viewed these markets as anomalies, in need of reform. This may not be true. The majority of developing countries are inundated with informal markets, which contribute significantly to GDP and employment figures. I view informality in a rather expansive manner. Instead of looking only those businesses that would fall under a la-Lewis framework of subsistence sector, I understand informal economy to also comprise underground economies that are traditionally considered to be illegal in nature. Hence, the business of the mafia, which supplies an illegal product but functions in the manner of a business, would be treated as informal market in the book. The reason is not to redefine informal markets in general, but to appreciate the likeness of informal modes of ordering present anywhere. In some ways therefore, informality here is a legal performative, explained by all that lies outside the law.

1.2 What is the argument, *not* about?

Since informal markets fall in a significantly large set of scholarship, it is important to specify what the book is *not* about. To begin with, it does not engage with the taxonomy or definitional aspects of informal markets, for two reasons. Firstly, the categorization is exceedingly complex

and any dwelling on it will come at the cost of covering the analytical study that I conducted.¹ My goal is not to understand how to define informal market, but once defined – with whichever parameter – how to understand its institutions. Secondly, in taking the expansive view of informal markets (everything outside the borders of formal legal framework is informal), I do away with subtle definitional nuances, which could be digressional for me.²

This book is not about asking if the institutions in informal market are efficient or not, or whether informal markets are welfare enhancing or not. Such questions – I believe – are important in their own right, but their generality carries the risk of straightjacketing complex and diverse issues. Such risks can result in grave policy consequences. A blanket answer for questions that are laden with value often ignores the micro-aspects of questions, leading to oversight of far more fundamental building blocks of the subject under scrutiny (Rodrik, 2000). Focusing on institutions rather than markets is a neat way of understanding organizational building blocks, and will help us to target proposals for reform better.

Readers expecting a *thesis* on the rule of law, legal reform, and legal pluralism may be disappointed, even though I invoke these concepts frequently. Ideas of legal reform are rather old and understood broadly in consistent manners. I take inspiration from the general scholarly understanding of these terms, more than digging into these terms further.

1.3 Law and Economics Framework

This is a work under the intellectual umbrella of law and economics. The book pushes forward a law and economic understanding of how markets work outside the law. ‘Informal market’ is therefore used as a term that captures the principles of private ordering in legal, semi-legal, a-legal or illegal markets. Within the discipline of law and economics, I have employed a transaction cost framework. I show how these costs are absorbed by intermediaries that have evolved through the informal institutional frame. The intermediaries become the crucial connect between the book and policy prescriptions. I show how intermediaries may emerge in a market, and how costly would

¹ For a detailed literature and classification, see, Losby et al (2002); Kanbur (2009); and Gerxhani (2004).

² But this does not mean that definitions are not important here. Guha-Khasnobis et al (2006, pp. 2-3) emphatically mention that despite our expectation to see clear and consistent conceptualization of formal-informal binaries in literature, they find no such thing. The discourse began with Boeke’s (1942) work on ‘dual’ economy, which was further conceptualized by Arthur Lewis (1954), who expressed the idea of two-sector model of development. Harris and Todaro (1970) observed this duality in equilibrium economics. All these efforts were minor, until 1972, when ILO Report on Kenya (ILO, 1972) along with paper by Keith Hart (1973) mobilized huge interest in the concept.

they be. Government then, can choose to replace them if it can provide the same services at a cheaper price.

In this introductory chapter, I discuss broad strands of L&D scholarship, its shortcomings and the idea of informal markets. Further, I reason that institutional study holds great promise for understanding the micro-constituents of informal markets, which should be the target of policy reforms (if at all), instead of the entire market itself. The chapter shows why informal markets may be sites of high transaction costs, resulting in the prevalence of informal intermediaries whose economic role is to reduce or absorb the transaction costs at a price. I offer a brief synopsis of the three cases explored in this book, illustrate the methodology used in the papers and give an overview of its major findings. I also illustrate the methodology used in the papers.

The rest of the paper is divided as follows. Part 2 offers a brief overview of law and development, and the need to incorporate study of informal institutions into its framework and major ideas within the literature that motivated me to dig further. In part 3, I elaborate on how best we can view informal markets, and in particular their two characteristic features, namely path-dependent and private ordering embedded therein. Part 4 explores the importance of transaction costs in analyzing informal markets and Part 5 develops the concept of the intermediary as an institutional response to the problem of high transaction costs in informal markets. Part 6 offers a synopsis of three cases explored in the book and part 7 explains the methodology employed for the case studies and engages with each chapter separately. Finally, part 8 concludes by surmising the main findings.

2. Law and Development (L&D)

2.1 Intellectual History of L&D

L&D has been one of the most powerful intellectual force in policymaking during the previous century, lying at the intersection of economics and law. More importantly, it has been one of intellectual fodder for interventions of the World Bank and other international organizations (Santos, 2006). Trubek and Santos (2006) divide the L&D movement into three moments. The first moment emerged during the post-war reconstruction efforts, where economic growth was to be driven through State intervention and policies. A State's development policies and interventions were legal instruments in the eyes of theory and the doctrine led to several law reform projects around the world. This was the moment of the Law and Developmental State, and state's intervention was to be primary vehicle for 'taking-off' the state towards the path of 'modernization.' The movement died in the 70s, out of the weight of its weak foundations of faulty

and myopic assumptions, including, American ethnocentricism, legal liberalism's untested dynamics, universalizing errors (Trubek and Galanter, 1974).³

The rise of Thatcherism and Reaganomics, saw skepticism of state-led economic development, inefficient state agencies, the collapse of the Soviet Union and a newfound faith in free-market economics, which marked the onset of a new L&D scholarship. The second moment thus began in the 80s with the rise of neoliberal economics, exhibited in an institutional form through Washington Consensus, which drove privatization, liberalization and opened-up the economy to the world market. Markets assumed the central role in driving economic growth; and law was employed primarily to create conditions for enabling the market to take its course. At this time law limited the State, switching the focus to making governments more efficient in their administration, activating judiciary reform to ensure business protection, removing trade barriers and sizing down the regulatory and bureaucratic arms of the governments. Law became law of the market, and the primary emphasis was on efficiency rather than equity. L&D became a gigantic scholarly inquiry (Trubek and Santos, 2006) as the focus on ensuring property rights and freedom of contract gave way to a privatization drive around the Third World. Washington Consensus codified the new global order and gave rise to a regulatory state where non-majoritarian agencies were vested with the task of 'managing/governing' the economy.

However, rising inequality, devastating crisis experiences in Latin America, Russia and East Asian, exacerbating hunger indices and an increasing rate of gaps between the haves and the have-nots of last two decades reminds us of the horrors of unflinching faith in the markets. Trubek and Santos (2006) contend that we are now in a third moment of L&D, characterized by a recognition that markets may not always be the best way to reach development in the absence of an institutional framework, and more importantly, development should be seen more expansively than merely through the lens of economic growth.⁴ Since the lack of an appropriate institutional framework may lead to market economy transforming into gangster capitalism, oligarchy and cronyism, the emphasis now is on optimal regulation rather than deregulation. This enhances the law's role and expands it not just vertically, but also horizontally. In other words, capturing the social and the political in the economic, becomes imperative.

³ Often, this article itself is called as the death knell of the first moment of L&D.

⁴ See for example, Sen (2000), for understanding development as freedom. See also, Comprehensive Development Framework, at <http://www.worldbank.org/evaluation/cdf/>

2.2 Scholarship as it Stands Today

The resurrections of L&D, which brought the funding agencies, academic support and systemic reforms (Davis and Trebilcock, 2008) is attributed to a development of new players and new vocabulary. The new players were economists who became attracted to development and institutional variables (of contract, property, the role of legal institutions, regulation) for enhancing law reform strategies.⁵ In doing this, they also provided a scientific language of economics that was ripe for the prevailing environment of law. The new vocabulary they found was to replace law and development with a streamlined understanding of the ‘rule of law’ (Trubek, 2014). In addition, the legal academy had begun developing receptivity to ‘law and ...’ type scholarships, which provided a fertile grounds for the growth of law and development studies (Santos, 2006).

The transformation in the scholarship’s center from markets to institutions is reflected in the influential writings of several economists. The focus on institutions has also been convincingly presented by Acemoglu and Robinson (2003) and Acemoglu et, al. (2005). Similarly, Kuran’s (2012) work shows how institutions were at the heart of the ‘long divergence’ of the Middle East from being a prosperous region in middle-ages to an underdeveloped economy by nineteenth century. Their scholarship makes institutions (and not markets) central to explaining economic growth. Rodrik (2006) showed the fissures in the Washington Consensus and its failure in producing desired results. In fact, Rodrik (2000) has been emphatic in demonstrating why ‘local knowledge’ needs to be appreciated in identifying appropriate institutions. Therefore, today, the third moment carries with it a perennially changing blueprint which offers scope for experimentation, since there are no cut-out answers to effectuate development through law. It appreciates the global political forces of transnational law in growing capitalist economies, whilst still emphasizing importance of the Developmental State. This means there is a far more receptive environment for social and political forces in determining economic change. One can view this as a response to the failure of State intervention and also of the markets. Here, informal institutions assume a prominent role.

2.3 The Need for Recognition of Informal Institutions in L&D

Winn (1994) reveals the link between L&D and informal markets in her investigation of Taiwan, where she invoked the informality of the country’s economic and social order. She discusses an informal financing technique, *biahoui*, used by small businesses in Taiwan to show how the recent formal laws have facilitated the informal relational networks which kept the financing techniques

⁵ See generally for review of these developments: Dam (2007), North (1990), Trebilcock and Daniels (2009)

alive, and in fact have expanded it. The informal features of Taiwanese small businesses – which significantly contributed to the economy – gained powerful impetus from the formal legal system which sought to strengthen the existing relational transactions rather than replace or displace them. This is one of the often missed and yet fundamental reasons for Taiwan’s ‘economic miracle.’ Through complementing local contexts, the value and scale of economic units was significantly enhanced. Hence, formal legal institutions should first assess the context in which a market order exists, and then, based on an evaluative method, decide whether formal law should replace, displace or complement the existing institution.⁶

Of particular significance here is the diverging formal rules and informal norms. Developing nations are bound more by customary norms than the rule of formal law. Economic transactions there are characterized by social networks, formed informally, with a heavy impetus on these networks to achieve desired aims. These networks are generated through castes, ethnicity, language, or any other means of group identity. The social networks in terms of political relations have important bearing on all political decisions. More importantly, their presence is most largely felt in the omnipresent informal markets of the Third World. Rodrik (2000) in his claim for recognizing the importance of local knowledge, reminds us how much we need to shed some of our obsession with *blueprint* policy solutions. Informal institutions are at the heart of this argument.

3. Informal Markets

The importance of the informal sector for third world economies is undisputed (Charmes, 1990; Schneider and Enste, 2003; Schneider, Buehn and Montenegro, 2010). It contributes up to 35-45% of total GNP in Asia, Africa and Latin America (Gerxhani, 2004), and employs large parts of the world’s workforce. While this sector has been long studied by development economists, institutional economists have focused their attention on the subject only occasionally.⁷

The discourse on what exactly constitutes an informal economy has often changed its course. A notable early work by Lipton (1984, p. 196) notes this vagueness by expressing the problem in terms of ‘misplaced dualism, misplaced isolation and confusion.’ Different countries use the term with different things in mind, and use different terms for the same thing (Muller and Esselaar,

⁶ Japan’s legal system is also alloyed with many informal practices, like *keiretsu*, and trade association networks (Upham, 1994), which form the bedrock of Japanese growth.

⁷ An early effort is by Floro and Toyopoulos (1991), where the authors study informal credit markets in the Philippines though new institutional economic approach. Feige (1990) has also invoked valuable ideas to explore the informal sector from transaction cost perspective.

2004). Even ILO's definitions have been altering and expanding. Perhaps a very versatile idea of informality can be drawn from Guha-Khasnobis et al (2006, p. 4-5), where they explicate the notion of informal markets as reflected in them being 'outside the reach of different levels and mechanisms of official governance' and 'lacking structures'. While the former encompasses informal sector to lie outside regulatory and tax umbrella, the latter explains their organizational frame, which lends an unorganized color to it. However, informal markets may actually have some structure if privately ordered. The authors even mention (*ibid.*, p. 7) that 'informal does not mean unstructured or chaotic...' Indeed, informal markets are agile, and responsive to regulatory outreach in their character. They change their structure to adapt to changing market dynamics, or laws. And in doing so, they may also assume an illegal color (*ibid.*, p. 6). These illegal markets could in theory be even more structured than those falling within the ambit of law. For the purposes of my thesis, I take up a similar expansive view of informal markets. They could be a-legal or illegal, but they will always be characterized by falling outside legal net.

The recent interest in informal markets is fueled by two distinct sets of scholarship (Guha-Khasnobis et al, 2006, p. 1-2). On the one hand, during 1980s and 90s, Ostrom's (1990) work which brought to the surface embedded informal institutions, which greased the sustenance of common property regimes. Interestingly, government efforts to formalize these communities had disastrous consequences (Agrawal and Gupta, 2005). On the other hand, Hernando de Soto (1989, 2000) showed how the informal sector holds enormous untapped assets and therefore urged governments to legalize the informal sector to unlock this dead capital. Through extensive empirical work in Latin America, De Soto's arguments converge to massive policy changes in order to formalize all that lies as 'dead capital.' My thesis is inspired by these two broad sets of scholarships and illustrates the informal institutions of India's informal markets.

One of the most prominent ideas identifies the source of informal markets in excessive taxes and regulations in an environment of weak enforcement (Loayza, 1996). People opt out of the legal framework if following the law is costly to them. Barriers constructed by the law could include the cost of access in the form of registration, licensing legal paperwork, bureaucracy, and administrative bottlenecks. Labor regulations are often said to increase these barriers. However, it has also been shown that informality has its own costs (Loayza 1996). Informal firms and their workers are forced to bribe the state enforcement authorities to enable them to sustain their livelihood. Secondly, informal workers fall outside the State sponsored welfare services. Thirdly, since contracts signed outside the law are not enforceable by the State, there is high level of uncertainty, vulnerability and precariousness associated with informal workers. Fourthly, the a-legal market status hampers provision of capital in the form of loans from institutionalized

organizations, thus pushing up interest rates in informal sector. The cost of capital becomes very high, which further intensifies informality by attracting labor to replace capital requirement.

If informal firms incur huge costs to remain informal, why is the conversion of informal markets to formal ones not common? This dilemma shows that there is an element of lock-in seen in informality. The switching cost of the informal sector is too high. It fossilizes in time, and operates under path-dependence (David, 1985). This must encourage markets players in informal sector to develop innovative forms of organizational methods to sustaining themselves outside the law possible. This drives them to cultivate institutions that aim to reduce the costs of lying outside the law, which are crucial to understanding the nature of informal markets.

One way to begin a study of these institutions is to look at the works of Robert Ellickson, Avner Greif and Lisa Bernstein, who explored how order and businesses could be maintained outside the law through private ordering. Of particular interest is also Ostrom's (2005) idea, which brought forward recognition of community-based organizations that have successfully managed vast common pool resources - devising innovative and customized solutions to the problem of economic governance through private ordering. She shows that there are indeed internal informal structures, which are better able to address the governance challenges of the specific milieu than replacing them with a top-down regulation from a third party, which will often result in adverse consequences. In Nepal, for example, the government tried to nationalize forests since they thought small forest-based communities were not able to address the problems of deforestation; which was disastrous (Varughese and Ostrom, 2001; Waltner-Towes et al, 2003).

Vast numbers of informal enterprises could be highly structured and yet cut off from the official governance channels of the State (Tucker and Ostrom, 2005). In a similar vein, such an analysis helps us observe and understand relations between players in an illegal activity in order to address risk in the activity (Gambetta, 1993). It becomes important then to examine how the characteristics of informal markets inform their institutions. We use the lens of transaction costs to understand the institutions of informal markets, which not only offer them private ordering, but also create longevity and sustenance.

4. Transaction Costs

Quite predictably, in the absence of written laws and third-party enforcement, informal market institutions must be built on many non-economic factors. Granovetter (2005) reminds us how socially embedded our economic actions are and inspires us to look beyond neoclassical economic

frameworks of knowledge. Given the social construction of informal markets, we may imagine informal markets to contain huge transaction costs within them. These transaction costs are seen as a result of professing outside the law. The cost of maintaining the business involves bringing-in enforcement officials, increased risk, high levels of uncertainty, lack of financial insurance, barriers to capital access from formal channels and little recourse to cheating. Indeed, if the transaction costs are not addressed adequately, the markets may not emerge in the first place. Informal institutions that grow in informal markets therefore, must indeed be largely aimed at reducing the transaction costs. Understanding informal institutions therefore centers on the exercise of understanding these transaction costs.

In informal markets, these transaction costs are reflected prominently in the bargaining costs of the exchange. In formal exchange, bargaining costs can be understood as ‘unfair’ contractual arrangements (Klein, 1980). Invoking the concept of hold-up problems (Klein, Crawford and Alchian, 1978) and opportunistic behavior (Williamson, 1975), Klein focuses on market determined contractual relationships. Indeed, if both parties can cheat, then contractual restraints are put on the smaller party (Klein, 1980). In formal markets, the hold-up problems are addressed through counter-contractual restraints for the stronger party. The situation is tricky for implicit contracts seen in informal markets, where the law does not come to the rescue of the weaker party.

Williamson (1975) has convincingly shown that the two dimensions which determine the most efficient execution of a transaction are a) uncertainty and b) asset specificity. If the value of the two dimensions are high, it makes more sense for a firm to have complete control over the transaction. For a buyer of a product, this would mean to make it in-house. The root of uncertainty and asset specificity problems is the propensity of opportunistic behavior. At high transaction costs, firms will choose to make rather than buy (Walker and Weber, 1984). This would also be particularly true in cases of societies with weak legal systems. For example, firms choosing to hold large inventories (Raja and Schäfer, 2007) or buying out small firms to evade the risk of the latter holding up.

Williamson’s idea offers a powerful tool for understanding the governance behavior of firms and their organizational structure, but only in formal organizations. The exercise of exploring the *viability* of a firm to switch to ‘make’ more from ‘buy’ mode remains untreated. Transaction costs help us determine which side of the boundary between firms and markets, will an economic entity choose to move. But the movement itself does not attract scholarly work in this setting. In other words, what happens if a firm, despite suffering from high bargaining/transaction cost wants to vertically integrate, but due to structural features, simply cannot?

In informal markets, firms choose to remain in their small scale sizes even when the gains from buying-out are large. Firms and units inherently remain small-sized with limited organizational expansion because they do not really have a *choice* between make or buy. Informal firms are far more vulnerable to transaction costs (reflected in uncertainty and asset specificity too) and suffer from lack of options for elevating themselves to another level of institutionalization than their already institutionalized formal counterparts. Firms and players in informal markets remain small, unorganized, unregulated and often capital-starved. Individually, they also do not have economies of scale or large-scale production. And even if the collective production in informal markets is significant, organizing the markets as if it works as one entity is not possible. Many of these attributes intensify problems of uncertainty and asset specificity, meaning that transaction costs cannot be overcome by organizational maneuvering. Hence, vertical integration or legal recourse to unfair contracts which can address the problems of transaction costs in formal markets, are not forms of recourse that can be applied to informal markets.

Informal markets will therefore need alternate mechanisms to absorb or reduce transaction costs. These mechanisms often develop in the form of intermediaries, who become crucial institutional agents in informal markets. In this sense, while the idea of an intermediary in its abstraction is not different in formal markets as it exists in informal ones, the helplessness of firms in informal markets makes the nature, scope and role of the intermediary very important.

5. The Emergence of Intermediaries to Address Transaction Costs

This book shows that one of the crucial institutional pillars that informal markets rest on is the informal intermediary. Born out of necessity to absorb transaction costs at a price, intermediaries act as important economic agents in informal transactions. Intermediaries are a result of institutional structures that informal markets adopt over time and therefore their study is imperative for us to get a sense of how these markets address the problem of transaction costs.

A pictorial representation would help. For any bargaining with high transaction costs the space of bargaining can be denoted by the semi-circular curve shown in figure 1, which shows utility C_1 is the Pareto frontier curve. A contract at any point on this curve leads to a Pareto optimal solution. In the presence of transaction costs however, *some* surplus is absorbed in addressing the transaction cost. This pushes the curve inwards, with lower payoffs, yet positive. However, if the transaction costs push the bargaining curve further inwards, to the point where the bargaining curve falls below

the reserve levels, the transaction will not take place at all. At C_2 , the transaction will break down, and at any curve beyond that, say, C_3 , no transaction will take place

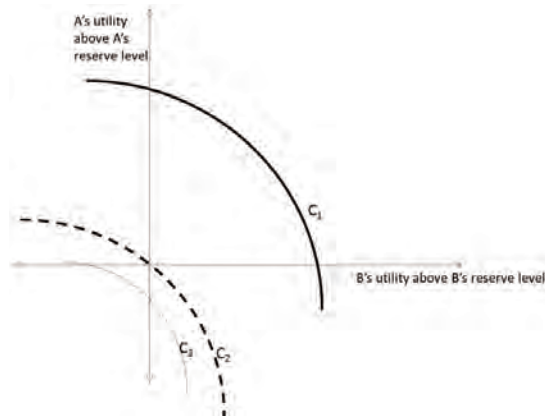


Fig. 1: Bargaining outcomes on different curves, at different levels of transaction costs.

Coase (1960) helps us understand why prohibitive transaction costs may become reasons for transactions not to take place in the first place. In such cases, policy makers may want to achieve a state which would have been achieved were there no transaction costs. This is why a State can use regulations and laws to help reduce transaction costs in formal markets. However, in informal markets, this role is fulfilled by intermediaries, whose job is to push the curve upwards, at a positive price. This price will be less than the surplus added, so that there is incentive in paying the intermediaries. The intermediaries would be able to push the bargaining curve forwards/upwards at a price smaller than the value added by the push itself. Intermediaries can efficiently absorb this transaction cost because of their advantageous position as regards knowledge and information, networks, path-dependency, initial endowments (low cost of liquidity) or low costs of risk. Indeed, this economic role of intermediary to reduce transaction costs acts as the most important stability-providing force in informal markets, which is evident in my three cases.

6. A Brief Synopsis of the Three Cases

The foregoing analysis helps me build a case for my choice of essays featured in this dissertation. This book explores three unrelated informal markets in India and examines the presence of intermediaries therein. Each of these three cases form standalone analysis which pushes the scholarship of informal market institutions in distinct directions. The choice of seemingly unconnected markets/cases was motivated by the hope of observing similar patterns in diverse

settings. Discovery of a pattern in this makes the contribution far more valuable. A very brief idea of these essays is give below:

6.1 Agra's Footwear Cluster

Agra is a city in north India, contributing to major part of India's leather footwear production in its historical and largely informal cluster. Amongst many institutional features of the footwear cluster, one stands out. Shoemakers have to sell their shoes to the trader on credit, but the capacity of poor, household shoemakers is severely limited. To address this problem, an informal intermediary has emerged, creating an institution of '*parchi*.' The trader purchases shoes on credit, and intermediaries in the market purchase this credit at a discount. The value of the discount depends on the creditworthiness of the trader. Therefore, for a trader who does not fulfil his promises, discount rates increase, disincentivizing the shoemaker to sell his shoes to this trader. This compels traders to keep their interests low by being true to their promises. The market thereby ensures a self-enforcement mechanism in place. I estimate the discount rate and find that the rates are higher than the bank's prevailing interest rates, which leads me to explore why shoemakers do not visit banks.

6.2 Dhanbad's Coal Mafia

The second informal market I study, is that of the coal mining mafia in Dhanbad, which is one of the most productive and lucrative mining regions of the country. I study the historical evolution of the institution of mafia by observing the relationship between mine owners and workers across a period of time. I notice that erstwhile supervisors of workers in the mines turned into a mafia after nationalization. These supervisors were an intermediary that emerged due to a metering problem (Demsetz and Alchian, 1972), prevailing institutionally in the mines. Over time, the informal relations between workers and supervisors made them indispensable to the structure. With the introduction of labor unions in the region, these supervisors assumed the role of labor union leaders and after nationalization of coal in India, these supervisors-turned-union-leaders became a mafia. I estimate the cost of this institution and attempt to understand what characteristics present in a natural resource industry can give rise to mafia type institutions.

6.3 Delhi's Sex Work

The third case concerns the market for sex work (prostitution) in New Delhi. My focus here is on independent sex workers who work outside the designated red light areas, and therefore provides

a useful case to understand choices made by informal workers in an industry whose legality is under question. I observe prostitution from an informal work perspective. I divide the sex workers outside red light areas, into two cohorts – those availing the services of a pimp and those who are not. Pimps act as intermediaries and by estimating various quantitative parameters, I attempt to determine their economic role. I show how their value lies in offering a protection service, mainly from police, gangs and violent clients. Sex workers purchase this service given that they act as risk absorbers in this trade.

7. Methodology

Since the book engages with issues that navigate across multiple disciplines, it becomes important to devote some space to explaining the methodological approaches it is seeking help from. The idea of informal markets and institutions has been addressed by economists, lawyers, sociologists, political scientists, ethnographers, anthropologists and historians. This makes the issue highly multidisciplinary. In this note, I will elucidate approaches I have adopted in my work. Further, I will offer a brief exegesis that relates to each chapter.

Methodologies, particularly in context of economics, are hotly contested issues for the strengths and limitations associated with them. For studying informal markets therefore, I had to be careful to adopt a methodology which ensures that reality doesn't get diluted in a scholar's obsession to be theoretically consistent. Hayek (1989) reminded us that failure of economists in guiding policy successfully is often a result of their desire to imitate the procedures of the physical sciences – and this may be erroneous in economics because a mechanical and uncritical application of habits of thought to different fields is undesirable.

In physical sciences, we assume that any important factor which determines the observed events will itself be observable and measurable. In understanding complex phenomena, say markets, factors for causes and outcome of processes will hardly be fully observable and measurable (Barry, 1979) – and this is particularly true of informal markets.

And often, economists take this so seriously that they formulate their theories in terms of only that which is observable and measurable (Barry, 1979; Hayek, 1989). This demand for measurable data puts a limits on phenomena and causal factors that economists study. It not only puts an undue pressure on legal studies since law inherently hinges on real life, but it also dilutes any serious engagement with all the facts that cannot be confirmed by scientific evidence. In other words,

economists happily believe that facts which can be measured are the only ones which are relevant (Hayek, 1989).

These considerations were however not decisive for the methods of information gathering in this study. Its informal and descriptive methods were imposed by the subject of the study itself. None of the information could be gathered with the usual tools. The study sheds light on contracts and markets, which are either illegal and violate regulatory law (for instance informal banking in Agra) or which are not illegal but also not protected by the law (prostitution in Delhi). It goes without saying that statistical data, which can simply be downloaded for further processing, do not exist for these markets. And even though much statistical economic work exists on the size of the informal sector and its contribution to the national income, this provides no insights on how the problems of making and enforcing contracts, which span time and space and give incentives to ruthless and opportunistic behavior, are solved in the absence of any contract enforcement mechanism by the State. The absence of published statistical data is widespread for the study of numerous economic problems and can often be solved by sending around questionnaires, for instance as e-mail attachments to a very large number of people. Even if the quota of returns is very low a scholar can draw valuable conclusions from information thus gathered and use econometric methods to process them. Again for various reasons this method was out of the question. Disregarding all technical problems in a country like India it is not reasonable to collect data on the income of prostitutes or their pimps or on interest rates paid for illegal credits. The way to gather this data was to contact people directly and build up trust with them through other people. This allowed me to get an overall picture of relations and dynamics in these markets which otherwise would not have been possible.

To believe that lawlessness in society, as well as the institutions and contractual relations which govern in such an environment, can be best understood with established statistical method is erroneous. Informal markets are victims of such beliefs and given that majority of the world in terms of population runs on informal markets, this is a major oversight. For gaining understanding of informal markets, various facets which can't be measured easily assume central importance. For instance, history and sociology. Indeed, Clark and Andres (1992) argue that 'the pursuit of an economic theory modelled after the natural sciences...eliminated history and society from having any meaningful role.' Further, the data available is not documented or published in an authoritative manner. There are also some secretive manners about the market players for outsiders. In addition, a theoretical study divorced from reality often glosses over crucial institutional factors that explain the complex structure we seek to examine. For understanding institutions, it becomes essential that studies are done in natural settings.

All this makes it very important that we engage with qualitative methods to understand the mode of operation and functional aspects of informal markets. Qualitative research is conducted in natural settings to illuminate the ‘thick description’ of everyday patterns of action and meaning (Dasgupta, 2007). This is particularly useful here. The quantitative research could be, depending on the context, too sophisticated to be efficacious. The new ‘brand’ of qualitative research relies on undertaking case studies, observing reality and engaging with people at the individual level. What quantitative data will conceal in its aggregate form, will be captured by qualitative study.

7.1 Case Study, Interviews and Surveys

My research is based on a *case study* approach, with most data collected through *interviews* and *surveys*. Indeed, engaging in a case study approach can be intellectually very enriching, and offers valuable and substantive contribution (Mahoney and Goertz, 2006; Rogowski, 2004). Each case study involves a mix of structured and unstructured interviews, in addition to carefully observing institutional factors that make the given market. In societies and cases where divergence between law on paper and law on the ground is huge, it is important to understand *de facto* arrangements more than *de jure* ones. To understand law and its reform processes, I excavate questions of (being outside the) law in real life. This illuminates the question even further, because here, my primary inquiry rests on ‘what’ and ‘how’ before ‘why.’ Each chapter therefore, is demonstrative of what lies in the field and consequently, why and how it has arisen. The case study approach will be of special value if the focus is on a contemporary phenomenon in a real-life context (Yin, 1989).

The importance of ‘what’ is summed up by Clark (1977), “*The point is not to prove that the hypothesis is correct, but to find out something.*” The primary impetus should be discovery indeed. That is why scholars often suggest the benefits of using mixed-methods, both qualitative and quantitative, in multiple settings (Bates et al, 1998; Scharpf, 2000; Lieberman, 2005). Both methods have their merits, and employing them together to answer similar set of questions has potential to magnify the scope of one’s research. I do the same. I have undertaken qualitative research, supplemented it by quantitative analysis on the data I have collected. So while the qualitative bit answers ‘what’, for ‘why’, I rely on both qualitative surveys and quantitative data that I collected in interviews.

As a result this book is based on qualitative methods, but borrows considerably from quantitative approach to discuss the cases. For informal markets, no documented data exists. Hence, the only way – and a very reliable way – is to build a databank oneself. I collected data using filed surveys

and inspired by participant observation, I exposed myself to market participants in a variety of settings for a sustained period of time to generate enough trust that they begin sharing information with me. This led to a series of valuable interviews, which when coupled with studying archival records (in chapter 2 and 3), led me to theorize how the influence of historical evolution matters in a market setting outside the law. The data was analyzed using simple, descriptive statistics, and regression techniques. Conclusions were drawn over the results from data, seen through the lens of qualitative judgments of the cases, distilled across field-based research.

The case study method focuses intensively on individual cases to develop concepts and theory to draw out a logical narrative to situations *as they are*. This method is '*especially appealing in the effort to make sense of complex processes*' (Poteete et al, 2010). Exercised through field-based research in my work, it is therefore a uniquely suited method to undertake an institutional analysis of informal markets, since there is no data or general knowledge about these very heterogeneous settings. It is also appropriate for exploratory and evaluative research from a wide variety of theoretical perspectives (George and Bennett, 2005; Rueschemeyer, 2003). The need for assumptions is reduced, making the findings closer to reality (Mahoney and Goertz, 2006). Further, they not only test theories but the 'fine-grained observations support conceptual refinements and theory development and enhance internal validity, data quality and concept validity' (Poteete et al, 2010). Perhaps most importantly, case studies limit the universalizing tendencies of social science research, particularly theories that often have a simplistic understanding of complex processes (Gerring, 2004; Rogowski, 2004). This is valuable for institutional analysis of informal markets, since their predominant prevalence in poor countries that have scarce research resources, results in generalized Western views of these markets, which ignores the plurality, internal dynamics and private ordering embedded within them.

Unstructured interviews are of particular use here. They recognize issues in conversational form and are appropriate for obtaining information that may be sensitive or hidden (Guthrie, 2010). Often, knowledge inventory stored in human memory, where people feel comfortable expressing their thoughts orally, is of particular importance but is not necessarily documented. People are comfortable in expressing their thoughts orally. Such unstructured interviews are of particular importance.

Indeed, if people do not want to share sensitive information, interviews could be futile. Hence a personal rapport becomes important (Guthrie, 2010). This is what I did in my several visits to respondents without asking anything of relevance to my topic. This made them feel more comfortable in our space. We would talk about interesting things at personal level – about the

wedding s/he attended last night, about the weather, about the local politician's sex scandal, about growing up in India and comparing that to abroad (doing my doctorate abroad, I would often assume the role of respondent to their questions about Europe), or about what their children are doing. Unlike in the West, polite questions on private lives are often entry points to friendships and are not necessarily considered rude. Questions were often open ended to give room to the respondent to play around. This would obviously mean that interviews were long and it took me time to bring them to the point, but that was necessary. In the social setting that I was operating in, it would be offensive to suddenly appear, ask key questions in an interrogatory manner, and disappear without a tea. Conversations are a mark of respect and the process needs to be dialogical in this scenario.

These unstructured interviews also helped me gain access to respondents' personal stories which were invaluable. In emotionally rewarding them by being a patient listener, I was being taken seriously. Indeed, in writing the thesis, I am only collecting relevant facts which get verified from several sources, but in between this grain, I also observe the lovely chaff which covers it. It was a very human experience. Research often secludes us from people who we study, and as scientists, this is also the right way. However, being in touch with human lives in between is of great comfort.

In gauging the practices and customs which are embedded in the everyday interactions of informal markets, data collection could not be done without being physically present in the market and constantly engaging with the market participants for sufficient time. Such manners of the case study offer insights into the underlying and foundational implicit contracts that markets hinge upon, and were valuable for dissecting the cases analytically. I would take notes, record whenever permission was given. Sometimes if not possible, I would collect information in my head, and make notes when I would reach home. Even though most of my interviews were open ended and unstructured, for my third case study I conducted semi-structured interviews. Such interviews are valuable in having closed responses. I will explain in the chapter the specific methodology and manner in which I constructed these questionnaires and other details pertaining to the interviews.

It is important also to mention that often interview as a choice for research and the style (structured or not) as a medium of interaction is a result of local expectation as well (Francis, 1992). In all of this, I had a delightful time. Often, initially several meetings in a row would be of no use to my work directly, but then, once that rapport was built, information would cascade exponentially in the last few meetings.

7.2 Limitations

That said, there are also some limitation of the method of case study fieldwork and interviews/surveys that I use. One of the biggest problems is that one is never sure if respondents are lying, since interviews and surveys are not written official documents. To address this, I spoke to many respondents. This resulted in convergence in most cases and helped me distil known truths. Indeed, I spent considerable time with respondents developing a personal rapport that may have discouraged them to lie. Further, they had no incentives to lie. I noticed a high level of consistency among my respondents and felt that most responses are people's true perception at their micro-level. In fact, when I aggregated the responses and numbers which the responses generated, the overall picture diverged from their individual expectations, which was interesting and surprising to them. I would also like to mention – based on my experience – that perhaps scholars' perception that people will lie, is rather overly zealous.

In addition, the validity of surveys is limited, given the lack of room for respondents to answer the posed question. That is why, I relied mostly on unstructured interviews, so that respondents can bring in any story, or deviate freely from what I intended to ask them. In other words, my specific questions with closed answers were sandwiched between several open ended questions to make them feel comfortable. This also dilutes possible bias creeping in the analysis, since those who did not respond were significantly less than those who did.

Note that my questions were of three types: (a) what occurs, (b) why it occurs and (c) what is the value. The third one requires them to give one value, where deviation will matter. The first two have subjective answers, and I did not get a single no-response there. The first one remained largely consistent, since that could be observed by my being in the market itself and talking to industry experts. The second one had a few diverging answers, and it is here that my own understanding of the issue and reading literature on similar issues around the world, transformed me from being a journalist to a scientist.

Often, it is mentioned that inferences from case studies cannot be generalized (Hamel, 1993). They are considered to be useful in context-specific knowledge but not in general proposition. Scholars regard them to be good in generating hypothesis but not in testing. This concern according to me, may be overstated. As Erickson (1986) argues that since general lies in particular, there is no reason to believe that other way round will not follow – in fact, the burden of applicability lies on readers rather than the researcher, since the reader can better appreciate if the context is similar on her case or not. Researchers pass on their knowledge which is then further filtered by the reader, making it

a powerful way to start a discourse (Stake, 2005). This is much needed in the study of informal markets, especially in Indian context. In fact, given the heterogeneity characteristic of informal markets, a case study approach is perhaps more powerful than deceiving generalizations, which has thus far colonized this research.

Flyvbjerg (2006) dispels concerns about the generalizability of case studies by noticing that often formal generalization based on large samples are overrated. Case studies are more sensitive to epistemic and human factors. If the experiences of Galileo, Newton, Einstein, Darwin, Marx and Freud have advanced human knowledge based on countable cases, there is indeed merit in observing one case in detail (ibid.), and if not proposing a theorem, at least identify the blind spots in existing theories. There are biases in all research methods. Engaging with a specific case reminds us how humans are different everywhere and actually induces some freshness in our traditional mode of analyses. The point here is not to posit a case study approach as the best, but to recognize that it is particularly suited to studying certain issues, and to be welcoming to the newness that comes with it.

7.3 Inspiration for the Method

This kind of approach is not new either. In fact, influential scholars with high academic standing have applied such methods and produced great works of policy and scientific relevance. Disregarding case study methodology (with interviews/surveys) is not possible without disregarding the works of these scholars. My work builds on the inspiration I got from their methods and that is where I draw my work's legitimacy from as well. In particular, my research method is inspired by the methodologies of four scholars, who have worked in the area of institutions – Elinor Ostrom, Lisa Bernstein, Avner Greif and Robert Ellickson. Indeed, each of their works has inspired countless studies of this fashion.

Ostrom's (1990, p.45) two decades of influential scholarship, which she describes as '*moving back and forth from the world of theory to the world of action*' is appreciative of the context and institutional details of a situation. What she did for resource management, is what I attempt to do for market entitlement management in informal settings. Her 1990-work, *Governing the Commons*, is one the most cited property-related pieces of scholarship. In her analysis (1990) of a fishery in Alanya (Turkey) she observed how communities have developed a rotational system for fishing through a cooperative, avoiding the possibility that handful of fishermen would take the best spot to catch the fish. She went to Alanya in 1975, spoke to fishermen about the systems and institutions in place and gathered her information through interviews and observations. She further

gathered many such case studies from around the world (Canada, Brazil, Nepal and others), and emphasized that Hardin's tragedy of commons does not fit the model of common pool resources (given some conditions), where community members cultivate norms and procedures to prevent overuse and degradation of the resource. Such an insight was not possible without adequately surveying and reflecting upon practices on the ground.

Lisa Bernstein (1992) in her work on diamond traders follows a similar methodology. She studied the community's systematic rejection of state-law and development of an internal set of rules and practices by observing what happens on the ground. Her powerful narrative sketches the market and its institutions in great detail. Her analysis relied heavily on case study approach, and speaking with people in the market.⁸

Avner Greif, in his influential works (1993) on Maghribi traders of 11th century, looked at their coalitions for trading across the Mediterranean and examined 'reputation' mechanisms that helped to build implicit contractual relations. His work explains interactions between market (economic) and non-market (social) institutions which addresses the commitment problems inherent in business transactions that involve overseas agents. Greif explored the *geniza* documents found in a synagogue in old Cairo (Fustat) where for centuries, thousands of documents were archived. These documents reflect thousands of years of Mediterranean trade amongst other things. Obviously, these documents as source of authentic knowledge that cannot be verified in the context of today's scientific approaches. But they were the only window into the past, and Greif, through these documents illuminated medieval trade. His findings were therefore of direct relevance to understand business practices that lay outside the scope of law as we understand it today.

Robert Ellickson's ground breaking work, *Order without Law* (1991), based on his field research at Shasta County in California helps us to imagine the needlessness of law in many social contexts. Beginning without any hypothesis in his mind (p. viii), he conducted series of interviews with rural residents of the County. He discovered that the informal social norms applied by County residents to resolve their disputes, even though inconsistent with the law, were very efficient. He relied on government records and a total of 73 interviews (p. 290). In many ways, Ellickson may not have accomplished what he did, without engaging with the subjects directly, employing the case study approach with interviews.

⁸ See also, Richman (2006) who studies Jewish diamond merchants and the reputation and cultural norms, in same way.

Each of these contributions are of enormous value in understanding new perspectives in law and development. Each of these works pushed the boundary of law and economics in a distinctly forward manner. These works have attracted huge derivative scholarship which still continues. Ostrom went on to win Nobel Memorial Prize in Economics in 2009. Scholars studying interaction between market and non-market behavior are particularly attracted to this scholarship. In my work, I have not only found inspiration in their topics, but also the methodology they employed.

I now engage with the methodology adopted for each of the case-studies specifically.

7.4 Agra's Footwear Cluster

My fieldwork took place in December 2012-January 2013 and during summer in April-June 2013. Since the market is concentrated in a small geographical space, and traders are present in their shops every day (except Sunday when the market is closed), this was an ideal locale to collect cross-sectional data. I employed unstructured interviews to understand the market, and collected survey data for the interest rates of 312 traders from three sources.

My initial understanding of the market emerged through my interactions with 6 traders, who I had known personally, since I was born and brought up in Agra. These were friends' fathers who took extensive time to explain me the market, its structure, dynamics and history. Two of them were working in the market for more than four decades and all of them were second or third generation traders. This means they were engaged in the industry through family trade. Their historical knowledge therefore was massive and conversations with them were hugely instructive. Since markets are in action after 5-6pm, the first half of the day would usually be open for discussions. One of the traders belonged to the *Dalit* family, which was unusual and he was particularly helpful in making me understand how the market has historically hinged on caste-based networks. These ideas were corroborated by other traders. With each one of them, I had around four-five sessions lasting on an average, between one to two hours.

Whilst gaining what I thought was adequate market information, I began sitting in two of their establishments during the day for several weeks to observe and understand how the trade happens. Here, I was only observing and at the end of the day, attempting to understand few transactions I didn't comprehend. Without divulging specific financial knowledge, they would give time to explain the trade to me, with specific instances that I posed questions to them on.

During this time I also met several other traders, shoemakers and *adhatiyas* (intermediaries/middlemen). Overall, I met 27 traders, 45 shoemakers and 4 intermediaries (meetings with shoemakers were in big groups, hence it was manageable in short span of time). The number of intermediaries is naturally small, and they are very clandestine in their conversations anyway. Also, the intermediaries collect their debts on the (n+5)th day of each month, where n is 5th. So on 5th, 10th, 15th, 20th, 25th and 30th of each month (or the previous day of each month), when one sees them more often. These days, the market is in full swing, with everyone trying to arrange cash to fulfil the debts. Traders borrow money to ensure that they don't renege on the payment due that day. It is a sight to behold. Hundreds of people are on the street, with rickshaws laden with shoes, and people walking or driving two-wheelers. The traders are busy negotiating with shoemakers and intermediaries are busy. Usually it is very difficult to notice the intermediary and my acquaintances would usually point out to me from distance, who is an intermediary.

My observations were rather consistent over the few weeks I spent time in the market. Over those weeks, I had built some rapport with traders. Quick conversations with them revealed a fair amount of consistency in their narratives. I also visited at 4 factories, which engage in export-oriented products, which were not part of my study, but the visits were instructive. The shoemakers I met were also consistent in their stories. Since Sunday was the off-day, I would visit shoemakers' household-units (also sometimes, the traders' houses) and chat with them over home-made tea about their work, market and its trade, and their plight of living in penury. Many of these conversations would happen with several shoemakers sitting together. I had 3 such collective sessions, each lasting an hour or so. The traders and shoemakers differed on who exploits who – the former thinks the system is fair and keeps everyone happy; however the latter felt the system squeezes all their profits. This wasn't really the point of my research, but opens up new questions for future work.

In any case, most shoemakers were working in the trade through generations, and were very valuable in offering me information on the history and social dynamics of the profession. I met the leader of the Association of the Shoemakers who also explained to me the government's and banks disengagement with the artisans/shoemakers. Questions of caste and politics became important at this stage. I met two reporters who worked in major Agra newspapers and covered trade in the city who shed light on trader-shoemaker relations. I also met three loan officers in government banks in the area to figure out reasons for their decline in loaning to the poor shoemakers (whoever comes), and better understand why shoemakers don't approach them in the first place. Their responses were rather indifferent. However, all agreed that it is very difficult for them to offer

loans at the interest rate prevailing in the market, given the poor creditworthiness of the shoemakers.

I found a list of around 400 traders in the market, which was published by a local association of shoe traders which was two years old. Through three sources in the market – two traders and one manufacturer, I secured structured information on the interest rates of 312 traders in the market, mentioned in the list. Most of the values were the same. The deviation in the other values was minor. I took the mean of the three readings and tabulated them to measure the average interest rates.

7.5 Dhanbad's Coal Mafia

I undertook the fieldwork in Dhanbad during December 2012, July-September 2013 and May 2014. Since I had been visiting Dhanbad fairly often in last few years because of my previous work, I had cultivated a trusted group of friends who were very helpful to me during my project.

I interviewed (unstructured, except for the one in which I was collecting value of GT (goon tax)), 28 people for understanding the market and history of the coal mafia (in addition to 18 miners). There were 5 reporters from various vernacular newspapers, which are more popular in Dhanbad than the national English dailies. One in particular, Mr. Vankhandi Mishra was very helpful and offered me a series of interviews. I had 7 rounds of interviews with him, and each time, he gave me almost an hour. He is also one of the oldest reporters in town and possesses an institutional memory of growth of the city concomitant with that of the mafia. He was also named in much national press coverage over the 1980s for his brave reportage of the mafia's activities even at the threat of his own life. He gave me access to many old records of newspapers and now-defunct magazines which pertained to the mafia's activities. His narrative of history was coherent, powerful and supported by facts which he presented in written form.

I met 9 coal traders and agents, many of whom divulged details of mafia activities inside the collieries. While 3 of them gave me an hour each, the others spoke to me for about 15-20 minutes. It is through their accounts that I documented my field-notes and prepared the chart of values of GT in various collieries. Every morning at Katras Mod in Jharia, the coal trading is held from 5am until 9/10am. Dealers are found wearing their regular *kurta pyjamas*, sipping tea and chewing *pan/gutka* (beetle leaf). They are mostly in their forties and fifties, and can be generally seen to be chatting in groups, reading local newspapers and talking about the market. Dealings in cash are rare, but it happens on the street. Most sale is on credit. All of them requested me to keep their

names confidential. One trader in particular was very helpful. Each trader is given a username and a password to operate the website of Coal India, which he uses to purchase coal in an online auction. This gave me access to historical coal pricing, and I could compare the GT that the mafia charges coal buyers as a percentage of the coal price.

I visited four collieries personally and saw the smooth functioning of GT collection in two of them from the outside. This was done in a very clandestine manner when I was simply accompanying agents who had taken me there. Outside these collieries, I spoke to 18 laborers/miners (usually in a group) over a span of around ten visits, each of which would be around 20 minutes long. I spent time understanding the prevalent exploitation, and how relations between *sardars* and miners have changed – if at all – over time. I secured information about their recruitment style, wage structure, indebtedness and union following. These discussions were facilitated by 2 agents who I had become a good friend of, during the course of my fieldwork. These agents gave me the values of GT in all the collieries in Dhanbad. They gave me a range of value of GT in the collieries, rather than a specific figure. I met them during four evening tea sessions which lasted 30-40 minutes each. One of them also invited me for dinner at his house.

I had the opportunity to meet 4 police officers. One of the interviews in particular, lasting two hours, was of Ms. Suman Gupta Deputy Inspector General of the State of Jharkhand, who was previously posted in Dhanbad as Superintendent of Police. My interviews gave me the perspective of mafia's connection with government and their influence on the transfer orders of bureaucrats who would be tough on the mafia. 2 police officers were based locally, one in a police station in Dhanbad and the other in an area covering two of the mines. I also met a policeman at the lower-rung of the official ladder. Meeting with the last three was especially valuable to understand the operations of the mafia on the ground and what makes the State tolerate it.

I interviewed Professor Pramod Pathak, at the Indian School of Mines in Dhanbad whose 1977 Master's thesis was on coal mines unions, which he was kind to give me a copy of. I met 6 officers in varying positions from Bharat Coking Coal Limited (BCCL), which is a subsidiary of Coal India Limited. These meetings were helpful in so far as I wanted to understand BCCL's role in tolerance of the mafia and how the institutional history of BCCL and organizational history of mafia coincided.

I also met Mr. Ajit Rai, who had grown up in Dhanbad, and who had written a book in Hindi, with title translated as *History of Dhanbad*. Meeting the author was a very instructive and inspirational experience. He not only gave me a detailed background of what transpired in his city but also

answered my questions patiently. Our meeting lasted almost two hours. The narrative of the book was consistent with details that I found in government records and old British books on coal safety and mining which related to the Jharia coalmines.

I met one member of Singh Mansion (the biggest mafia house in Dhanbad), as a friend of friend. They were secretive about everything but aided my understanding of how the mafia operates. Many of my meetings with traders, members of the mafia family and their colliery sites was only possible through my two friends, whose help was invaluable. They had worked in the industry previously and know many people in the business. It is through them, that I could approach and discuss the activities of mafia.

Historical study was conducted by using secondary resources, government of British India records, local publications in vernacular languages and indeed by conversations with few veterans of the trade. There are a few magazines dedicated to coal and energy sector, and some of their issues were useful. Institutional memory is etched only in minds of old population of Dhanbad, and was never documented. Hence, relying on their stories was not only important but also inevitable. I have also referred to the works of anthropologists and historians who have worked on the mining population and *zamindaris* of the region as historical backdrop. Drawing connections between anthropologists and economic historians was a particularly gratifying experience.

7.6 Delhi's Sex Work

My fieldwork survey in New Delhi's northwest suburbs took place during December 2013 and January 2014 (briefly) and then during May – September 2014. In the first leg, I met three key people who had worked in this area, including an NGO officer. Mr. Khairati Lal Bhola runs an NGO called *Bharatiya Patita Udhar Sabha*, which has been working for the welfare of sex workers in the red light district of Delhi (known as GB Road), for forty years. He is an old man in his seventies and has a small group of people totally dedicated to the cause of sex workers empowerment. They distribute free medicines in the area and also assist sex workers collectives in many ways. I had four interviews with him, running into one hour each. His imagination really revealed a number of things to me. I also met Mr. Iqbal Ahmed, who runs a brothel in GB Road. I had one interview with him, unstructured, that lasted more than 3 hours. Meeting with him was hugely instructive. In fact, after having met Mr. Bhola and Mr. Ahmed, along with few faculty members from Jindal Global Law School in India who worked on feminist legal studies, I was convinced that I do not want to look at red light district sex workers – not only because they were over-researched in many ways but largely because I realized that there is a general exodus of sex

workers from GB Road who are now becoming independent. And there is no systematic study that maps the dynamics of these independent sex workers.

I had several telephonic conversations with NGOs that work on sex workers' activism, but didn't particularly find receptivity. The third person I met, Mr. Pankaj Pathak, worked in an NGO, called *Drishtikon*. This NGO works on AIDS prevention, mostly on government-funded projects. AIDS prevention NGOs are better conduits to approach sex workers because their mandate is far less intrusive to sex workers' livelihood. For instance, an NGO working on anti-trafficking intervenes in sex work to thwart it. This affects their livelihood negatively and therefore they are not receptive or friendly with staff of such an NGO. AIDS prevention NGOs on the other hand do not ask any uncomfortable question, but only request usage of condoms and ensuring regular checkups for HIV. If contacted, the NGO also helps secure their treatment in government hospitals. It is due to their rather favorable attitude and capability-enhancing motto that sex workers are close to officers from these NGOs and happy to discuss their personal life stories with them. They are not afraid of them; on the contrary, they often seek out their help in times of need. Mr. Pathak, the third key person I met in January 2014, offered all help and support. In January itself, I had 6 meetings with him, lasting about one hour each. I understood the dynamics of independent sex work and gained several important insights.

Drishtikon works in the northwest suburb of Delhi *Rohini* and *Sultanpuri*. When I returned in summer of 2014, we engaged in a series of interviews and discussions about sex workers in these neighborhoods. Mr. Pathak would meet with me in his Rohini office, and together we would visit many brothels in the area. He was very useful in helping me to build a rapport with the respondents, who were both pimps and sex workers.

Mr. Pathak and I conducted a semi-structured interview of 100 sex workers – 70 home based and 30 street based. Their selection was based on 'hot-spot' locations, which was an informal map that *Drishtikon* used for locating where the brothels and street-based sex workers are. We then made a representative selection from these hot-spots. Indeed, we wanted respondents who would be more cooperative and in that sense, based on Mr. Pathak's knowledge, these respondents were over represented in the sample. This does not matter because regardless of their cooperation with us, their data pertained to a random sample in the entire cohort. Also since this was a cross-sectional study, rather than longitudinal, we did not look at the same sex workers' data points, across a period of time, but observed data for a cohort of sex workers.

The interviews, as suggested, were semi-structured. There was a list of questions and based on Mr. Pathak's advice, in most brothels I did not write down the answers, but took simple notes (some on paper, and for others, I made mental notes), which we used later to fill the questionnaire sheets. The sex workers were told the purpose of the study and only those who were comfortable, participated. Since the interviews were semi-structured, we spent considerable time in brothels, talking about various other things, and did not follow a straightforward Q&A sessions. Often, in many brothels, several sex workers would give our answers together. Since the independent sex work is less researched, most of the sex workers were acting as interview respondents for the first time. This not only made them more receptive to being interviewed, but it also interested them.

8. A Brief Overview of Findings

The three cases show that informal markets will *inevitably* rest on the institution of the intermediary for their stability. Intermediaries serve the specific economic function of reducing the prohibitive transaction costs in these markets. In one way therefore, to understand any market outside the law, one needs to understand the intermediaries. The price of their services depend upon the elasticity of demand in the market, as well as their comparative advantage. The advantage of using an intermediary lies in their access to idiosyncratic knowledge of the market, crucial networks with the elites and their path dependent historical evolution which remains fossilized.

Informal markets operate outside the law and at many levels, are also formed as a result of costs associated with following the legal system. Institutional analysis of informal markets is valuable in order to appreciate their role, as well as the needlessness of law. Economic analysis of the legal architecture of a society can be gauged by the extent and depth of its prevailing informal markets and cost which they bear to remain outside the legal system. Studying informal markets from an institutional perspective therefore tells us the cost of law.

Informal markets are a dominant contributor to economic growth in developing countries around the world. This chapter introduced the book by making the case that institutional analysis is central to understanding informal markets around the world. Transaction costs can explain considerably and analytically the emergence and sustenance of markets outside the law. These costs are absorbed by informal intermediaries who have specific economic functions to fulfil in the market, due to their advantage in resources/capital, networks, information or simply through historical status. These intermediaries offer the much needed viability and stability to the markets. A transaction cost economics approach therefore leads us to intermediaries as foundational pivots of informal markets.

Interestingly, in exploring transaction cost determinants of ‘unfair’ contracts, Klein (1980, p. 362) called for economists to ‘get their hands dirty’ and closely observe facts and the state of the law to determine hold-up possibilities – something which he believed professors of contract law were not expected to contribute to. In one way, this is what I do in my dissertation. However, I choose to do this for informal markets – which also means getting my hands *dirtier*.

9. Chapter One Summary

This chapter introduces the book. It locates the thesis within the framework of law and development (L&D). The scholarship of L&D is undergoing its third moment in which scholars argue that both the State and the market are required to guide society’s path to development, and offers blueprints which ignore local realities that need to be avoided. These blueprints disastrously dilute away the heterogeneity and informal institutions of societies. The chapter argues the importance of understanding informal markets at an institutional level and gives a brief synopsis of the three Indian cases selected to investigate the operation of these informal institutions. Each one shows that to reduce the huge transaction costs of informal markets, an intermediary will exist in all these markets. In some ways, it infers that the legal reform processes of developing countries need to take serious account of the intermediary. The last section is dedicated to explaining the methodology in detail, employed in the research.

CHAPTER TWO: GUARANTEES AND TRADE CREDIT IN INFORMAL MARKETS: EVIDENCE FROM AGRA'S FOOTWEAR INDUSTRY (INDIA)

1. Financial Intermediaries in Informal Markets

The role of financial intermediaries in society's economic growth and performance can hardly be overstated. They collect assets from those who value it as low and make them available to those who value them as high. Alternatively, they may emerge to bridge this gap in the presence of transaction costs. Financial intermediaries and institutions are critical for ensuring the economy does not suffer from crippling information or credit costs. Banks and capital market systems are classic formal examples. An economy with well-developed institutions of financial intermediaries will be better able to allocate resources to where its value could be maximized. Rajan and Zingales (1998) have shown that industrial sectors with a greater need of external finance, develop disproportionately faster in countries with more developed financial markets. Recently, Cooter and Schäfer (2012) have also shown how financial institutions are central to economic growth and development.

However, what are the alternatives available in societies that do not have sufficiently developed banking and capital market systems? Think about for instance, informal markets.⁹ Outside the world of formal markets, we see the considerable limitations and constraints informal businesses go through attempting to secure funding from formal market intermediaries. These restrictions could be of two types: access to liquidity and guaranteeing the payment. The chapter discusses the emergence and functioning of informal financial intermediaries that address these two problems. I focus on a specific form of credit, the trade credit, which is frequent in business-to-business transactions. Often the supplier of raw materials offers credit to the manufacturer of goods that require these raw materials. Research has shown that implicit borrowing from the suppliers is an alternative to bank credit (Petersen and Rajan, 1997). Financing the needs of countries where formal financial intermediaries are not well developed or which suffer from low vertical penetration, generally means that firms with financing needs will fall back upon their own business-relatives (usually suppliers) in the form of trade credit.

⁹ For instance, unorganized chit funds emerged after bank nationalization in India, which were only formalized, albeit partially in 1982 through the Chit Fund Act, 1982. See Shah et al (1996).

The literature on the theory of trade credit is plenty. However, most of it hinges on understanding the trade credit present in formal markets. Using the case of the informal footwear industry in Agra for example, I illustrate the operationalization of the informal trade credit and also show one of the ways in which the credit is guaranteed in an unorganized market. Investigating the unorganized economy's ingenious ways to devise trade credit institutions and the effectiveness of the implicit guarantee (or surety) contracts in such markets can hold significant lessons for policy design in developing countries.

In particular, the discourse on L&D and legal reform will be greatly enriched if we use the example of trade credit and guarantee contracts to examine important development factors (like finance), since they are representative of extremely complex financial instruments that if ingeniously designed can operate outside the law. In such contexts, since financial instruments pose huge risks and involve high stakes, their design has to be very rigorous. In formal markets, the state-led enforcement of contracts assures the faith of people engaging in financial markets. A look at informal means of organizing these high stakes institutions necessitates them to be far more rigorous than when a State's guarantees are present. In this paper, I show how informal trade credit and surety contracts operate in the unorganized markets of developing countries, and therefore contribute to the general literature on trade credit and surety contracts. This evidence develops a view of relationship between law and 'informal' finance.

The rest of the paper is as follows. I present the literature review in part 2 to unpack the idea through understanding trade credit and guarantee contracts. In part 3, I provide brief exposition on the footwear industry in Agra and its industrial organization. Part 4 discusses in detail, the institution of trade credit and quasi-surety contracts in the market, by investigating its operational structure. This section also investigates the interest rate of trade credit in the market and analyses its implications. Part 5 identifies the departures that the study has found from the standard literature on trade credit and guarantee contracts. Part 6 digs into the history and shows how institutions are path dependent. In part 7, I show the possibilities for policy reforms, in particular, explicating the reasons as to why banks are inaccessible, even if they offer loans at cheaper interest rates. Finally, part 8 proposes next steps.

2. The Concepts of Trade Credit and Guarantee Contracts

2.1 Trade Credit

The importance of trade credit is documented in many studies at length. When I as a trader purchase something either from another trader or the manufacturer, for which I pay later, I am purchasing the product or service on ‘trade credit.’ Disparate sources indicate a variety of explanations of trade credit. Demirguc-Kunt and Maksimovic (2002) and Fisman and Love (2003) show that countries with weak legal systems rely on trade credit relatively much more. This is indeed true, especially in informal markets like Agra. The detailed empirical investigation of Petersen and Rajan (1997) concludes that firms engage in trade credit when credit from financial sources is unavailable. They propose that trade credit is used as ‘financing of last resort’ by highly constrained firms.¹⁰ However, for many informal small firms, the first resort itself is the trade credit and in situations of low levels of financial inclusiveness, bank loans may actually be the last resort, as I show in the case of Agra footwear industry. Using the same dataset as Petersen and Rajan (1997), Elliehausen and Wolken (1993) shows a 20% liability of small firms comprised of trade credit.

There are few hypotheses that concern trade credit. The *information advantage hypothesis* suggests that high information asymmetries will restrict the incentives of supplier (of trade credit) to offer credit (Schwartz, 1974). Biais and Gollier (1997) theoretically show that the extension of trade credit reveals that more information about the debtors lies with creditors than banks. This hypothesis was further built by Jain (2001). The *switching cost hypothesis* argues that trade credit may actually avoid default because transacting parties may often face high costs in switching their business partners (Cunat, 2007). The *collateral hypothesis* explains why the goods/products on which trade credit is being offered is actually a far easier commodity to liquidate for the purchaser of credit than for banks to do so, because the former is in the business of these very products (Mian and Smith, 1992; and Longhofer and Santos, 2003). The *quality guarantee hypothesis* argues that trade credit seeks to serve as a de facto guarantee of the product/service quality (Smith, 1987). As such, the choice of trade credit terms the supplier offers can reflect the degree of product quality (Emery and Nayar, 1998; Lee and Stowe, 1993; Long, Malitz and Ravid, 1993). This will only be true if the quality cannot be ascertained ex ante. However, all of these studies focus on formal markets. By demonstrating the functioning of Agra’s footwear cluster, we draw the attention of scholars to the examination of how these factors play out in the case of informal markets.

¹⁰ Although this may not be true in some cases. See for a contradictory view, Giannetti, Burkart and Ellingsen (2011).

Ferris (1981) offers an insight into why trade credit may make sense if we focus on its function to manage liquidity. For small firms and ones in informal markets this is definitely the case. Also, scholarship that builds case for relational trade practices (McMillan and Woodruff, 1999; Johnson, McMillan and Woodruff, 2002; Uchida, Udell and Watanabe, 2007) has shown that in emerging markets generally (and in Japan in particular), higher trade credit is offered if trading relationships are longer. Informal markets, naturally, must show a very strong support for this theory, and we test it in this chapter.

Petersen and Rajan (1994) have shown that primarily, the cost of trade credit is the foregone discounts. This may show that trade credit could be cheaper than formal credit. This is illustrated empirically by Giannetti, Burkart and Ellingsen (2011). However, as I show through my empirical work, trade credit is significantly costlier than that offered by the banks, and markets which are unorganized, exhibit divergence from these conclusions. Brick and Fung (1984) propose that the function of trade credit – and this is usually missed in many scholarly surveys – is to avoid taxes. In informal markets, it does not seem to be of any importance. Another lesser realized function is that of exploiting opportunities for arbitrage when lending and borrowing rates differ (Emery, 1984). However, most informal markets are characterized by a high degree of information symmetry – as I show – making the likelihood of arbitrage low.

Perhaps the most interesting and yet unexplored finding of the literature on trade credit is that of trade credits by small firms. It is observed that more often than not, small firms despite being more capital constrained than big firms (Demirguc-Kunt and Maksimovic, 2002) sell relatively large amounts of their goods on credit in developing countries, as compared to small firms in developed nations (Horen, 2007). For instance, in 2006, a survey found that 72% of Mexican firms provided trade credit to their suppliers, and it was found that small firms were more likely to provide credit than larger firms (Horen, 2007). This was in contrast to the US, where small firms have been shown to provide less credit (Petersen and Rajan, 1997). This paper sheds light on how that could be the case.

2.2 Guarantee Contracts

Guarantee arrangements constitutes a person (or an entity) standing as surety for a second person's obligation to a third. For example, one can consider my father offering to guarantee an education loan I am applying for in a bank. In the event that I fail to pay the loan on stipulated timelines, the bank will have the right to claim the payment from my father. Intercorporate guarantees, standby

letter of credit, construction suretyships, statutory and fidelity bonds, chattel papers, real estate mortgages, joint and several liability are some of the ubiquitous examples in commercial transactions (Katz, 1999). Scholarly work on guarantee contracts has been rather scanty.¹¹ One notable work in this area has been by Katz (1999), which provides a rigorous theoretical framework to generalize. However, his work focuses on formal markets. In exploring the same theoretical construct, the paper proposes some departures.

It may be natural to think that the need to guarantee credit in informal markets would be relatively much higher than seen in formal markets. This is because defaults in formal markets can be challenged in the judicial system, while such a recourse is not available to players of unorganized markets. In this vein, scholars of institutional analysis may perhaps obtain interesting findings upon digging deeper into how unorganized markets develop guarantors and assessing their interest rates. This paper attempts to do precisely that for trade credit.

3. Agra's Footwear Industry

The choice for footwear industry in Agra is based on the importance of industry as well as the region. Firstly, India has a 3.5% share in the global leather trade and ranks eighth in the world for leather-related foreign exchange earnings (Ghosal, 2011). The annual turnover of the leather industry in India touched \$7.5 billion, of which the exports totaled \$4.6bn (2011-12), recording a cumulative annual growth rate of 8.22% (five years).¹² Of all leather related goods, leather footwear assumes an important position. India is the second largest manufacturer of leather footwear, after China, with an annual production of more than 2000 million pairs.¹³

Secondly, Agra is *the* most important center of footwear manufacturing in India. Agra supplies to around 55% of domestic market demands and caters to 22% of total footwear exports from India (Hashim et al, 2010). Around 40% of city's 1.7 million population is directly or indirectly involved with the footwear industry. The industry is enormous and the wholesale trading takes place through trade credit.

¹¹ There is a subtle difference between guarantee and surety contracts, but since they do not affect the conceptualizations and results of this paper, I will treat them synonymously as guarantee contracts.

¹² Data collected from Council of Leather Exports, Ministry of Commerce and Industry, Government of India. Available at www.leatherindia.org last accessed on 25 June 2013.

¹³ See, <http://www.leatherindia.org/products/footwear.asp> last accessed 3 October 2013.

Agra is the second most self-employed city in India. The NSSO data (2003-04) reveals that of every 1000 males, 603 are self-employed.¹⁴ This gives the city, an enormous 500,000 plus males in self-employment. This value is higher for females: the number of self-employed women is 789, per 1000 females.¹⁵ This is the third highest in the country. Indeed, the statistic is reflected in sprawling informal markets at almost every nook and corner of the town. Therefore, aside from being a poster child of India's tourism, boasting the Taj Mahal in the background wall of international travel agents' offices, a rather lesser known but more profound identity of Agra draws from its massive self-employment figures (Singh, 2007). The footwear industry is Agra's prime livelihood achievement, boasting at both national and international levels, which hinges crucially on the self-employed shoemakers.

There are two kinds of manufacturers in the city: *organized* and *unorganized*. I divide the organized manufacturers further, into two further categories.

Organized:

Small Players: they employ less than a fixed number of laborers (usually 100) and therefore do not come under the purview of any labor law, yet have a registration number, pay taxes (usually hiding/manipulating most of their income sources and numbers) and exist on government documents.

Big Players: they have employed more than 100 workers, follow the labor and industrial laws (at least on paper), and are largely export-oriented establishments. There are close to hundred big players' units in and around Agra, generating significant revenue.

Unorganized:

The unorganized manufacturers could be better called 'shoemakers', lending an image of poor artisans. And poor they are, living on subsistence wages, working in households with family members, making shoes on very low capital and earning marginal profits that enables them to barely feed themselves. Many of them fall under the poverty line of India, making them chronically-impoverished. They almost entirely consist of *Jatav* (sometimes called *Chamar*) community, and some Muslims. *Jatavs* are people of low caste in the Hindu caste system and have been offered affirmative action under the Indian Constitution. Throughout history, their socio-economic situation has remained deplorable. Colloquially, they are called as *karigars* or *dastkaar*, which translates loosely into artisans. They do not exist on paper. They do not have registration

¹⁴ NSS 2004-05. The national figure is 395 per 1000 people. The sex ratio in Agra is 854 females to 1000 males (Census of India 2011).

¹⁵Ibid.

number, do not pay taxes, have no social security, do not follow or conform to any laws, and therefore fall entirely in unorganized/informal sector. Except the ‘big players’, manufacturers deal in domestic market only. This paper deals with the domestic market, and that which captures the informal self-employed shoemakers.

High numbers of unorganized self-employed units engaged in footwear manufacturing makes the industry highly labor intensive. Rough estimates suggest that more than one-third of the total contribution towards the domestic shoe market from Agra comes from the self-employed household-based artisans. Crude estimates are based on the number of units and their daily production. Their units are clustered in specific localities, totaling into 355 *bastis* (colonies).¹⁶ With an average of 30 units per *basti*, there are approximately 10,000 units that make footwear every day. At approximately 20 shoes per day, the daily figure of shoe making from the unorganized sector reaches almost a quarter million. For a pair worth Rs. 100 (US\$1.6) to the wholesale trader (lower-bound estimate), the daily trade easily touches Rs. 20 million (US\$ 324,000) from the unorganized sector alone!¹⁷

4. Institution of Trade Credit and Guarantors in the Market

4.1 The Trade Credit Chain

The classic way of supply-chain management in footwear (or any other consumer good) begins from the manufacturer, reaches the wholesaler and finally to the retailer, where it is sold to consumers. Agra’s wholesale traders (or simply traders) get footwear from one of the manufacturers (organized small player or unorganized) and sell it to wholesale traders in Agra and other Indian cities. Trading takes place on credit. This means that payments are withheld until the last agent receives money for his sale. In Agra’s footwear business, it means that the retailers will purchase footwear from wholesale traders, but will usually not pay them the amount due. Once the goods are sold, the retailers clear off their outstanding to their wholesale traders. The outstanding period could vary from a few weeks to a few months, depending upon how quickly the retailer will be able to sell the goods he has bought. This means, that traders in Agra sell shoes on credit. This in turn means that manufacturers have to wait for their payment too.¹⁸

¹⁶ The names of these *bastis* is available in the government’s office, also available with the author.

¹⁷ These details have emerged from my primary survey.

¹⁸ Note that not all manufacturers have to wait for their payment. The big manufacturing houses sell on zero credit policy because they have a huge bargaining power due to the market demand for their products.

This is illustrated in table 1. While the shoemaker gives the shoes to trader in Agra at time $t=0$, it is only at time $t=3$, that the customer pays the retailer. Hence, chain of credit begins completing at time later than $t=3$. This clearly means that the longest wait for the payment is suffered by the shoemaker. The retailer has the highest bargaining power in terms of trade credit, while the shoemaker has the lowest.¹⁹ All traders in Agra therefore purchase shoes from shoemakers on credit, which is paid off at the end of the trade credit chain. In this paper, I focus on the trade credit and guarantee relationship between shoemaker and trader in Agra.

PLAYER	TIME t	ACTION
Shoemaker	$t=0$	Makes shoes
Shoemaker	$t=1$	Sells shoes to Trader 1 on credit
Trader 1 (Agra)	$t=2$	Sells shoes to Trader 2 on credit
Trader 2 (Mumbai)	$t=3$	Sells shoes to Retailer on credit
Retailer	$t=4$	Sells shoes to Consumer
Retailer	$t=5$	Pays to Trader 2
Trader 2 (Mumbai)	$t=6$	Pays to Trader 1
Trader 1 (Agra)	$t=7$	Pays to shoemaker

Table 1: The credit chain and relative payment schedule: shoemaker is the residual bearer of credit risk

Two conditions are crucial for this trade credit system to work in practice. Firstly, since the transactions are informal in nature (without legal paperwork), there needs to be a credible commitment from the trader's side to fulfil his credit. The shoemaker cannot go to the court later if the trader refuses to clear the outstanding. This is an implicit problem of trust.

Secondly, the system will work only if the cost of liquidity to the shoemakers is low. In other words, for the trade credit to work here, shoemakers need some cushion to bear the delay. The problem however is that in Agra's footwear industry, the manufacturers are largely poor, unorganized artisans, who *cannot* sustain their livelihood on credit. They work on thin margins and their savings on labor costs (since they only employ their family members) is the actual savings

¹⁹ It appears that the retailer has the highest bargaining power and can compel his suppliers to maintain outstandings at his whims. He, however, bears a high risk. The cost of inventory is very high, and retailer needs to ensure several designs of several sizes in his shop. My preliminary estimate suggests that sale of shoe sizes in India follow a normal distribution curve, where the sale of size number 7 lies at the normal. Yet, the retailer needs to have sizes ranging from 5 to 12, and that of several designs. Many of these pairs lie in his inventory stock for long periods of time. Secondly, he is also not well aware as to whether the new kind of designs will be successful with the customers.

they have. Their dismal financial state makes their existence best explained in a 'hand-to-mouth' fashion. The shoemaker will not be able to sustain such a lengthy credit.

The shoe market in Agra solves the two problems simultaneously through the institution of a *trade credit slip*, commonly known as *parchi* (it literally means a paper slip). Through this system the shoemaker finds a guarantor to secure his payment, as well as liquidity.

4.2 The Informal Institution of *Parchi*

Shoe trading in Agra takes place in *Hing ki Mandi*, which has historically been the hub of shoe trading. In a space of not more than 4 sq. km., there are more than 500 trading units to be found. This market has evolved in an ingenious manner, where the sale of trade credit by poor shoemakers comes with requisite cash flow and credible commitments through the *parchi* system.

When shoes are sold, the trader in *Hing ki Mandi* furnishes a *parchi* to the shoemaker which bears the shoemaker's name, the amount due and date on which this amount will be payable. The *parchi* is signed by the trader, and acts as a non-justiciable and transferable piece of promissory note. The trader will have to fulfil his obligation to whoever brings the *parchi* to him on the due date.

4.2.1 Solving the Credible Commitment Problem

Commitments come from the prevalent high degree of information symmetry in the market. Almost everyone knows everyone else and news of non-payment spreads fast. If a trader reneges on his payment, this is quickly known to the entire cluster through informal channels of information dissemination like discussions, gossips, chats, rumors and informal gatherings. The market is very cohesive and one can find traders on the phone almost entirely through the day. They also reside in premium locations in Agra (like Jaipur House), and hence they meet often during social gatherings. They have conjugal alliances and are members of same clubs (Agra Club for instance). Most traders are Punjabis and unorganized shoemakers belong to backward castes. The caste networks bring them closer. The laborers live in ghettos and after work, get together for local drinks on weekends. They share stories, rumors and build information. Opportunities for arbitrage are low. Hence, if the news of a trader not paying his dues is revealed in the market, it quickly spreads and shoemakers will stop trading with him. The sanction does not only affect him, but all units run by his family (say trading units run by his sons). Reneging on the payment comes with a huge cost of losing future earnings. The discounted value of the cost is high enough to compel people to fulfill their promises, regardless of whether they are legally binding. This solves

the problem of trust and credible commitments. Because of the reputational risk borne by the trader, the *parchi* acts as an informally enforceable contract.

It is important to relate the structure of the market with cooperatives, as conceptualized by Bonus (1986). Bonus views cooperatives as holding a dual nature, namely, as a social group (where economic advantages are provided to all its members) and as a business enterprise (entity facing economic constraints as faced by individual enterprises). Bonus studies the non-economic transactions within the economic frame of cooperatives and emphasizes the psychological construction of cooperatives engaged as business enterprises. The organizational device that Bonus attempts to invoke in a cooperative is very similar to the one I observed in Agra's footwear market. The centripetal force of a cooperative being a collective organization is reflected in the low information asymmetry. He shows the advantages of self-employment (p. 324), the value of reputation mechanisms (p. 322) and productivity of trust as a resource (p. 321) to explain the benefits of collective organizations. A cooperative of the hybrid organizational form that Bonus imagines is very close to the way the market for footwear in Agra functions, and this will be amply clear in succeeding sections.

The market has created new set of intermediaries over time, called *aadhathiyas* (loosely translating into middlemen or more precisely, road-seller who procures goods and sells to consumers), who offer this guarantee. They do not have any established setups and act independently. They guarantee the payment to the shoemakers, and agree to fulfil trader's credit obligation in event of his default. We see in the next sub-section how do they do it, and thereby solve the liquidity problem.

4.2.2 Solving the Liquidity Problem

The surety from the guarantor does not (and cannot) come in the form of a legally binding contract since the market is informal and contracts cannot be enforced. More importantly, it cannot replace liquidity for the poor shoemaker who needs to purchase raw materials today for making shoes tomorrow. The guarantor (*aadhathiya*) therefore, goes a step further in offering his guarantee. He purchases the credit from the shoemaker, at a discount. This discount is the interest charged by the *aadhathiya*, which acts as the sum of his liquidity cost, risk and marginal cost of obtaining funds to buy the *parchi*. He pays the face value of the *parchi* less the interest. Shoemakers get instant cash equal to the worth of the *parchi* minus the interest rate, the *adhatiya* earns this interest rate and the trader gets credit.

To illustrate this, consider I go to trader A with my shoes. He values them at p and signs me a *parchi* mentioning that he owes me p , which will be paid in three months from then. I am in need of cash and go out looking for those who may purchase A's *parchi*. I come across B who is willing to do so. He buys this *parchi*, at an interest rate of 2% (let's say), (it is the interest rate for B and discount rate for me). Hence, he takes the *parchi* and hands over $0.98p$. I collect the cash and purchase necessary items for next day's produce, in addition to family groceries. After three months, B goes to A and collects p upon showing him the *parchi*. Overall, in this entire transaction, I get $0.98p$ instantly, A earns his credit for three months and B earns $0.02p$ on interest. In this way, the *parchi* system institutionally creates liquidity in the market. The system resembles the emergence of commercial paper in history. *Parchis* are the pivot over which a parallel banking system of the enormous industry of footwear in Agra rotates. This structure is graphically illustrated in figure below.

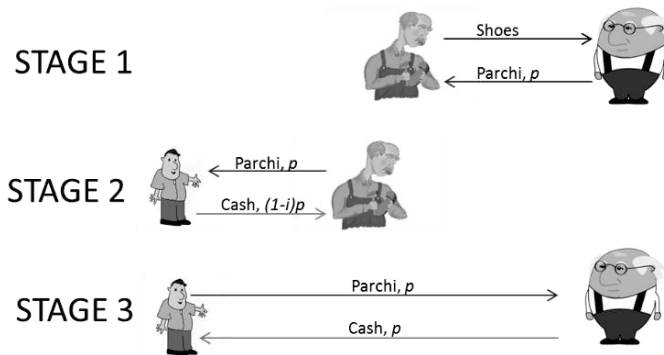


Fig 1: transfer of credit in Agra footwear industry (from left to right, *aadhatiya*, shoemaker and trader). p denotes value of *parchi* and i is the interest rate of the *parchi* that *aadhatiya* charges the shoemaker.

Source: Author's fieldwork.

4.3 Monitoring and Enforcement

How is the *aadhatiya* able to manage the risk in securing the loan to the extent that he purchases it at a discount? Interestingly, the interest rates he charges on the *parchis* are the enforcement tools of the market. Interest rates are neither fixed nor do they depend on the size of the principal (*parchi* value). They depend only on the reputation and creditworthiness of the trader who issued the *parchi*. This means, if A is considered to be trustworthy and has high credibility in the market, the interest rate will be lower than say, C, who is known to renege on his promises. The interests on *parchis* act as a reputation indicators. If C has a poor payment record, his *parchis* will be sold at a

higher interest rate. This will disincentivize the shoemaker to approach C because interest rates are a cost to the shoemakers. Hence, trader has an incentive to create a good. The *parchi* institution therefore creates a self-enforcement mechanism. If the payment record does not improve, *parchis* of that trader will stop being traded in the market absolutely.²⁰

Mathematically, if c denotes creditworthiness and i is the interest rate on *parchi*, then,

$$i = f(c)$$

$$f'(c) \leq 0$$

Since information is fairly symmetric, the costs of monitoring are low. Hence, interest rates change when the news of changing creditworthiness spreads. As mentioned earlier, the sanction of trader reneging on his payment is his boycott by shoemakers. From a game theory perspective, this is a case of repeated interaction. Because the footwear industry in Agra is characterized by family units, there is no end-game state because even if a trader is reneging on his payment, his children will need to carry forward the business. More importantly, social and family ties matter, ensuring credibility. But the *parchi* system achieves a more nuanced element of enforcement. Not only is a trader punished upon non-payment, he is also taxed for delayed payment in form of interest rates. There is a continuous due diligence of his credibility that the market undertakes; if there is news of his consignment getting lost somewhere or his payments to some shoemaker (or *aadhatiya*) are delayed, the market will suddenly spike up his interest rates and shoemakers would avoid selling him shoes. To build his creditworthiness, he may have to deal in cash, or perhaps work hard to ensure payments are being made in time in future. Interest rates police traders' behavior.

Notice that the information dissemination of interest rates, creditworthiness of various traders and even shoe quality of a specific shoemaker are highly trade-specific and better understood in Williamson's terminology of idiosyncratic information (1975, p. 35). This is also invoked by Bonus in explaining the behavior of cooperatives (p. 324) and shows how intuitive knowledge builds over training and experience, which is incapable of being expressed in written form and permeates the spectrum of a cooperative. This idea captures enforcement in Agra's market very well.

²⁰ It is also noteworthy that *parchis* could not only be traded for liquidity but can be exchanged for raw materials in the same market. This is extraordinary because as promissory note, *parchis* could be used to purchase items used in shoe making, thus reducing transaction costs. Over here as well, the seller will sell quantities of raw material desired by the shoemaker, at the discounted value of the *parchi* he collects. On due date, he collects the requisite sum from the trader who issued the *parchi*.

4.4 Salient Features of the *Parchi* System

My fieldwork revealed the interesting structure of the *parchi* system and how is it located as a commercial paper in the footwear wholesale market in Agra. Many of these salient features are enumerated below.

- a. Non-justiciability: The *parchi* is simply a written piece of paper with no legal obligations. They operate purely on trust linkages in the market.
- b. Scheduling: *Parchis* are usually issued for three months credit, and for convenience's sake, the due date on the *parchi* is always on the 5th, 10th, 15th, 20th, 25th or 30th of each month (or the next day of it's a Sunday or a holiday). Most traders are therefore found in their shops, and one can see them handling the *parchis* on these days. If not, they will assign someone trustworthy who can make *parchi*-payments. Bottom line being the promise *has* to be fulfilled.²¹
- c. Massive reputational impact of non-payment: The reputational impacts are strong and any reneging on the *parchi* payment will bring down the credibility of the trader massively. If this happens more than once, his *parchi* may simply not run in the market and will lose all value, thereby forcing him out of the credit business. In fact, one can see the traders frantically trying to arrange cash a day before the *parchi*-payment-date, so that none of their creditors have a reason to return. In financial terms, one can see an interesting credit rationing happening in the market.²²
- d. *Parchis* as currency: The *parchis* are not just used for selling against cash, but they can be directly used for purchasing raw materials used for manufacturing shoes.
- e. Value: *Parchis* can be issued for any value literally. During my fieldwork, I have seen their values ranging from Rs. 2000 to Rs. 1 million. High values of *parchis* are usually traded with organized players.
- f. *Parchis* against entire value of goods: It is uncommon for a manufacturer or a trader to settle down for a *parchi* against entire lot that is being sold. More often than not, the trader hands out cash for part of the total value and issues a *parchi* for the remaining amount. The cash bit takes care of necessary item where *parchi* will not work (for e.g., paying off to workers their salaries, buying food for the house) and *parchi* takes care of production sustenance. For the trader, it makes sense because it helps him build more commitment.

²¹ I have been told that the scrupulousness with which payment is followed in the market is so high that if a dog shows up on the day of payment with *parchi* in its mouth, the trader will take the *parchi* and thrust the cash in dog's mouth.

²² See for example on credit rationing, Stiglitz and Weiss (1981) who show why it makes sense for the bank to ration credit and not raise interest rates indefinitely. They propose that credit rationing helps banks avoid adverse selection problem.

- g. Price of shoes based on proportion of cash payment: The proportion of cash and credit determine the prices at which shoes are bought by the trader. A trader will usually pay less for shoes if the proportion of cash payment is higher. Effectively, it is an internalizing process of the interest rates on his *parchis*.
- h. Cheating: Instances of cheating (willful non-payment of *parchi* amount at the stipulated time) are infrequent, but they do happen. Usually the boycotted trader can return to the business by dealing in cash only.
- i. Dispute Resolution: *Hing Ki Mandi* has many different smaller markets, set up in narrow lanes and by-lanes off the main street. Each of these markets have their associations, and so does the entire market. Veterans of shoe trade and many other ‘respectable men’²³ of the trade form an arbitration panel that address issues of potential conflict.
It is easy to imagine a situation where the trader goes bankrupt since one of his major payments didn’t come through. If the trader has reneged on his *parchi*’s promise – whatever be the reason – he will see his interest rate increase, and after a point, his *parchi* will not have any value in the market. This practically means that he cannot do business henceforth, since cash-based business is difficult. But he owes money on *parchis* already issued. Since his goods are lost, he could be declared bankrupt and in such cases, informal associations of different markets form a panel to decide on the fate of the firm: how much of the outstanding needs to be cleared off and to whom. These informal dispute resolution mechanisms have emerged as very effective means of reconciliation.
- j. Barriers to entry: Indeed, if a trader always deals in cash, he is considered to be most desirable and there is no uncertainty on his credibility. New entrants who have zero credibility need to begin with cash alone. This coupled with high levels of trust issued create high barriers to entry, which is reflected in old family businesses dominating the market almost entirely.
- k. Interest rate fluctuation: Interest rates may move depending upon liquidity available in the market. During times of credit constraints, particularly when there is a slump in the market, the interest rates increase. Liquidity constraint can also come in the time of festivals. One major festival in Agra is Diwali, which falls in the months of October/November. During these months, business is good. Everyone is in need of cash for procuring and producing more. This creates liquidity constraint and increase in demand for cash that pushes up interest rates. Note that interest rates of *all* traders rise equivalently, so relatively speaking, they are all at the same level.

²³ It needs be mentioned that the entire market is almost 100% dominated by men, and in my fieldwork, I did not come across a single woman. Indeed, the workers who make shoes in unorganized sector have their wives and girl-children working with them, but that is not the case with most factories.

4.5 The Value of Interest Rates on the *Parchis*

There are more than 500 traders in *Hing Ki Mandi*, of all shapes and sizes (measured by their revenues and size of shops). Since the *parchi* system is an unaccounted transaction, traders are extremely secretive about the system, particularly to those who do not belong to footwear industry. I interviewed several insiders and discovered the prevailing interest rates of *parchis* of 312 traders (see the note on methodology in Chapter 1). As a custom, the interest rates are mentioned in rupee per hundred, per month. I arrive at an average monthly interest rate of 1.41%. For simplicity we assume this is 16.8% annually, interested simply (a compounded value will yield 18.2%). The lowest monthly interest rate prevailing in the market is 0.60% and the highest goes to 2.5%. Interestingly, the interest rates move at an interval of 0.1 unless the rounding yields a quarter or three-fourths figure. The only possible reason is to keep calculations simple. As mentioned, the interest rates vary from trader to trader depending upon his credibility in the market.

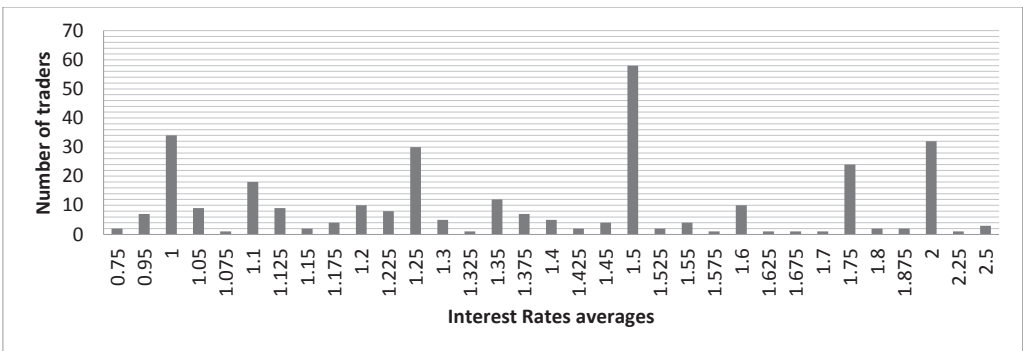


Fig 2: Variation of Interest Rates on *parchis* collected during the survey period of four months (summers of 2013). Note that they don't follow any standard distribution curve, and spike at round-valued interest rates.

Source: Author's fieldwork

Fig. 2 above shows the frequency of interest rate distribution in the market, and it hardly acquires the features of any standard distribution. This means that the variable of the interest rate is non-parametric. The market comprises all kinds of traders with varying degrees of interest rates, without any specific convergence tendency. This could have several implications:

- a. The existence of such traders in the market is a proxy for how different manufacturers find their specific traders. It is reasonable to assume that in a market organized in an unorganized structure that not all manufacturing will be of very high quality. With domestic consumption

also targeted at people with lower income levels, we can expect that there will be some manufacturers who are simply catering to that section, with their lower quality of products. These are the manufacturers who would be able to go to traders with high interest rates, and so both inferior quality goods and traders with high interest rates exist.

- b. The peaks are observed at four points: 1%, 1.2%, 1.5% and 2%. This may also simply mean that the market has many traders with varying interest rates but there is a rounding-off tendency in the values of interest rates, simply because of mathematical simplification.

An interesting feature of the credit market in *Hing ki Mandi* is that monthly interest rates above 2.5% hardly exist. This is puzzling because at deteriorating reputation, interest rates can simply keep on increasing. Why does it make sense to cap the interest rate and evict all other traders outside of the credit market? This is akin to (pure) credit rationing that banks do, which is to limit the credit even if borrowers are willing to pay high interest rates. The seminal paper by Stiglitz and Weiss (1981) developed a framework to explain how credit rationing is justified by adverse selection.²⁴

Something similar happens in the market in Agra too, which is also characterized by traders with limited liabilities. However there are two notable differences. Firstly, the *Hing ki Mandi* market is not faced with a la Stiglitz-Weiss imperfect information. Everyone in the trade knows everyone else and information about the riskiness of a *parchi* is fairly known across the cross-section of players. Secondly, bank financing is usually done with a depositor's money, while in *Hing ki Mandi*, financing is done by big financiers of their own money. Hence, the risk involved in Agra is simply too much to disallow rationing in credit. Interest rates in *Hing ki Mandi* are not just the cost of capital, but also represent the risk and credibility of the trader. It is a proxy for whether the trader can handle the business and whether his credit is secure or not. Hence, once a trader's interest rate reached 3%, the *parchis* effectively become worthless, because no one would want to transact with someone who has a very unsecure credit rating.

Interesting findings were revealed when I compared the trade credit interest rate with that of the banks in the area. With variations ranging in plus minus 0.25%, almost all Indian banks doled out personal loans/advances at around 14% per annum at the time of the study. The working capital loans are given at 11.5% per annum for values below Rs. 500,000. For higher value advances on working capital, the interest rate hovers around 12.5%.²⁵ Since the mean value of interest rate on

²⁴ Stiglitz and Weitz (1981).

²⁵ These were the figures during first quarter of financial year 2012-13.

trade credit is 16.8%, we notice a significant 5% points (approximately) difference in the interest rates. It is therefore startling that a shoemaker would still prefer to trade at the higher interest rate. Studies have shown that financing from formal channels is associated with faster firm growth (Ayyagari, Demircuc-Kunt and Maksimovic, 2010) and whenever possible, firms always want to borrow more from formal institutions (Banerjee and Duflo, 2014). I dwell on this puzzle later, but for now we understand that trade credit could very well be more expensive than formal credit in this scenario. This also disputes a range of studies which have attempted to show that trade credit is either lower than formal credit (Giannetti, Burkart and Ellingsen, 2011), (which is also the reason why would parties not choose bank credit in the first place), or incurs the loss of a foregone discount as the only cost (Petersen and Rajan, 1994).

5. What differentiates Informal Markets in Ordering Trade Credit and Guarantees

One may be tempted at this stage to examine the idea of ‘tradable credit’ in Agra’s footwear cluster through the lens of transaction costs. Indeed, intermediaries (or middlemen) have emerged in the cluster to absorb the transaction cost between shoemakers and traders. Noteworthy here is, Cheung’s (1983) insightful study interpreting Coase’s *Theory of the Firm* (1937), where, he explains the transition of the services provided by a middleman through piece-rate arrangements to wage contracts. For middlemen in Hong Kong who purchase garments from manufacturers for foreign importers, or for those contractors who construct wooden floor for someone, the contract is analytically the same – a piece-rate contract. In both the cases as Cheung (1983) notes, middlemen help discover prices, which was one of the most obvious costs of organizing production through a price mechanism (Coase, 1937). This is indeed one of the reasons middlemen exist in Agra’s footwear cluster. They expose the interest rates of each trader, and work in a piece-rate fashion. This reduces monitoring costs since shoemakers don’t need a proxy to measure the traders’ creditworthiness. In some ways, Cheung’s understanding of Coasian theory of the firm is illustrative for explaining informal market structures as well.

However, in an informal market setup, the construction of trade credit and guarantee contracts changes significantly. I discuss below the implications of these findings for the broad strand of literature on guarantee contracts and trade credit.

5.1 Trade Credit

A careful analysis of the scholarly work examining the determinants of trade credit reveals that Agra’s footwear industry – which is of a substantial size – does not fit neatly into existing models.

In fact, while invoking all the trade credit theories, it is difficult to capture Agra's case in any of them, even when considered jointly. Table 2 illustrates this inapplicability. It shows that the dominant frameworks' attempts to bracket trade credit mechanisms around the world fall short of capturing the dynamic nature of trade credit seen in Agra's footwear industry. Furthermore, there is no reason to believe that the market in Agra is not a reflection of many such significantly valuable industries in other parts of the developing world.

Trade credit in Agra is offered at a discount rather than at an interest. There is therefore, a need to fill the theoretical void by adding an alternative approach to understanding trade credit markets in developing parts of the world. To understand what goes on behind the markets, we need to understand the informal linkages of the system and the source of these relationships. Informal markets and institutions display a locked-in history and an overview of the emergence of this market yields several interesting insights which can potentially explain the causes of persistence of the institution, and reasons for its organic evolution.

Literature on Trade Credit	Main (or one of the main) conclusion(s)	Relevance to Trade Credit in Agra Footwear Industry (Yes/No/Partly)
Brick and Fung (1984)	Trade credit avoids taxes	No: Unorganized workers don't pay taxes anyway
Emery (1984)	Arbitrage	No: Rates of interest of <i>parchis</i> is always fixed, so no arbitrage
Smith (1987), Emery and Nayar (1998), Lee and Stowe (1993) and Long, Malitz and Ravid (1993)	Trade credit as a guarantee against quality	No: Even though the quality differs, trade credit is taken from every shoemaker regardless of quality
Brennan, Maksimovich and Zezhner (1988)	Trade credit used for price differentiation	Partly: While prices of shoes bought by the trader differ depending on whether the transaction is cash or credit, it is not the real purpose of credit.
Biais and Gollier (1997) and Jain (2001)	Trade credit rests on information advantage of suppliers as compared to banks	Yes: However, even though banks have cheaper capital, traders prefer informal credit.
Mian and Smith (1992) and Longhofer and Santos (2003)	The supplier can better utilize the inventory, hence trade credit is customised collateral	No: Trade credit does not come with any collateral, except the reputation of the trader
Petersen and Rajan (1994)	The cost of trade credit is foregone discounts	No: Cost of trade credit is forced upon the supplier, which is much higher than just the value of foregone discounts

Literature on Trade Credit	Main (or one of the main) conclusion(s)	Relevance to Trade Credit in Agra Footwear Industry (Yes/No/Partly)
Petersen and Rajan (1997)	Trade credit is used when credit from financial sources is unavailable	Partly: Buyers (traders) are financially well off to approach banks
Ferris (1981)	Liquidity concerns	No: Traders have sufficient liquidity usually
McMillan and Woodruff (1999), Johnson, McMillan and Woodruff (2002) and Uchida, Udell and Watanabe (2007)	Trade relationship	Partly: Trade relationships matter but the primary driver is the interest rate, based on which shoemakers often switch to a trader with lowest interest rate.
Wilner (2000)	Trade credit as financial help	No: Shoemakers are usually too poor to offer any help.
Demirguc-Kunt and Maksimovic (2002) and Fisman and Love (2003)	Countries with weak legal systems rely on trade credit more	Yes: Inaccessible legal systems encourages markets to find alternative sources of credit.
Johnson, McMillan and Woodruff (2002)	Lower trade credit is noticed in homogeneous products	No: Practically the entire market runs on trade credit even though there is significant product differentiation
Burkart and Ellingsen (2004)	Trade credit has lower likelihood of being defaulted on because it is illiquid	No: The only reason for low default is the reputation concern and loss of future profit, without ever reaching the end-game situation
Cunat (2007)	Trade credit helps avoid switching costs	Partly: This may be true but with rising interest rates of traders, shoemakers may switch.
Giannetti, Burkart and Ellingsen (2011)	Trade credit is cheaper than formal credit	No: In Agra's footwear industry, it is actually significantly higher
Banerjee, Dasgupta and Kim (2008)	Trade credit is inversely related to market power	No: In fact, we arrive at exactly opposite conclusion
Wilson and Summers (2002)	Trade credit is positively related to market power but the power affects different suppliers differently	Partly: While there is a market power, it does not affect suppliers differently.
Horen (2007)	Large trade credit is offered by small firms because of the market power of big customers	Yes: This result is closest to the observations in Agra. However, we see that market power needs to be unbundled.
Fabbri and Klapper (2009)	Power differences	Yes: Perhaps one reason why would shoemakers accept a 'discount' rather than an 'interest' on their credit is explained by bargaining power difference.

Table 2: Location of trade credit in Agra footwear industry in scholarly literature: a framework to capture Agra's model is missing.

5.2 Guarantee Contract

As mentioned previously, Katz (1999) posits three main questions that characterize guarantee contracts, and answers them at a general level. He posed (a) why do creditors prefer to make a guaranteed contracts rather than the unguaranteed one, (b) why would guarantors prefer to provide guarantees rather than make loans directly, and (c) why is the relationship between credit, debtor and guarantor triangular in nature, when creditor can lend credit to guarantor, who in turn can pass the credit to the borrower.

I borrow from his formulations and show how and why unorganized markets with poor manufacturers, like Agra's informal footwear market, need different treatment at a theoretical level.

In the formulation of Agra's footwear market, the creditor is the shoemaker while the trader is the debtor. The middleman, *aadhathiya* acts as the guarantor. I denote C, G and D as creditor, guarantor and debtor respectively.

The unit cost of credit to the creditor is expressed by:

$$C_C = i_c + l_c + m_{CD} + r_{CD} \quad (1)$$

Where, i_c is the marginal cost C bears in obtaining liquid funds to lend, l_c is the cost of liquidity - which is the liquidity premium cost of losing liquidity. A creditor faces this loss when he needs money while it is still lent out, meaning that he has to arrange it from somewhere else. m_{CD} is the cost of monitoring the debtor, and r_{CD} is the risk borne by the creditor. The subscripts denote the three players in the transaction. The creditor may have a refinancing cost, which for simplicity will be disregarded here. In the presence of a guarantor:

$$C_{C|G} = i_c + l_c + m_{CD|G} + r_{CD|G} \quad (2)$$

The standard theory assumes that cost of monitoring and risk is lower for the guarantor than the creditor (this is the whole point of why guaranteeing makes sense). Hence:

$$m_{CD|G} + r_{CD|G} < m_{CD} + r_{CD} \quad (3)$$

Now we estimate the cost to the guarantor. Since he does not bear the marginal cost of raising money for crediting it, the expression of i_G vanishes. Also, since the cost of liquidity to the

guarantor will emerge only in case of default by the debtor, the liquidity term will get absorbed in the risk term. Hence, the cost of the guaranty to the guarantor is:

$$C_G = m_{GD|C} + r_{GD|C}(1 + l_G) \quad (4)$$

Also, according to the standard literature, guarantors prefer to guaranty loans rather than make loans themselves. This is because the cost of liquidity is higher for them compared to the creditor. Alternatively, C's cost of liquid funds is sufficiently lower than G's (although G may hold his assets in relatively illiquid form). Hence, we have:

$$l_C < l_G \quad (5)$$

The standard literature also proposes that a triangular fashion of relationship exists between C, D and G, rather than a straight line link because the monitoring costs do not come in one single unit. Instead, they are packaged forms of many smaller costs (for instance: credit investigation, auditing, supervision, underwriting, collection, and finally, payment following default). Since C and G may incur different categories of costs cheaper than the other, it makes sense for the relationship to be based on a triangular guarantee and not on an intermediary.

Reworking these equations in the context of Agra, we find interesting departures that inform our understanding of informal market institutions.

Given the near perfect information symmetry in Agra's market, the monitoring costs will be equal for both the creditor (shoemaker) and the guarantor (intermediary/*aadhathiya*). Also, since the information about the creditworthiness of the debtor (trader) is available freely, we can safely assume that the costs of monitoring for the creditor is zero regardless of whether there is a guarantor in the picture or not. The guarantor himself also bears a zero cost of monitoring. Hence:

$$m_{CD} = m_{GD|C} = m_G = 0 \quad (6)$$

$i_C = 0$ because the funds are not being generated by the shoemaker

$$\therefore C_C = l_C + r_{CD} \quad (7)$$

For guarantor, from (4) and (6),

$$C_G = r_{GD|C}(1 + l_G) \quad (8)$$

In Agra, the primary difference from formal markets is that the creditor here is credit constrained and yet offers credit. He is a destitute shoemaker who has no capacity to offer credit. The reason why he still ends up offering credit is an issue we will approach in the next sections. As of now, we understand that the cost of liquidity for the creditor is very high compared to the cost of liquidity for the *aadhathiya* as the guarantor. Hence:

$$l_C \gg l_G \quad (9)$$

It follows from (7) and (8),

$$C_C > C_G \quad (10)$$

This is the principal difference between the standard theory of guarantee contracts and similar financial structures from in informal markets. The framework dominant in formal markets ensures that the cost of credit is lower for the creditor (and hence he is indeed giving credit). But in unorganized markets, the creditor endures a higher cost of credit, which should not be surprising. This implies that Katz's (1999) three questions need an alternative approach to answering them.

Firstly, while the standard literature says that since debt can be more cheaply monitored by the guarantor (equation 3), it makes sense for the creditor to guarantee his loan. In Agra, the debt monitoring is done at the same (very) small cost by both the creditor and guarantor. But the reason why guarantor is still important for credit in the Agra footwear industry, is because the market is informal in nature and non-payment is not justiciable in court. This makes the risk too high to enable the market to function and so a guaranteed loan is preferred to a non-guaranteed one.

The second question discussed reason for guarantor's aversion to making loans, and preference for only guaranteeing. This is true in the formal projection of reality, when the cost of liquidity is high for the guarantor, compared to creditor (equation 5). In informal markets like Agra's footwear cluster, the cost of liquidity is very high for creditor (equation 9) and yet he ends up offering credit. The question is important and relevant. The response of my fieldwork to this question is that the guarantors do indeed end up offering loans rather than providing only guarantees and comfortably make interest money on it. Notice how the *aadhathiya* is effectively offering a loan to the shoemaker

by purchasing his credit at a discount. This discount is the interest rate he charges on his loan and that's his earning. Hence, for informal markets, the question's universal validity is suspended.

If the guarantors can offer loans, why don't they simply take shoes from the shoemakers and sell them at credit to the traders, instead of maintaining the triangular structure? The answer to this departs from the previous literature, which, as I mentioned earlier, categorizes the monitoring costs and proposes different comparative advantages of creditors and guarantors to cheaply incur them. The answer in Agra approaches the question at two levels.

Firstly, there is a comparative advantage of a shoe trader to examine and ascertain the quality of shoes that the shoemaker has brought to him, as compared to the guarantor (*aadhatiya*). Secondly, my fieldwork revealed that many shoe traders have opened their establishment's arms in the same market that acts as the *aadhatiya*. Hence, they sustain the market for credit and for shoes in parallel.

Therefore, because of (10), the creditor in Agra's footwear market would prefer to transfer his costs of credit to the guarantor:

Cost of credit to guarantor:

$$C_G = r_{GD|C}(1 + l_G)$$

Aadhatis handle cash all through the day. They have varying levels of liquidity throughout the year (except during very high-demand season), and so it is reasonable to assume that:

$$l_G \sim 0 \quad (11)$$

$$\therefore C_C = C_G = r_{GD|C} \quad (12)$$

This risk is the cost borne by the guarantor, which is captured by the interest rate on the *parchi*. The risk depends only on the creditworthiness of the trader and the interest rate is the cost of following the system.

To return to Katz' (1999) three questions for understanding what defines guarantee contracts highlighted at the beginning of this section, his answers from a formalistic analysis propose that: (a) creditors would prefer guaranteed loans only when a potential guarantor can monitor the debt more cheaply than creditor herself, (b) guarantors prefer to provide guarantees rather than provide

loans because their cost of liquidity is higher than that of creditors, and (c) a triangular form of relationship between creditor, debtor and guarantor is more efficient when costs of monitoring is unbundled with creditor and guarantor can monitor different costs cheaply.

However, the illustrations from how Agra's footwear industry trade credit functions will not only mildly challenge the centrality of these questions in guarantee contract literature but also show that answers could vary depending upon the industry structure.

6. Path Dependency of Institutions in Informal Markets

In this section, I show how through history, the institution that emerged in Agra's footwear industry has led to small firms offering credit to big firms. In this way, I illustrate that, *inter alia*, there is a need to understand this type of informal financial institution as a means of responding to the past challenges that it emerged in response to and how it has become fossilized in time. I will also be able to shed light upon the economic and social origins of the trade credit institution that persists in the city's sprawling footwear industry. With clarity on the path of institutional emergence, we will be better able to approach differing models of trade credit institutions and perhaps develop an alternative discourse in understanding the market forces that deal with unorganized labor.

6.1 Historical Evolution of the Market

Hinduism, the dominant religion in India divides the population into four *castes*. The hierarchical categorization puts *Brahmins*, the priests, at the top. Next comes *Kshatriyas*, the soldiers and *Vaishyas*, the businessmen/traders. Finally at the bottom, the *shudras*, the untouchables – those who perform menial jobs, like cleaning, sweeping, animal husbandry, handling the corpses and the like. These four *varnas* are further divided into several sub-castes, mostly segregated along occupational lines.

Owing to the prevailing Hindu caste system, work on dead animal's hides or leather is (was) considered highly polluting and therefore forbidden to upper castes (Khare, 1984). Hence, leather products were largely made at the household level by Muslims and a particular sub-caste of *shudras*, called the *chamars* or the *Jatavs*.²⁶ Only those born as *chamars* 'can occupy the status of shoemaker without breaking caste rules.' (Lynch, 1969) Since shoes have historically been made of leather

²⁶ Leather in Hindi, is called *chamra* (pronounced as *chamda*), and hence the name of the sub-caste, *chamar*.

(particularly those used in battlefields), the shoe industry was naturally to flourish through those who *were supposed to* handle leather.

6.1.1 Agra's Historical Importance

The reason why Agra became the center of (leather) shoe-making is attributed to two factors. Firstly, the *chamars*' population as a percentage of total population in the city has historically been fairly high, and for the most part of history, the highest.²⁷ Population registers corroborate these figures. Of one of the earliest figures, from the 1908 Imperial Gazetteer of British India, published that 86% of population was Hindu and 12% Muslim.²⁸ Further, it noted that, "*Most numerous caste is that of Chamārs (leather workers and laborers), 175,000. Next come Brāhmans, 110,000; Rājputs, 89,000; Jāts, 69,000; Baniās, 65,000; Kāchhīs (cultivators), 53,000; and Koris (weavers), 32,000. Gadariās (shepherds), Ahīrs (cowherds), Gūjars (graziers), Lodhas (cultivators), and Mallāhs (boatmen and fishermen) each number from 30,000 to 20,000...*"²⁹

Secondly, Agra being the capital of Mughals,³⁰ who were not only great connoisseurs of art, craftsmanship and embroidery but also fine warriors, was immediately sought after for the production of footwear both for ornate taste and the battlefield. In particular, Emperor Akbar's (1542-1605), demand for leather shoes for his army helped catapult shoe-making, by attracting many people from amongst Muslims and *Jatavs* to become shoe artisans.³¹

²⁷ The scale of leather footwear industry could be explained largely on the basis of number of workers because even until this day, it is essentially a labor intensive industry (and not capital intensive) – shoe-making pivots crucially on skills of workers more than any other factor.

²⁸ Imperial Gazetteer of India, New edition, published under the authority of His Majesty's secretary of state for India in council. Oxford, Clarendon Press, 1908-1931 [v. 1, 1909] vol. 5, p. 76. Available at http://dsal.uchicago.edu/reference/gazetteer/pager.html?objectid=DS405.1.134_V05_085.gif last accessed on 5 June 2013.

²⁹ Ibid. Imperial Gazetteer of India, vol. 5, p. 77.

³⁰ The Mughal dynasty ruled most of Indian subcontinent from 1526 until 1857 (Agra was the capital of Mughals until 1658).

³¹ It is unclear however, whether footwear was dominant industry in Agra, despite a huge Jatav population. The Imperial Gazetteer of India 1909 says, "*About 48 per cent of population are supported by agriculture, 10 per cent by general labor, and 8 per cent by personal services. Rājputs, Brāhmans, Baniās, Jāts, and Kāyasthas are the principal landholders, and Brāhmans, Rājputs, Jāts, and Chamārs the principal cultivators.*" (Ibid. Imperial Gazetteer of India, v. 5, p. 77.) The Gazetteer does not mention of what was the occupation of 35% of the population, which could or could not have been footwear.

The reason could lie in rather little usage of footwear in Hindu culture. Note that leather being proscribed for high caste Hindus, leather shoes were hardly the preference. Earlier shoes/sandals in India, commonly known as *paduka* (name for small foot), were made of metal, wood, plant fibers etc. (see, Margo DeMello, *Feet and Footwear: A Cultural Encyclopedia*, Santa-Barbara, California: ABC, Clio, p. 171). It was only by the fourth century that leather and animal skin's soles started to be used by Hindus. They were called as *chappal*, where a leather sole was connected

6.1.2 Post-Mughal Period

During colonial rule, in particular between 1835 and 1868, when Agra was the capital of North Western Province, the British developed a demand for the repair and manufacture of *boots*.³² They would bring with their troops, many English shoemakers who would lend their style and design technologies to local artisans. This enhanced the skill-set of local population of *Jatavs* and made the footwear business became lucrative.³³ English-style shoes replaced the traditional designs and manufacturing techniques. The specialization extended through training family members and hiring apprentices from same castes. The artisans would occupy specific localities and work used to happen in neighborhood clusters – something we still see today.

The trade became important by the early twentieth century. During 1899-1904, the total exports in animal skin and hides increased significantly.³⁴ At around the same time, first central shoe market was set up in *Hing ki Mandi*, which facilitated the trade immensely, allowing wholesale traders to sit at one place where both manufacturers and other merchants could come together directly (Knorringa, 1999). Shoemakers would buy leather in the open market, make shoes and go to specific *mandis* (markets or local bazaars), which would have a certain trading class (type of middlemen). These middlemen would buy all the goods brought by the shoemaker, sell it off and charge a commission for themselves. My interviews with some families who have been in this trade for around a century suggest that the value of the commission would be 1.56% of total value. This was fixed, and did not depend upon volume. The commission essentially acted as the service charge of the middlemen, who would free the shoemakers of their efforts to sell and enable them to concentrate on making shoes. This was a highly localized affair. Shoemakers had very few markets, and due to lack of such open markets with middlemen, they would usually have little incentive to expand their production or invest more time. Shoe merchants from many parts of north India would come to Agra to place orders. Consequently, Agra became an important center for English style

to the foot through a strap (which is still in use today). Hinduism considers footwear as impure and it is not uncommon to take them off before entering houses and temples in India (this was common in Greece and during ancient Roman time too) (ibid. at p. 31). Also, many pilgrim voyages are done barefoot (p. 34). Hindu customs also consider barefoot, a sign of humility, and also due to weather conditions, for a large part of its history, many people simply went barefoot in India (p. 169-70). It is therefore no surprise that even until independence, the shoe industry was mainly a household, cottage driven enterprise that was entirely unorganized.

³² In fact, owing to the demand, boots and shoes were largely imported to meet the domestic demand during British time with an increasing rate – between 1886-87 and 1903-04, the import supply increased from 1,130,000 pairs to 2,790,000 (Imperial Gazetteer of India v. 5 Ibid. p. 190.)

³³ See for example, Misra (1980).

³⁴ Imperial Gazetteer of India, vol. 3, p. 189

men's shoes during the period between the two World Wars and by the time India became independent its products were being exported to Iran, Iraq and the East Indies (Knorrington, 1999, p. 306). The prolific shoe business had robust backward linkages as well. The tanneries were concentrated in Madras (present day Chennai) and Kanpur in south and north India respectively.³⁵

6.2 Indian Independence, Partition and Post-Independence India

An institutional shift took place during the period of partition-induced-migration while India gained its independence. In 1947, the country was divided into India and Pakistan. The communal riots-toll that followed saw one of the largest mass migrations in the history of the world. Hindu Punjabis migrated to India, while many Muslims moved to Pakistan – overall, estimates suggest that about 14.5 million people were uprooted.³⁶ Many of these Punjabis came and settled down in various cities of north India, notably in Delhi.³⁷ Considerably large number settled in Agra, which is 200 km south of Delhi.

As mentioned, until then, the business was dominated by Muslims and *Jatavs*. But most of the affluent Muslims left for Pakistan and Agra's shoe industry began deteriorating (Knorrington, 1999). When the Punjabis arrived in Agra, they noticed the skills of Jatavs and poor Muslim shoemakers. They also noticed that: (a) there was a lack of market connectivity, and shoemakers had tough time finding customers since they could not travel far; (b) the shoemakers themselves were shoe sellers, and selling came at the opportunity cost of making; and (c) shoemaking was done in a very informal and unorganized manner. Further, working on/for leather was not a taboo within Punjabi community as it used to be within traditional Hindu upper castes. In addition, the migrant community was badly in need of a sustainable income, and the potential of footwear trading in Agra caught their attention.

Before the partition, the relation between Muslim distributors and *Jatav* producers was 'smooth' and amicable (Lynch, 1969, p. 36). The former would purchase shoes in cash and also give

³⁵ The development of curing, tanning and currying of leather in India is also not without reasons: India possessed naturally tanning materials such as acacia pods and bark, cutch, Indian sumach, tanner's cassia, mangroves, myrabolams and others (Imperial Gazetteer of India, vol. 3, p. 189). Even then, the production of shoes was entirely a household-based and hand-made affair - it was hardly an organized industry. Leather as an industry hinged around dead cattle, since killing animals was not appreciated. Therefore, records indicate that the exports of animal products (particularly hides) would peak during famines, due to increase in death of cattle. See, Imperial Gazetteer of India, v. 3, p. 188-189.

³⁶ Census figures of 1951

³⁷ The population of Delhi swelled from 1 million to little less than 2 million between 1941 and 1951. See also, Kaur (2007).

favorable loans to *Jatavs*. All this changed when Punjabis replaced Muslims after the partition. The Punjabis' approach was much harsher and more antagonistic towards the *Jatav* artisans (Knorringa, 1999). In the beginning, the Punjabis began working as middlemen. They were a hard working population and closely connected. They applied their business acumen and realized that these shoes could be sold in places relatively farther away. They proposed to the shoemakers that they would be able to lift their goods and sell them off to places outside conventional markets and for a much better price. The condition however was that the shoemakers would have to sell their shoes to the Punjabi traders on credit. In other words, while the shoemaker would get more money, the payment will not be made upfront. The shoemakers liked the idea. The Punjabi traders would take the goods, sell them off in markets outside Agra, return with the money, give the shoemakers their due and keep the rest for themselves. The only difficulty was to remain penny-less for the first round of the cycle. Once the second round begins, cash never gets depleted if Punjabis are able to sell off the products. Indeed, this is what happened. Punjabis, over time, expanded the markets. And the institution of credit was established.

Until the 1960s, production used to take place exclusively in household units, where self-employed *Jatavs* would manufacture shoes with the help of family members and sell the products to (mostly Punjabi) traders (Knorringa, 1999, p. 307). Either they would manufacture shoes and go out to sell them, or the trader would place an order for a specific shoe-type and quantity which the shoemakers would manufacture in a given timeline (*ibid.*). These two systems still exist. There were few organized factories, which worked exclusively by the second system for major traders in Delhi. Only since the 1970s have more workshops and small-scale factories emerged which employed *Jatav* artisans and by the 1990s these were all owned by non-*Jatavs* (*ibid.* at 308). From then on, the organizational structure of the industry has remained pretty similar. The earlier exporting destination was usually Soviet Union, and not Europe because the latter emphasized specific technical requirements and became weary of Agra's low standards of production (Hashim et. al, 2010). However, after the fall of USSR in 1989, export houses began searching for new countries. They refined their manufacturing setups and ensured that quality was maintained to keep the specifications of Europe adhered (*ibid.*). Today, most export reaches Europe indeed.³⁸

In extensive surveys conducted in the early 1990s, Knorringa (1996) found that the organizational structure of Agra's shoe industry has remained unchanged at fundamental level. More than two-thirds of manufacturing units in Agra are located in *Jatav*-dominated localities. According to

³⁸ Datasheet from Council for Leather Exports, available at <http://www.leatherindia.org/exports/current-export-trends-graph.asp> last accessed on 3 October 2013.

Knorrinda's (1996) estimates, 'some 50,000 to 60,000 production workers are employed in around 4,000 to 5,000 mostly informal small-scale manufacturing units, who would produce approximately 300,000 pairs of shoes.' These have indeed increased in last two decades.

Little has changed today in terms of industrial organization. Like many south-Asian craft-based industries, Agra's footwear industry is characterized by a caste-fossilization between artisans (belonging to Jatav caste or Muslims) who make the shoes and traders' communities (belonging to Punjabis, largely) (Kashyap, 1992; Nadvi, 1994). Punjabi communities own most major organized enterprises, as well as most of the wholesale units in *Hing Ki Mandi*. Lured by the high values of profit margins, traditional Hindus and others have also joined the trade. Few owners are Muslims. Occasionally, one would come across a *Jatav* as the owner of a manufacturing set up, but most of them are unorganized set-ups. More than 90% of shoemakers in the informal sector,³⁹ as well as laborers working in shoe factories, are *Jatavs* or Muslims, with the former outnumbering the latter by huge account. For Agra *Jatavs*, footwear is not simply an occupation for livelihood, but, '*It is a family affair and a way of life*' (Lynch, 1969, p. 7).

7. Possibilities of Legal Reform?

The survey of the footwear industry in Agra exposed the fascinating institution of one such financial service: the trade credit. It revealed a new design in which trade credit could persist in a fast paced economy, driven by social and political causes that later on assume institutional inertia. Trade credit in Agra's footwear industry, which has global importance, is characterized by the credit on a discount, rather than on an interest basis. The paper showed that the credit is sold at a discount of 16.8% per annum, which is larger than the bank's interest rate.

What can a policy maker, who is exploring L&D, learn here? Perhaps three definitive instructions stand out. Firstly, informal markets are not naïve. They have fairly mature systems of private ordering at work. They are ingenuously designed and highly responsive to local contexts. Second, despite their responsiveness, institutions within informal markets may assume rigidity, which could be path dependent in nature. Understanding the historical evolution of institutions offers rich analytical insight into the players and their interactions. Thirdly, the market crucially hinges on the intermediary, the *aadhathiya* in this case.

³⁹ Rough estimate based on author's factory visits.

L&D scholar may argue that we should develop legal a framework to ease the burden of interest rates. Since the per annum average interest rate in the informal market of *parchis* is 16.8%, while at the bank hovers around 12%, it is puzzling as to why shoemakers do not go to a bank but instead suffer a higher cost of themselves providing credit.⁴⁰ More importantly, the government has mandated banks to introduce several schemes that prioritize lending to certain sectors, which includes small-scale enterprises and yet, financial exclusion remains a big problem in India. There have been significant efforts in this direction, which include opening ‘no-frills’ accounts (for people with insufficient resources), relaxing ‘Know Your Customer’ norms for those who do not have a proper state provided identity. Yet, studies have consistently shown Indian banks to have a dismal record of expanding their net wide enough to have lower figures of financial exclusions (Pal and Pal, 2012).

We are aware that in reality, banks face tremendous costs, particularly relating to information asymmetry and adverse selection, which the informal lending is to a large extent able to address.⁴¹ It is therefore more important to discover what the demand-side problems of trade credit in Agra’s footwear market are. Also, policy prescriptions can flow by identifying the demand-side issues. My fieldwork reveals three main problems faced by shoemakers detailed below.

7.1 Delay

Delay in processing loans seems to be an important reason. From amongst few studies that have explored the contours of barriers to bank credit in different countries, Beck et al. (2008) is notable. The authors in the paper use survey data from 209 banks in 62 countries to develop new indicators of barriers to access and use of banking services. They find that borrowers might be discouraged to apply for bank loans if waiting periods are long. In India, the survey discovers a value of 4.17 for this indicator (*ibid.*). This means, it takes more than 4 days for a consumer loan application to be complete.⁴² This is indeed the case in Agra too. Manufacturers have fluctuating income and they

⁴⁰ One of the reasons could be that poor artisans/shoemakers may not have legal identity to make them eligible for loans. This may not be true entirely however.

⁴¹ Informal markets are imperfect, disaggregated, and highly irregular in their flow, while banks are constrained by the rules and institutions which make it difficult for them to re-design their policies for differing business behaviors and individual uncertainties (Choudhury, 2004). Also, research has shown that lending small capital is costly for big financial institutions (Johnston and Morduch, 2008). Informal moneylending is therefore more accessible and reliable for poor borrowers. Hoff and Stiglitz (1990) in their seminal work on rural credit indicate the importance of a screening mechanism in information asymmetry, which banks usually lack but local moneylenders tend to have an advantage in.

⁴² In India, the survey received responses from four banks and they overall contributed close to 37% of loans and deposits in each market. This means the survey’s results could carry valuable information.

need cash at urgent notice. Irregularity in the labor supply, canceling or augmenting the orders, a sudden need to clear-off certain outstanding means that they need their cash flow to be maintained at short notice. The *parchi* system helps achieve this. Whenever there is a need for cash, they can quickly go and liquidate the *parchi* in the market. This instant availability of credit in Agra leather shoe trade therefore helps to address a major transaction cost of time/delay.⁴³

7.2 Bribery by Bank Officers

One of the startling discoveries during my fieldwork was the bribery involved in formal credit channels.⁴⁴ Bank officers routinely charge a certain ‘cut’ on loans they approve for shoemakers. My interviews with organized and unorganized manufacturers revealed that the probability of bribery increases if: (a) the shoemaker belongs to a lower caste; (b) this is his first time in the bank with such a request; or (c) if he has a smaller unit. In fact, the market has many ‘bank agents’ who will get the loan processing done without the need for scrupulous paperwork, as long as there is a commission that can be paid to the agent (who in turn pays to the bank loan officer). Many shoemakers are therefore deterred to approach formal financing channels in the first place. For them, the opportunity cost of bypassing the informal system of *parchi* is way too high.

7.3 Cultural Factors

Another interesting reason for replacing formal credit with the more expensive informal credit from Agra’s footwear market lies in the cultural context. Studies have shown the importance of institutional imprints that affect a person’s decision to use financial services. Osili and Paulson (2008) find that immigrants in the US, who come from countries with more effective institutions, are more likely to have a relationship with the bank and access to other financial services in the US, than those who come from places characterized by weak institutions (other relevant parameters controlled for) (Okonkwo and Paulson, 2008). Households that do not have bank accounts are also known to adopt a certain kind of distrust of banks (Gambrell, 2003).

⁴³ Even though it is not related, a sense of how poor entrepreneurs face significant delays in bank credit is shown in Bedbak (1986) and Sarap (1990), who studied agricultural markets in two villages in Orissa; and Chaudhuri and Gupta (1996) who explored villages in West Bengal.

⁴⁴ There have been few studies that have modeled and analysed the problem of delay and bribing in formal credit institutions in India. Chaudhuri and Gupta (1996) devise a theoretical model to draw a stylized picture, where loan officer and informal moneylender are playing a non-cooperative game and choosing the bribing rate and informal rate of interest respectively. They show that informal interest rate is equal to the formal interest rate plus the bribe, in equilibrium. For other studies related to patronage, arbitrariness and corruption by loan officers, see, Ghatak (1977), Bell (1990). For international perspectives, see, Ladman and Tinnermeier (1981), and Adams and Vogel (1986).

Many other social factors are at work. In Indian contexts, Aseem Prakash (2010) conducted a primary survey of thirteen Indian districts on how lower caste entrepreneurs raise capital and find credit. It was found that even after the institutionalization of credit mechanisms like banks, government schemes for *backward castes* and cooperative societies, their attempts to approach such institutions for credit/loans attracted constant harassment and rent seeking by officials.⁴⁵

Agra suffers from similar problems. I discovered during my interviews that the unorganized workers are simply afraid to go to the bank because of possible ridicule that they will be thrown at by upper caste loan officers. Once this belief becomes institutionally heavy in memory, people stop going to the banks totally – even when a few bank branches would genuinely want to help them with credit.

Engaging with the question of why shoemakers don't visit banks reveals that *effective* interest rates from the bank *must* be higher than that offered by *aadhatiya*. This means therefore that unless a bank's *effective* interest rates do not go down, not in literal terms, but by reducing delay, bribery and cultural barriers, shoemakers are unlikely to shift from using *aadhatiyas* to banks. There is a grudging acceptance of the *aadhatiya* amongst the shoemakers. But their presence is also important to them. Understanding or introducing legal reforms in this market cannot be conceptualized until the *aadhatiya* is understood.

In other words, an L&D-inspired policy prescription that flows from the study of understanding informal markets at the institutional level shows that government should intervene, in so far as it is able to provide cheaper loans to shoemakers. And if it cannot, they it should actually consider legitimizing the role of intermediary here.

This is an important insight. The idea is that intermediaries are able to absorb the transaction cost which has emerged as a result of the market structure, caste dynamics and cash-strapped shoemakers. If this transaction cost wasn't absorbed by some player, the transactions could have never taken place to begin with. Traders do not have cash in hand to offer to all shoemakers and shoemakers need cash almost on daily basis. *Aadhatiyas*, in their role as intermediaries, address both the players simultaneously for a price lower than the transaction costs. These intermediaries are able to do that because of their advantages in (a) information about credit history of every trader; and (b) low costs of liquidity. Indeed, if the government can facilitate the intermediaries to enable

⁴⁵ The rejection was attributed to caste prejudice largely. Those who were financed by formal institutions had either (a) family member in the lending institution, (b) bribed the loan officer, (c) had an upper caste partner or (d) had used the influence of local political leader.

them to rise to the next level of institutionalization (think about a pooled resource base, like a mutual fund), gains from this exercise will be high. On the contrary, without giving due consideration to its comparative role here, it can also impose huge costs to the market, if intervention is done purely for cosmetic purposes instead of seeking to align its practice with the rule of law and legal reform projects.

8. Next steps in Understanding Informality and the Law

From my own interviews, I realized that similar structures of credit mechanisms exist in several business transactions in India. The use of the *parchi* is common in many trades across the country. The *parchi* acting as a commercial paper is rare, but for the fact that outside of contracts and property rights espoused in the law, these seemingly innocuous institutions run most businesses in India. Understanding these transactions is crucial for understanding other developing countries and this paper is a step in this direction.

This chapter helps us to imagine private ordering and the persistence of institutions present in informal, yet not illegal markets. However, markets all over the world also choose to continue even if the activities are illegal. Engagement with the question of what types of informal institutions are adopted by a market that is expressly prohibited by law, may give us a glimpse not only into the private ordering embedded in such markets, but also an entry into discourse on what could governments do to dispel those institutions and create a more receptive legal order. We study that in our next chapter which discusses the Dhanbad (Indian) coal markets.

9. Chapter Two Summary

This chapter explored the informal leather footwear cluster of Agra, showing how and why poor firms engage in trade credit and guarantee contracts. Shoemakers in the historic market of Agra are poor household run units. They sell the shoes to traders on credit. This creates a problem for them since they have high cost of liquidity and do not have sufficient capital to sustain the delay in payment. To solve this problem, market has developed informal institutions. The receipt of the sale of shoes issued by the trader (called *parchi*) becomes tradable in the market at a discount. Intermediaries who will purchase the receipt at a discount and later get it matured from the trader on the specific date have emerged in the market. The discount rate (which is the interest rate for the shoemaker) depends on creditworthiness of the trader. If the trader has high credibility, the interest rate on his receipt will be low, thus incentivizing shoemakers to approach him. Conversely, if a trader wants shoemakers to come to him, he will need to keep his promises.

My empirical work shows that the value of this interest rate is higher than the bank by 5 percentage points. This leads me to discuss why shoemakers don't visit the bank. Policy prescriptions follow. In the meanwhile, I also engage with the historical evolution of this system of trade credit. Invoking the literature, I illustrate how standard theories on trade credit and guarantee contracts diverge when we focus on informal markets.

CHAPTER 3: LABOR RELATIONS, UNIONS AND CONTRACTORS - THE CASE OF DHANBAD'S COAL MAFIA (INDIA)

1. The Idea of a Mafia and its Links with Labor Unions

There has been a significant body of research which has shown that criminal activity can take place in an organized fashion that can collectively be termed as a “mafia” (Gambetta, 1993; Chu, 2000; Varese, 2001; Hill, 2003). Yet, scholars have studied its emergence and manifestations mainly in Western societies (prominently for the Sicilian mafia, Russian mafia, Japanese Yakuza, Hong Kong Triads and American mafia) to show that the mafia emerges as a means of substituting the State for provisions of a service. For example, in Sicily, where property protection was the service offered, or in the US during the prohibition era when trade in illegal goods was at its height, or alternatively, in places experiencing economic expansion without the appropriate legal structures to enforce the protection of property rights, like in Russia after the collapse of communism.

In line with this thesis, there is some evidence that mafia activity may emerge through the channels of labor unions (Weinstein, 1966; Blakely and Goldstock, 1979; Jacobs, 2006; Cohen, 2003; Witwer, 2003).⁴⁶ These studies mostly describe the American experience and offer little theoretical understanding of the social phenomenon. The intuition is compelling: since labor unions possess a significant monopoly of power over labor and are politically active, it may lead to labor racketeering and rent seeking, culminating in mafia-type activities and union leaders' collusion with employers. In this scenario, the service provision which was supposed to be the prerogative of the labor force is now costlier, since labor is controlled by union leaders. With a lack of adequate checks and balances for unions to behave, the labor unions may transform themselves into racketeers.

The paper is a step towards understanding, more generally, the phenomenon of labor unions transforming into mafia organizations. I observe the coal-mafia emergence in Dhanbad, which is the administrative capital of Jharia coalfields – one of the richest and oldest coal mining region in India, located in the eastern state of Jharkhand. I discover in my fieldwork that the mafia here operates through labor cartels run by union leaders. At the colliery site, the extortion of money from coal buyers occurs in the form of payment of a rent/tax by the mafia, against the service of loading the appropriate quality and quantity of coal into the buyer's truck. Laborers obey the mafia

⁴⁶ Most studies focus on longshoremen in America. See also, Taft (1960), Bell (1960). For earlier studies, see Seidman, 1938.

(union leader) because they are tied through threat, indebtedness and the centuries' old institution of patronage, which is manifested in social hierarchies. I chart the growth of the mafia in the region through the interplay of socio-economic forces at work, and show generally that weak states will attract a mafia in publicly-owned natural resource industries, especially if labor unions are faultily institutionalized. At one level therefore, this paper aims to add value to current scholarship on the mafia, and at the other level, it hopes to offer a nuanced understanding of labor unions in developing countries.

In the larger context of the inquiry central to this book, there are several reasons for exploring this market. *Firstly*, insights into informal markets lie in understanding not just a-legal but illegal markets, since the system of private ordering embedded in them has to be far more rigorous and fascinating. *Secondly*, understanding the coal mafia from an institutional perspective helps us to view the institutional determinants of exploitative and extractive activities more generally. Policy decisions can then engage with different institutional designs to develop better response to such activities. *Thirdly*, there is very small literature on the mafia in India in general, and the coal mafia in particular, despite its industry importance. The time for this exploration is apt given recent political corruption scandals in coal mine allocation, which have led the Indian government to contemplate privatizing coal and creating a regulatory institution to manage it. During such imaginations of interventions, this work may inform policy makers to recognize errors of the past, so as to address them while creating new institutions.

In this study however, I do not offer any theory of labor unions, nor do I intend to develop broad frameworks of labor economics to follow in its rich intellectual tradition. Also, those who expect this chapter to shed light on the expansive view of agency theory of labor unions may be disappointed. I rely on a few principles from these disciplines and engage with them in so far as they are applicable to the mafia institutions examined in my case study. I draw lessons from prominent frameworks which have often been used in many disciplines and show how it may inform our understanding of mafia institutions found in labor unions in general, and in India in particular.

2. The Scholarship on the Mafia and Gaps Therein

Prominent theoretical frameworks envision the mafia as a provider of services including: protection of property rights (Gambetta, 1993), protection against extortion (Gambetta, 1993; Arlacchi, 1993), settling disputes (Reuter, 1995; Chu, 2000; Varese, 2001), protection against police and state actors (Sabetti, 1984; Gambetta, 1993; Chu, 2000; Varese, 2001), loan collection

from defaulting debtors (Varese, 2001), and provision of illegal goods (Reuter, 1987, 1993; Gambetta, 1993). At multiple levels therefore, it may be insightful to view the mafia as a parallel state action (Tilly, 1985). There has been some work that shows how the mafia operates within legitimate industries, primarily as cartel enforcers (Landesco, 1929 [1968], Gambetta and Reuter, 1995; Reuter, 1987); or as intimidators of customers, workers and trade unionists in favor of employers (Block, 1983); Gambetta, 1993; Varese, 2001; Chu, 2000).

The last bit has been rather inadequately explored. A labor union is a legitimate organization with extensive opportunity to racketeer and engage in rent seeking. Gambetta and Reuter (1995) briefly mention the role of labor unions in differentiating mafia activities seen in the US and Italy. While in the US, the labor union is a 'central instrument by which the mafia has acquired power in particular industries,' (p. 120), it has not had any role in Sicily.⁴⁷ Elsewhere, the issue of the mafia being linked to unions has been flagged by Reuter (1987), and Bell (1960), although there has been little evaluation of this connection.

James Jacobs (2006) has explored the union-mafia link in American industrial history. He proposes that labor racketeering in major American trade unions explains the lack of a 'socialist leaning labor movement' in the country. Even though he's been criticized for insufficiently explained arguments and some factual errors (Slater, 2008), his work is a compelling attempt to identify labor unions with mafia families,⁴⁸ something that Jacobs himself thinks has been largely overlooked by scholars (Witwer, 2007). Elsewhere, Cohen (2003) has exposed these links during the times of the American prohibition-era. David Witwer (2003) remains admmissive of the fact that even though not generally applicable and perhaps exaggerated by conservative anti-unionists, the instances of corruption in trade unions cannot be denied. Most of this antiunion scholarship brings to the surface the political and criminal endeavors of labor unions is based in USA – to the extent that sometimes, the mafia-labor nexus is seen as a uniquely American experience (Jacobs, 2006).⁴⁹ One of the ways this symptom is generalized comes from labeling America as 'business unionist' as compared to 'class conscious' Europe (Kimeldorf and Stephan-Norris, 1992, p. 512).

⁴⁷ Gambetta and Reuter (1995) mention that while the role of labor unions is important to trigger the mafia's involvement in legitimate industries, but not to sustain it. Investigating the coal mafia in Dhanbad leads me to dig this issue deeper and I find that the role of unions both in initiating the mafia's involvement and in sustaining it, is enormously important. In fact, once unionization is taken into account, the darkness of most unanswered questions in Gambetta and Reuter is dispelled.

⁴⁸ See also, Jacobs and Peters (2003)

⁴⁹ See also, Voss (1993). The author rejects traditional interpretations, but acknowledges that labor in USA has been weak and politically conservative.

The dominant idea in Kimeldorf's (1992) work is that American labor is ideologically a conservative proletariat with failed worker consciousness. He explains the divergent emergence of the 'radical' labor union of longshoremen in the West coast from the gangster-ridden 'big boss' union of longshoremen from the East coast. It is interesting to note the striking parallels between the East coast union's evolution and that in Dhanbad. East coast ports had opened long before their Western counterparts, at a time when the port was characterized by competitive capitalism. They had numerous decentralized owners who had to choose labor from a large pool of migrants with peasant backgrounds, who had neither any exposure to industrial unions nor socialism in general. The organization thus took place through common ethnic identity as around 95% of dock-workers in 1880 were Irish Catholics (ibid).

The West Coast on the other hand developed much later when capital was concentrated in a structure of monopoly capitalism. Workers were 'late generations of immigrant labor and native-born migrants who were more experienced proletarians' (ibid). There was also a considerable influence of Communist party in the West coast. As such, labor in the West became more politically radical, in contrast to the racketeering tendencies of the East coast.

The literature however, is scanty on developing a robust analytical framework to help explain the emergence of mafia-type organizations through labor unions. This paper provides such a theoretical frame. It proposes four hypotheses about labor unions and their rent seeking tendencies to help develop a general rule for understanding the behavior of powerful unions. The intuition developed is simple: labor monopoly, if not checked sufficiently, will lead to rent extraction by the labor collective which will take the form of a mafia. One of the key thrusts of the argument rests in appreciating the local and informal contexts in which unions are formed and sustained over time that determines their behavior. We test the hypotheses by studying the coal mafia in Dhanbad that is administrative center of the Jharia coalfields, one of India's richest.

The study will aid law scholars to design legal frameworks for many other settings where union-type labor relations in a natural resource industry are historical and inefficient. Identifying patterns here can also aid in L&D scholars' understanding of how institutions may develop extractive and exploitative tendencies, and what can *generally* be done to avert such a thing happening in newly found natural resource industries. More importantly, by delving into the historical evolution of the market, scholars can make sense of the roots of mafia emergence and propose effective solutions.

3. Hypotheses

The theory of labor market segmentation (Harris and Todaro, 1970; Reich et. al, 1973)⁵⁰ suggests, inter alia, that the labor market can be divided into primary and secondary types (better encapsulated by the term, ‘dual labor market theory’). While the former requiring skills, stability, high wages and the existence of job ladders; the secondary market is characterized by low wages and workers’ morale, high turnout, unskilled labor under complete control, barriers to job mobility and poor working conditions.

Most labor intensive industries, like coal mining are run on the secondary labor market. Their empowerment levels, broadly defined, are far lower than the primary sector laborers. If workers suffer from low education, extreme poverty, inhuman working conditions and decades of subjugation, they have little economic independence and are naturally more prone to exploitation than the ones from the primary labor market. This paper and hypotheses pertains specifically to the secondary labor market.

That public and private sector unions are divergent, both in their behavior and outcomes, is well established (Freeman, 1986, 1988). Freeman offers an illuminating study of how public sector unions affect the demand for labor rather than just wages, and have significantly higher non-wage effects than their private counterparts. They are also found to possess militant attitudes, being in favor of strikes and the like (Reid and Kurth, 1990). Their numbers/memberships have been increasing around the world, as compared to private sector unions.⁵¹ The political power of public unions is much greater as well, owing to their proximity with the government. Consequently, public sector unions have higher access to politicians, and are more easily able to mobilize resources for election campaigning.

In addition, unlike in private corporations, public sector contract negotiations may not be adversarial in nature. Most government-managers have little personal stake in such negotiations and the government may also want to keep the unions happy, lest they lose their vote bank in succeeding elections. The governments never run out of business (theoretically), which offers stability to the union without much effort. These hypotheses could therefore be more reliably tested against unions in public sector. As will be shown, the case for coal mining in India exemplifies it amply.

⁵⁰ See however, Wachter (1974)

⁵¹ For the USA, see, Edwards (2010).

3.1. Labor shortage, Metering and Labor Market Intermediaries

The conceptualization of the metering problem by Alchian and Demsetz (1972) provides a useful starting point for theory of labor intermediaries (who as I show, eventually became union leaders in the Jharia coalfields). The authors show that a key issue in an economic organization (say, a firm) is to be able to meter input productivity and rewards (p. 778). Metering in this sense means both measuring and controlling (footnote 1, p. 778). The problem of metering is characteristic in a team where marginal individual team member productivity is unobservable without incurring a cost. Since rewards stimulate productivity (p. 779), and individual productivity can be distinguished only at a cost, the employer decides to incur this cost if: (a) the costs of shirking are higher through (b) someone who specializes in such monitoring at a lower cost. This monitor need not be monitored further if her/his incentives are aligned with that of the employer as the monitor can receive the residual awards (p. 782). By corollary then, the monitor (residual claimant) must have power over the individual contracts of the team members. Therefore, the team members may *'assign to the monitor not only the residual claimant right but also the right to alter individual membership and performance on the team'* (p. 782).

The essence of a classical firm exhibiting a metering problem thus features a contractual structure with joint input production. One party, which is common to all contracts in the joint inputs, and which has the right to renegotiate any input's contract independently of contracts with other input owners (p. 783). Notice that at a general level, the monitor's primary task is not defined by being able to meter, but by being able to act as the contractual party. The monitor is therefore an intermediary between the principal employer and the team involved in production.

Labor intermediaries, who are tied to the firm, could act as such monitors.⁵² From a transaction cost perspective, intermediaries can help firms save enormous costs since they specialize in information and disciplining of labor (Osterman, 1999). In an environment of labor shortage, labor intermediaries can fulfill the role of these monitors and claim residual rewards, against procuring, organizing and metering laborers as inputs.

More importantly, in labor markets driven by social forces (Granovetter, 1985; Powell, 1990), intermediaries are embedded in social relationships with workers and firms simultaneously, in

⁵² In contemporary markets, research on labor intermediary focuses on temporary help agencies (Parker, 1994; Rogers, 2000) or job trainers (Osterman and Lautsch, 1996). Other efforts to understand their behavior is by Osterman (1999), Kazis (1998), Benner et al (2003).

ways which are ‘socially constructed and politically mediated’ (Benner, 2003, p. 627). The intermediaries create and control networks that are crucial for both employers and workers (ibid.). These networks are extremely important for workers in getting jobs, learning, skill-development, improving earnings intra-firms, dealing with layoffs and the like (Piore, 1980; Granovetter, 1985; Wial, 1991; Fernandez and Weinberg, 1997; Herzenberg et al, 1998).

Intermediaries form the organizational network infrastructure, which is highly valuable in unstable labor markets where employment opportunities are changing rapidly (Benner 2003, p. 628). The unskilled workers of the secondary market have ‘poor-quality’ social networks and are therefore especially dependent upon these intermediaries (ibid.; Harrison and Weiss, 1998).

Intermediaries could be tied to a firm and act as its permanent employee, if the demand for labor is fluctuating and cyclical (Benner 2003, p. 628). This will encourage the employer to keep intermediaries tied up with firms who act as cushions during the oscillating labor demand periods. Intermediaries help hedge varying labor and employment risks for both the employer and laborers by acting as the platform where labor demand and supply are met, and price levels are sustained.

Hypothesis 1: Labor intermediaries emerge to fulfill labor shortage, and they begin determining labor relations in an industry suffering from a metering problem.

3.2. Agency Theory of Labor Unions

General economic (and other) models⁵³ of union behavior assume that both union leaders and members face the same objective function which they want to maximize. Therefore, when collective bargaining takes place, union leaders always reflect the preferences of their members. Secondly and consequently, the assumption is that the labor union leader is a benign individual who will always make efforts to fulfil the promises s/he has made to the members of the union.

To assume unions as a homogenous mass, and therefore lend simplicity to the modeling exercise, is a valuable academic exercise, but may be far from reality. If we open the black box of unions – just like corporations – we find a web of incentives, structures and agency issues. This view of benign managers has been successfully challenged by principal-agent relationship models, which have demonstrated that managers, like any other individual, are rational beings, attempting to

⁵³ The seminal work was initiated by Dunlop (1944). Later McDonald and Solow (1981) introduced the Nash bargaining solution into it.

maximize their own interests. Agency theory in a union is a surprisingly major oversight then. We can observe the union leaders as agents of the principals, and the union members as agents. The information asymmetry is reflected in the union leader (agent) possessing more knowledge about the status of employment, given her/his closer proximity to the employer, involvement in negotiations and knowledge of the firm's labor policies, existing labor supply and wages. Faith and Reid (1987) remains one of the few good scholarships which has systematically explored the agency issue present in unions.⁵⁴

In what kind of scenarios would agency problems be high in a labor union? Indeed, if the union leaders are elected from outside, the likelihood of diverging interests between the union leader and union members could be high. 'Outside' here may refer *firstly* to dissimilar groups that the leader and members belong to. In India for instance, the former may develop in caste linkages. If workers belong to a particular caste and the leader to another, there is a possibility that their interests will diverge. A nontrivial body of research has shown that the empowerment of lower castes is possible through their direct representation in politics. *Secondly*, the labor leaders may not necessarily emerge from existing members.

But then, labor members may be able to oust a non-performing leader in the next elections. A second question therefore is why workers wouldn't remove a corrupt union leader? The answer is located in some form of benefits or threats that the workers receive from the leader. The labor union leader may devise various strategies to tie the laborer's loyalty with his candidature. If workers seem to receive some short-term benefits from the incumbent, they may continue to vote for him. Alternatively, an incumbent's exit may pose a material threat to workers' wellbeing. This threat could be exhibited in the removal of a benefit that was earlier afforded. In a worker cohort, homogeneously belonging to a certain caste, it is easy to bond workers through caste-based frameworks and indebtedness, which compels them to conform to a certain expectation, including the way they vote. The deviants may be punished by their own community, as Akerlof (1976) describes through his model of caste and statistical discrimination.

⁵⁴ Among the scanty and earlier work that has addressed agency issues in a union are that of Herberg (1943), Ross (1950), Berkowitz (1954) and Atherton (1973), who have touched upon the internal organization of the union. Pemberton (1988), Besancenot and Vranceanou (1999) and Jones (1989), have also looked at the specific role of the leaders. That the issue has been always important is reflected from seminal works briefly touching upon it. For instance, Dunlop (1944) advised that racket unions may be analyzed within the regular model of the business firms, while Ross (1956) explicitly negates the possibility of self-interested union leaders, but does recognize its existence in some abnormal cases. Becker (1959) shows how union leaders expropriate producers' surplus by illustrating the racketeering problem in the context of an upward sloping labor supply curve.

Hypothesis 2 (a): A labor union may have high levels of agency problem, if union leaders come from outside (another caste or profession).

Hypothesis 2 (b): A non-performing leader may continue to be chosen if s/he has bound labor through various informal arrangements.

3.3. Nationalization and the Power of Unions

Consider nationalization of a labor intensive industry like coal mining. This process essentially leads to ownership change, which alters the incentive structures of the players involved. In situations as these – and British coal nationalization is a classic example (Baldwin, 1955) – the welfare of laborers assumes vital importance and consequently the power of unions is enhanced. Across the world, industries left in the hands of the State always have a higher degree of labor mobilization and union power than those in private hands (Murillo, 2001).

Labor unions may develop into a more systematic and powerful organization in a State-owned set up due to endogenously embedded labor relations. One can view this process in the following way: shackles of owner's control are reduced, thus offering more maneuverability to the unions. At the same time, this maneuverability is the product of the internal organization of the unions that existed before nationalization. In other words, the extent to which the power of unions enhances after nationalization is dependent upon its existing inter-labor relationship. If the union sentiments were weak before nationalization, they may not necessarily develop suddenly after it. Nonetheless, the labor relations which are embedded in the local context are aided with the process of nationalization. Its impact therefore, can be better understood once we understand the local context.

This idea is akin to that of institutional inertia (Acemoglu and Robinson, 2006). Regardless of the process of institutionalization, the stickiness of institutions makes it impossible to replace an existing institutional relationship entirely. This is more so in the case of labor relations. Labor unions have been shown to possess a high degree of monopoly power.⁵⁵ This power and its rent

⁵⁵ This was mentioned as early as 1932 by celebrated economist John Hicks, “*monopolistic combination is common enough in all parts of the economic system; very much the same motive which drives the businessmen to form rings and cartels drive their employees to form unions*” (Hicks 1932, p. 137). See also, Lewis (1951); Lande and Zerbe (1985); Meltzer (1965); Oswald (1985); Farber (1986); Addison and Chilton (1997). Labor unions are also part of rent extraction (Sapsford and Tzannatos, 1993, pp. 325-338; Booth 1995, ch. 3-5). Even in their influential work *What do unions do*, which builds a strong case for the net positive impact of unions on society, Freeman and Medoff (1984) argue that unions have two faces: a monopoly face and a collective voice/institutional response face, in which the

seeking characteristics will depend not only on the ownership of industry, but also the kind of labor relations existing while nationalization is taking place. Hence:

Hypothesis 3: The increase in power of labor unions post-nationalization depends, inter alia, on the social structure in which existing labor relations are embedded.

Through exploring labor relations and mafia institutions prevalent in the coal mines of Dhanbad, we now test these hypotheses and show, why it is pertinent to view labor unions in certain settings rather differently.

4. Coal Mining in Jharkhand, India

India is the third largest producer of coal in the world,⁵⁶ which is also the most abundant fossil fuel of the country.⁵⁷ The country satisfies almost half of its primary energy needs from coal,⁵⁸ thereby making it important both at domestic and international levels. India's largest reserves of coal are located in the state of Jharkhand, which also has the highest number of mines.⁵⁹ The state accounts for 37% of the total mineral wealth of India and it is a leading producer of copper, coal and mica; producing one third of India's coal.⁶⁰ These coalfields are part of the Chota Nagpur plateau and the Jharia coalfields of the plateau produce India's best coking coal. Dhanbad is located in and is the administrative center of the Jharia coalfields.

monopoly face has severe negative consequences. The book's continued influence encouraged the publication of an edited volume, *What do unions do: a twenty years perspective* (Bennett and Kaufmann, 2011). Reviewing the developments of the last few decades, the new volume has produced an emphatic critique of Freeman and Medoff's underestimation of the negative – monopoly face of the unions.

⁵⁶ British Petroleum (2011), "Statistical Review of World Energy," available at http://www.bp.com/assets/bp_internet/globalbp/globalbp_uk_english/reports_and_publications/statistical_energy_review_2011/STAGING/local_assets/spreadsheets/statistical_review_of_world_energy_full_report_2012.xlsx last accessed on 4 November 2013.

⁵⁷ World Energy Council (2010), "2010 Survey of Energy Resources," London: World Energy Council, available at http://www.worldenergy.org/documents/ser_2010_report_1.pdf last accessed on 4 November 2013.

⁵⁸ Annual Report, Coal India Limited, *infra*. See also, the database in the website of Ministry of Power, Government of India, available at http://www.powermin.nic.in/indian_electricity_scenario/introduction.htm last accessed on 4 November 2013.

⁵⁹ Ministry of Coal, Government of India, available at <http://www.coal.nic.in/welcome.html> last accessed on 4 November 2013.

⁶⁰ Government of Jharkhand (2003), cited in George (2009), pp. 157-158



Fig 1: Jharia coalfields in the state of Jharkhand, India

4.1. Jharia Coalfields and the Mafia

Coal mines in the Dhanbad region cannot be imagined without the coal syndicate or mafia.⁶¹ They have preserved their dominance over the mining and trading of coal in this region for a long time. Yet they have largely been missing in policy discussions, academic debates and the Annual Reports of coal companies. Their presence is felt greatly in local newspapers however, which report incidents of violence, whenever they occur. Recently, Reuters published a report on the mafia in Dhanbad and mentions the pervasive effect of mafia families in controlling unions, transport, manipulating coal auctions, extorting money from coal buyers, bribing and corruption and illegal mining (Daniel and Williams, 2014). In fact, in the interview to Reuters, the Coal India Limited's (CIL is the government owned enterprise and statutory owner of all the coal mines in the country) Chairman said, the scams cost his company about 5% of its 450 million tons output every year.

⁶¹ In an outsider's mind, Dhanbad's coal mafia appears as an intriguing, incomprehensible and vivid account of organized crime as if in a movie scene. The 2012 Bollywood movie, *Gangs of Wasseypur*, exhibits naturalistic events in the town, invoking images that produce a pulp-fiction version of mafia wars in Dhanbad, largely inspired by reality even though not accurate.

4.2. Coal Trade in India

Coal in the country belongs to Coal India Limited (CIL), the state-owned company formed as a merger of Bharat Coking Coal Limited (BCCL) and Coal Mines Authority Limited (CMAL) in November 1975. BCCL and CMAL were born during nationalization to acquire all coking coal mines (1971) and non-coking coal mines (1973) respectively.⁶² Today CIL, with eight of its subsidiaries, is the largest coal producing company in the world.⁶³

The sale of coal is done through complex legal and bureaucratic procedures conducted by CIL.⁶⁴ The procedure to sell coal is determined by the customer type. If the customer is a power utility, captive power plant, cement and sponge, iron or steel producer, fertilizer manufacturer or independent power producer, the coal is sold through Fuel Supply Agreements (FSA).⁶⁵ This includes a legally enforceable contract between CIL and the buyer, after the latter's request to purchase coal through this route is granted by the Standing Linkage Committee (in the form of Letter of Assurance), which falls under the administrative ambit of Ministry of Coal of Indian government. Any other company which requires more than 4200 tons of coal per annum can also apply for a Letter of Assurance from the Committee.⁶⁶ The idea to release coal for purchasers who have a high demand through the FSA is espoused in the New Coal Distribution Policy (NCDP),⁶⁷ effective from October 2007.⁶⁸ The price is set by CIL and it is mandated that the coal will not be sold or diverted to a third party. These contracts are done directly with the government, and therefore, the mafia is absent in these transactions.

For those who wish to purchase coal with a quantity of less than 4200 ton per annum (but more than 50 ton), there are two options. Firstly, they can buy coal from State nominated agencies, which

⁶² Coal could broadly be categorized as coking and non-coking (amongst other categorizations that exist), where the former has lower ash content and therefore is a much better grade than the latter.

⁶³ Annual Report 2012-13, Coal India Limited. Available at http://www.coalindia.in/Documents/Coal_India_AR_Mail_2012_-_2013_06082013.pdf last accessed on 4 November 2013.

⁶⁴ Hereinafter, CIL would mean the CIL and all its subsidiary companies. At present, there are

⁶⁵ See a model FSA at http://www.coalindia.in/Documents/NCDP/Generic_Model_FSA_for_mine_specific_supply_IPPs.pdf last accessed on 4 November 2013.

⁶⁶ 1 ton is equal to 1000 kilograms.

⁶⁷ The policy is available at <http://sccimines.com/downloads/newcoaldistribution.pdf> last accessed on 4 November 2013.

⁶⁸ The policy has been modified with the new one releasing in July 2013. The modifications do not affect e-auctions but only FSA limits. The office memorandum containing the instructions is available at <http://www.coal.nic.in/260713.pdf> last accessed on 4 November 2013.

in turn, have to buy coal through the FSA. The second option, which is open for traders in coal as well, is to purchase coal through an e-auction. The mafia controls the latter open trading and this forms the basis of this study.⁶⁹ Earlier, coal traders and small purchasing units (like brick kiln owners) would visit Dhanbad and bid for the coal. Since 2004 however, CIL began e-auctioning coal (Narayan, 2008), in part to increase access by bypassing the mafia which used to appropriate the bidding process by securing all contracts unto itself and selling coal at discretionary prices to buyers. Surprisingly however, the digitalizing process has not reduced the presence of the mafia. The reason is interesting: since coal is a physical commodity, the buyers of the commodity – even though they have purchased coal online – need to physically come or send for someone to fetch coal from a colliery in Jharia. The mafia extorts money from them at the colliery, which shall be further explained later.

Approximately 10% of available coal is distributed by the e-auction scheme.⁷⁰ In 2012-13, the offtake from e-auction was 10.56% (49.14 million tons), contributing by 18.31% of sales by value.⁷¹ This is a significant value, and as yet, there has been no study that explores the existence and emergence of mafia in the coal mining district of Jharkhand.

4.3. Mafia Activity at the Colliery

Coal is bid for in e-auction (spot or forward) by buyers (or traders) who bid from their offices, say in New Delhi. The bidding portals are www.mstc.com and www.coaljunction.com. Once the registration is done and after the payment of an initial fee, the buyer receives an e-signature, username and password for future transactions. The bidding takes place monthly whenever CIL makes coal available in a given colliery. Buyers need to select the CIL's subsidiary and the specific colliery and decide the quantity s/he wants to purchase. Once the bid is accepted, CIL issues a delivery order (DO) upon submitting an earnest money deposit to the buyer. The buyer is then mandated to collect his rightfully owned coal from the colliery within 45 days, failing which his earnest money deposit is forfeited. The transportation and collection is the prerogative of the buyer.

⁶⁹ It must be mentioned here that other than the extortion of money from private coal buyers, the mafia operates through a few more channels. Illegal mining is one of the visible acts amongst them and does not fall into my focus. Illegal or informal mining involves manual mining of coal from small, abandoned mines by poor families and loading them onto bicycles over long stretches to sell. Survey estimates suggest that in 2003-04, 2.5 million tons of coal was transported by cycles (Lahiri-Dutt, 2007, p. 57-58). This stealth of coal takes place under the mafia's supervision (Daniel and Williams, 2013) and its sociological constructs have been the focus of some studies by Kuntala Lahiri-Dutt and her co-authors. See also, Lahiri-Dutt and Williams (2005).

⁷⁰ 25% of the e-auction scheme is dedicated to forward auction. See Narayan (2008).

⁷¹ In contrast, under FSA, 85.39% of coal was sold to generate 75.5% of sales revenue (the remaining coal was used for own consumption and as feed to washeries). See, Annual Report of CIL, supra n. 75.

The collection of coal from colliery is exactly where the mafia comes into the picture. My fieldwork revealed that the process of collecting the coal also involves bribing many agents at each step of the process. A typical process then takes place as follows (a schematic diagram is found in Figure 2)⁷²:

Step 1: The buyer/trader sends for his transporter and representative (usually the representative is an agent in Dhanbad who helps the process go – he is usually called *agent*, and *agents* serve many clients who could be buyer or traders) for collecting the designated coal. The *agent* may not travel with the truck/transporter, but signals his involvement to people in the chain through phone calls, so everyone knows the truck is associated with a given known agent.

Step 2: The truck arrives at the Central Industrial Security Force (CISF) gate to collect an *entry slip*.

Step 3: The truck goes to the *weighbridge* for measuring its empty-weight (later they measure the weight of the loaded truck and difference tells them amount of coal lifted from the colliery). The weighbridge is run by the government (BCCL). There, the driver submits the *entry slip* and collects a *weight slip*.

Step 4: The truck now arrives at the colliery, where the driver meets *loading in charge*. The latter takes the weight slip and issues a *loading slip*.

Step 5: Inside the colliery a mafia representative is stationed. He looks at the loading slip, which mentions the quantity of coal the buyer is entitled to. He collects a tax, called GT, which in the local language is the abbreviation of *gunda tax*, loosely translated as ‘goon tax’. It is often called *rangadari* and the tax collectors – mafia – are called *rangadars*). It ranges from Rs.2000-3000 per truck (as a matter of comparison, the State’s minimum wage for unskilled workers is approximately Rs. 180 daily, or for a 25 days month, Rs. 4500 monthly).⁷³ Once the payment is

⁷² Except step 5, all other processes work under the ambit of the state. In other words, everyone else is a salaried employee of the BCCL and therefore payments made to them are simply illegal from the point of view of corruption. My focus here is on step 5.

⁷³ The mafia’s influence is not limited to trucks alone. Collieries with proximity to railway lines are connected directly to rake-loading infrastructure (a goods train is called as rake). In these collieries as well, the procedure is almost the same. The value of GT for an entire rake varies between Rs. 200,000 and Rs. 300,000. The bribe by various BCCL officials also inflates in a rake transport, simply because the quantum of coal is much higher.

made in cash on the spot, the mafia's representative instructs the laborers to load the truck with coal lying in heaps.

There is a very high degree of certainty of both the type of interaction and the value of bribes for a given buyer/trader. This is tied with each buyer's repeated interaction. So even though the GT may vary from Rs.2000 to Rs.3000, for a given buyer/trader, it will be fixed in a given colliery.

Step 6: After the loading is complete, the driver collects the *challan* (receipt) from *dispatch officer*. The latter charges a bribe ranging from Rs 200-300 for each *challan*.

Step 7: The *challan* is then taken to the *loading in charge*, who approves the same, inspects the truck with coal, and charges a bribe ranging from Rs.50-100.

Step 8: There is an exit point of the colliery where *CISF personnel* monitor entry and exit. At the exit, the CISF personnel charges his bribe of Rs.10-20 for each truck that passes through.

Step 9: The truck returns to the *weighbridge*, where the loaded truck is weighted and load slip issued. The personnel at weighbridge then charges Rs.250-300 per truck as his bribe.

Step 10: The truck exits through the CISF check post, where a bribe of Rs.10-50 is paid. From here, the truck leaves the mining area for the buyer's/trader's factory.

What service does the mafia provide for the money that it extorts from the coal buyers? The colliery has enormous hills of coal lined up, with coal and other coal lookalike stones bundled up together. There is very little technological intervention. The process is laborious with men carrying heaps of coal from the gigantic coal heaps, and unloading them in the truck with pay-loaders (big trucks used for loading and unloading purposes) and also manually. Sometimes, they load it on the pay-loader which loads it into the truck. It is extremely important for the buyer to get only the coal and not stones. This sorting is manual and laborers' efforts are crucial to do this. If the buyer doesn't pay the GT, the mafia may either instruct the laborers not to load the truck, or have them load the truck indiscriminately, with both coal and stones. The GT therefore is the price the buyer pays for sorting and selecting good quality coal from a heap of coal and other stones.

The mafia operates through their labor cartel in these collieries. Laborers obey them scrupulously. This is possible because of the mafia's union leadership connections. Most big mafias of the region are union leaders themselves. Their organization is run through their middle management, which

comes in the form of *sardars*, who supervise the labor, instruct them as agents of union leaders and maintain direct links with the laborers. The way they operate and extort money from coal buyers is not through violence, but by offering a service. They are able to provide this service because of their control over laborers of the region. They also share part of these rents with the laborers. And needless to mention, owing to the union's presence, it is impossible for the individual buyer or even group of buyers to bring in their own laborers.⁷⁴

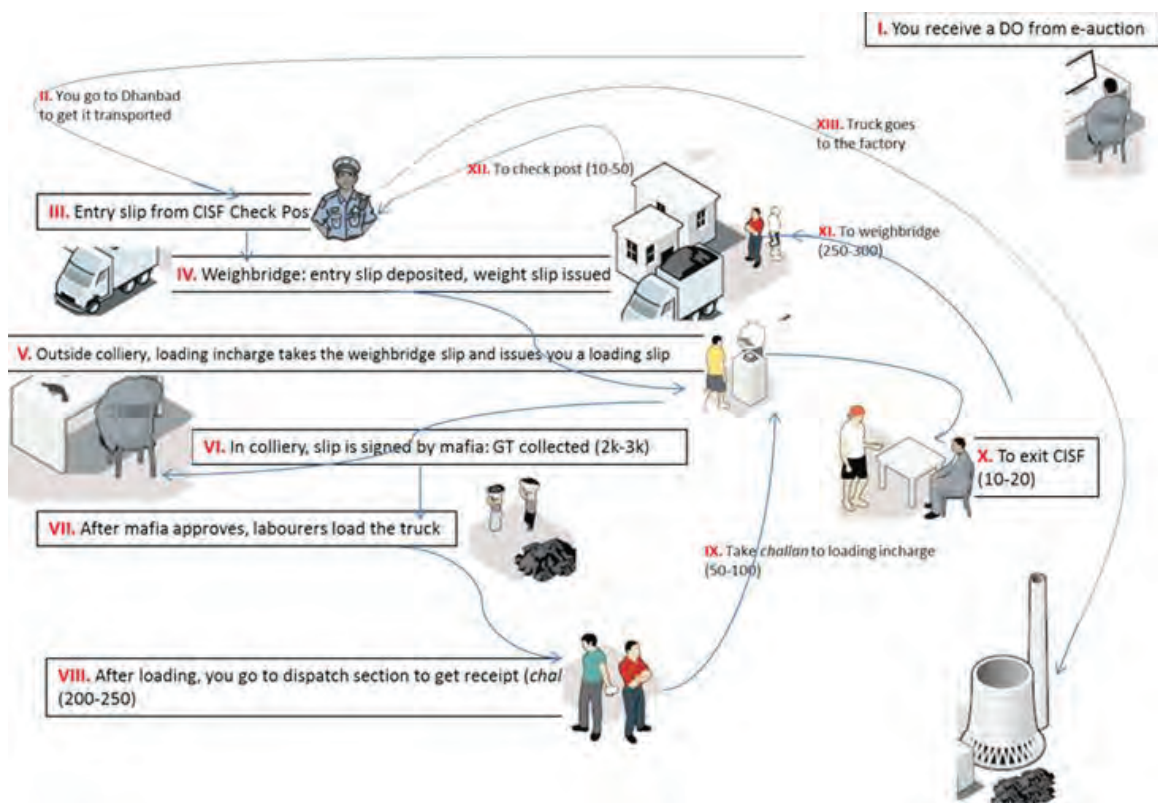


Figure 2: Flowchart of Coal-trading in Dhanbad mafia-infested collieries.

Source: Author's fieldwork

⁷⁴ While the abovementioned process is the predominant mode by which the mafia enters the regulatory space in the Dhanbad coal mines, there are other ways. For instance, in a few mines, the dominance of some mafia groups is sustained through different forms of coercion. In the Barora area, buyers/traders do not enter the mine. Only traders win the auction and they are coerced to sell their DOs to the mafia gang members at the trading point in *Katras Mod*, near Jharia, at a price higher than they paid for it. The mafia then sells the coal directly to interested buyer at any price they choose to do so, pocketing the difference.

4.4. Estimating the Value of Extortion (Goon Tax)

There are thirteen mining blocks (administratively decided) in the Jharia coalfield, with several collieries in each block.⁷⁵ Except three, all other blocks belong to BCCL (one of the largest subsidiaries of Coal India Limited). Table 1 shows the value of GT for every colliery (collected during my fieldwork) along with its impact on coal price, in percentage. It shows the GT to lie usually between Rs.200 and Rs.300, which for a truck translates into Rs.2000 and Rs.3000 roughly. On an average, the value of GT as a percentage of the winning bid price of the coal in the same mine varies from 2% to 20%. The mean value comes at 9.25%. This is significantly high and leads us to believe that the mafia has a substantial impact on the coal economy of India.⁷⁶

This service can be provided by the State by breaking the labor cartel. As we show later, the mafia imposes this huge deadweight cost in the system, even while exploiting the laborers brutally. Previous government engagements with the mafia have been unsuccessful and the problems of exploitation of laborers and extortion of buyers has continued – in fact even exacerbated. In order to find out the reason for the mafia's sustenance, we need to look into its emergence.

As with our previous case study, examining its institutional evolution puts us in a better position to recommend policy solutions and show how informal institutions can be understood through the role of the intermediary. This time, the intermediary has dual role; first as a labor intermediary between laborers and the employer (which is now the State), and second, between the buyer and seller (again, the State). Such an analysis will also help us to frame discussion in the language of our hypotheses.

⁷⁵ The list of mines and area can be found at <http://dhanbad.nic.in/mines.html> last accessed on 5 November 2013.

⁷⁶ I took the data for the last year from the bidding website, using the registration number of a trader who shared their password with me for this work. The website maintains historic data for one year only. Bidding does not take place every month, but whenever it does, it happens once a month. We notice that there is a significant variation in the bid values, which may depend upon market demand conditions. However, the GT has remained fixed during this time. This means that the buyers need to keep an account of only their purchase price online and simply incorporate the value of GT over it to determine their costs. The changes in bidding price also show volatility in the market making it a sensitive market.

Colliery Area in Dhanbad Region	Name of the Colliery	No. of auctions in last one year	Average opening price (in Rs.)	Average winning price (in Rs.)	GT per ton (min.)	GT per ton (max. or fixed)	Diff between open and bid price (in Rs.)	Diff between open and bid price as % of open price	Share of GT in Price of Coal, in %
Barora Area	Damoda	7	2386.43	3868.11	300	500	1481.68	62.09	12.93
	Madhuban W2	5	4372.00	4374.50	300	500	2.50	0.06	11.43
	Madhuban W4	6	3075.00	3226.00	300	500	151.00	4.91	15.50
	Muraidih	9	2373.22	3854.94	300	500	1481.72	62.43	12.97
	Shatabdi	9	2373.22	3586.43	300	500	1213.21	51.12	13.94
Block II Area	Nudhkurkee	10	2368.60	3971.18	300	500	1602.58	67.66	12.59
	Benidih	8	2379.00	3705.01	300	500	1326.01	55.74	13.50
	Jamunia	10	2368.60	4153.83	300	500	1785.23	75.37	12.04
Govindpur Area	Maheshpur	7	2122.71	2531.61	300	500	408.89	19.26	19.75
	Jogidih	9	2373.22	2833.83	300	500	460.61	19.41	17.64
	Govindpur	8	2379.00	3140.93	300	500	761.93	32.03	15.92
	Akas Kinaree	18	2270.67	3376.62	300	500	1105.96	48.71	14.81
Katras Area	West Mudidih	10	2368.60	4486.46		250	2117.86	89.41	5.57
	Katras Chot	1	2093	4849.5		250	2756.50	131.70	5.16
Sijua Area	Loyabad	5	9094.00	9830.00		250	736.00	8.09	2.54
	S/Bansjoda	8	2317.25	3602.56		250	1285.31	55.47	6.94
	Nichitpur		2368.60	4076.67		200	1708.07	72.11	4.91
	Tetulmari	11	2364.82	4224.73		250	1859.91	78.65	5.92
Kusunda Area	Gondudih G2	5	5050.00	5050.27		300	0.27	0.01	5.94
	Kusunda	12	2127.67	4228.45		150	2100.78	98.74	3.55
	Godhur G2	1	5050.00	5050.00		150	-	-	2.97
	Dhansar G1	1	5200.00	5200.00		200	-	-	3.85
	Dhansar W3	10	2368.60	4535.98		200	2167.38	91.50	4.41
Kustore Area	Alkusa	1	2184.00	2184.00		200	-	-	9.16
	Ena	1	490.00	490.00		200	-	-	40.82
	South Jharia	10	2368.60	4440.41		200	2071.81	87.47	4.50
Bastacola Area	Bastacolla	9	2373.22	4030.11	200	300	1656.89	69.82	7.44
	Bera	9	2373.22	4108.77	200	300	1735.54	73.13	7.30
	Dobari	9	1901.26	3267.32		200	1366.06	71.85	6.12
	Ganhoodih	6	2419.44	4228.78		300	1809.34	74.78	7.09
	Kuya	11	2402.64	3547.79	200	300	1145.15	47.66	8.46
Lodna Area	North Tisra	10	2980.00	3380.95		300	400.95	13.45	8.87
	Jeenagora	9	2373.22	3629.44		300	1256.22	52.93	8.27
	Lodna	1	3214	3214		200	-	-	6.22
	Bararee W3	2	2093.00	3787.53		200	1694.53	80.96	5.28
Eastern Jharia	Sudamdih	4	3218.50	3254.48		200	35.98	1.12	6.15
	Paterdih	5	3075.00	3075.00		200	-	-	6.50
Average GT (as percentage of total average value of coal lifted from Dhanbad collieries)									9.25

Table 1: Values of coal bid price and GT across the mafia-infested collieries in Dhanbad area.

Source: Author's fieldwork.

5. The Emergence of Labor Relations and the Rise of Mafia: A Story of Institutional Inertia

5.1. Shortage of Labor During the Early Phase of Mining

Modern commercial exploitation of coal reserves began when the East India Company began mining in 1774, in the Raniganj coalfields very close to Jharia.⁷⁷ Mining in the Jharia coalfields began in late nineteenth century with extension of railway lines in the region (Thacker and Rao, 1940, p. 480). By 1906, Jharia's coal production had exceeded that of Raniganj (Gee, 1940, p. 314-315) and it had emerged as the principal coalfield of British India. 1907 and 1908 saw what some commentators call the 'coal rush' of India, with around 50 companies operating coal mining in the region at the time – increasing at a rate of one joint stock company per week.⁷⁸ Indeed, 1890-1913 witnessed a growth of 880% in coal production (as compared to a mere 282% over the preceding 22 years), Jharia leading the coal production of India through the twentieth century (Ghosh, 1977, p. 59-60). The First World War gave a further impetus to coal production and by its end, there were around 200 joint stock companies working in the mines.

The region subsequently went through an enormous demand for labor (Guha, 1973, p. 35-45). This wasn't matched with supply. Numerous reasons were at work. *Firstly*, the two decades preceding the commercial exploitation of coal witnessed the migration of a sizeable population of 20,000 locals due to a lack of work at the time (Rothermund, 1978, p. 8). *Secondly*, during the same period, there were many industries which had emerged in nearby regions like jute and tea which attracted the laborers (Ghosh, 1977, p. 129). *Thirdly*, almost all the local laborers (consisting of tribal origin) were agriculturalists and would spend *only part of their time* every year on agriculture during peak harvesting seasons.⁷⁹ *Fourthly*, and perhaps most importantly, the mining job was extremely difficult for the workers, discouraging the hitherto agriculturalist tribal population to be dissuaded

⁷⁷ The exact account narrates two of East India Company's covenanted servants, John Sumner and S.G Heatly applying for permission to mine in the region, on 11 August 1774. (Later one Redfearne also joined as a joint applicant). The consent was received on 24 August particularly because of the high cost of importing coal from Britain. See, Ghosh (1977), ch.3, p. 34-40. For an account of correspondences between the miners and East India Company, see, Heatly (1842).

⁷⁸ Golden Jubilee Commemoration Volume of the Mining, Geological and Metallurgical Institute of India, Vol. V Part I cited in the Report of the Committee on Amalgamation of Collieries 1956, Part I, pp. 11-12., cited in Ghosh, 1977 p. 46-47.

⁷⁹ Report of the Royal Commission on Labor in India, 1931 points to the link between colliery labor and agriculture (p. 117).

from working there.⁸⁰ Even though between 1890 and 1919 the number of laborers increased (Papendieck, 1978, p. 187), it did not lead to a corresponding increase in productivity (see Table 2) signifying unmatched demand. Labor absenteeism⁸¹ and inadequate mechanization of the mines added to the woes (ibid., and Ghosh, 1977, p. 141). Scholars have suggested that this was a result of ‘parasitical features and functions’ of managing houses⁸² (Papendieck, 1978. p. 224), which focused on short term profits rather than labor welfare and technology. There is no surprise therefore that for decades in the future (the labor demand matched by 1960s-70s with supply), the industry continued to suffer from an effective labor shortage.

Year	Average Daily Employment ('000)		Per capita coal production (ton)
	Total	Underground	
1901*	95	66	82
1913	145 (+52)	94 (+42)	112 (+36)
1919	204 (+40)	128 (+36)	111 (-1)
1926	186 (-9)	126 (-2)	113 (+1)
1930	184 (-2)	126 (nil)	129 (+14)
1936	182 (-2)	127 (~nil)	124 (-4)
1942	246 (+35)	145 (+14)	120 (-3)
1946	367 (+49)	153 (+5)	81 (-33)

Table 2: Dismal pattern of low productivity (parenthesis denote change in percentage).

Source: Indian Coal Statistics, cited in Ghosh 1977, p. 139.

**values are averaged across 1901-1905. All other values reflect averages in interval years.*

⁸⁰ Mahindra Committee reported ‘[o]ver much of the industry, the conditions of labor are still in a shocking state; living accommodation is inadequate and deplorable; educational and medical facilities are scant; and few amenities exist to relieve the strain and tedium of work underground...The mine worker remains attached to his land partly for sentimental reasons and possibly also because of the conditions inherent in coal mining ...’ (Mahindra, 1946 ch. XV, section 3).

⁸¹ Laborers would hardly work for more than four days a week and the trend continued for a long time. Even as early as 1896, the Report of Labor Inquiry Commission pointed out the matter (Deshpande, 1946, p. 36). This was further echoed in Report of the Royal Commission on Labor (1931) and in Mahindra Report (1946).

⁸² The managing houses/agencies were early forms of industrial organization in the region in which “the promotion, finance and administration of a vast agglomeration of miscellaneous and unrelated enterprises...are controlled by a single firm” (Basu 1958, p. 4-5). Therefore, while each company was legally and functionally independent it was the Managing Agency and not the board of Directors of individual company who had real control. There was a heavy concentration of power in the hands of a very small number of managing houses – in 1911, a group of fifteen managing agents controlled 189 industrial units; numbers rose to 61 agents managing more than 600 companies by the eve of Second World War (Mehta, 1961, p. 316-317). The managing agency houses ran most big coal companies during the time, both in Jharia and Raniganj. (Kust, 1961, p. 61-66). These organizations were abolished in 1970s.

5.2. Rise of the Intermediary: *Sardar*

The shortage of a consistent supply of labor created the space for labor intermediaries to emerge in the market. These were labor contractors, commonly called *pahalwan*⁸³ or *sardar*⁸⁴ (referred to as *Sirdar* in colonial literature). Modern terminology also refers to them as *thekedar*, loosely translating as a contractor (labor contractor here). Coal mining is essentially a team work, with individual productivity hardly observable. The metering problem (Alchian and Demsetz, 1972) was glaringly visible here. The *sardars* acted as the monitors, who would not only procure laborers but also tried to ensure that they were productive. The *sardars'* rewards were tied to the productivity of the team (exactly in the manner as Alchian and Demsetz (1972), propose).

The so called *raising contract* system would involve commissioned labor contractors (*sardars*), who would arrange labor on the site, get them to cut the coal and supervise them (Ghosh, 1977, p. 133-134). The *sardars* would also be paid a commission per unit of coal cut by his labor cohort (called *sardari*), while the labor would be paid by the *sardar* from the recruitment allowance that the latter receives (Deshpande, 1946, p. 23). These contractors were also the supervisors of the laborers – their need pronounced because the arduous task of cutting coal needed workers to be ‘disciplined.’

The labor contractors belonged to northern Bihar and eastern UP (then called as United Province), where impoverishment and unemployment was endemic, compelling people to look for livelihood options outside the region. Once they achieved a stronghold with the mine owners and managing houses, they would get many more people from their own villages (and from among local population) to work as labor in the mines.⁸⁵ There was surely an impact of caste-based network in the relationship-driven migration to coalfields. The castes of *Rajputra* (called colloquially as *Rajput*) and *Bhumiyar* from Eastern UP and northern Bihar formed the elites who assumed the positions of *sardars*, while the country folks, people from lower castes and other migrants took to the casual day labor jobs (Heuzé, 1996, p. 145).

⁸³ Pahalwan is a Hindi term for wrestler; here referring to the usually tall and broad physique of the supervisors, so that they look physically intimidating to laborers.

⁸⁴ Sardar comes from Persian word *sir*, which means head (of any living being). It denotes authority, and can signify anything from tribal chief to a patron.

⁸⁵ Records indicate that there was a preference for labor from eastern UP and Bihar because they had ‘greater adaptability than the aboriginals [are] accustomed to the use of explosives... more assiduous and regular workers’ (Deshpande, 1946, p. 115-116).

5.3. Labor Relations in Private Mines: Debt Bondage

Most of these *sardars* were associated formally or informally, at regional and branch levels creating a labor cartel, which worked at their fancy (Heuzé, 1996, p. 133). So, the labor contractors were able to channel the labor supply or dry up the supply of labor, at times when they wanted their demands to be met. *Sardars* effectively act as labor monopolists. They became the market intermediaries for labor and charged a commission from mine owners (state or otherwise) to rescue them from an uncertain situation of labor – something that they would often create themselves (Heuzé, 1996, p. 222). However, a natural question emerges - how would *sardars* achieve continuous supply of laborers who would listen to him?

This was done through creating bondage in laborers. Bondage spreads in cases of shortage in manpower when loyalty is badly needed but cannot be earned. The situation of bondage has a long history in the Indian subcontinent, which became especially acute during the early industrialization phase across mines, plantations and other labor-intensive industries (Heuzé, 2009, p. 147). These industries have deplorable levels of exhaustion which discourages workers to come to the job if there is no urgent need for wages. One way in which the demand for wages and obedience towards the oppressor is cultivated is through creating a demand for money.

Oppressors maintain the demand by offering debt to laborers. The debt serves two purposes: firstly, it ensures that the labor is bonded to the labor contractor, and secondly, it is an efficient way to keep the cost of labor low. Because the labor is bonded, there is no economic sense in paying them just what would be required to keep the workforce. In times of need, they are loaned money at exorbitant interest rates, which ties the worker (and the family) to the moneylender. Hierarchical societies with deep inequalities often develop such bondage systems.⁸⁶

Dhanbad witnessed exactly the same mechanisms emerging. Heuzé's work (1996, 2009) documents this in great detail. *Sardars* would often source labor from outside regions, promising work, money and decent living conditions, nothing of which was eventually offered.⁸⁷ The early cohorts of labor arriving from outside usually took an advance from *sardars*, which bound them to the latter (Rothermund, 1978, p. 9). The debt bondage would start by *sardars* giving mining

⁸⁶ Even though bondage was legally abolished in India in 1976, the practice still remains. By some estimates, around half of the 30 million migrant workers in India are recruited through labor contractors, and many, if not the majority subsequently (and consequently) enter into some form of debt bondage (Lerche, 2010, p. 73).

⁸⁷ Heuzé (2009, p. 156) notes that legal aspects of contract coupled with deception and coercion has been a common feature of industrial relations in India since the beginning of colonial era.

tools to the labor on debt and would continue with several monetary advances that the laborer would need in time. The common interest rates prevailed at 240-560 per cent annually (Heuzé, 2009, p. 157). To continue the demand for debt, many *sardars* operated alcohol shops which forced labor into bondages further (p. 147).

This was also possible due to the ‘overwhelmingly powerful position’ of *sardars*, and their ‘intimate local and private influence’ (Heuzé, 1996). The subservience of these very laborers bought by *sardars* through debt bondage and loans (p. 134) is a practice which is ‘as old as the coalfields’ (p. 222) and moneylending is ‘*integrated in the ensemble of patronage realities*’ (p. 223). This subservience can also be viewed as further intensification of feudal and hierarchical milieu in which the *sardar*-labor relations were historically located. These hierarchies command subservience at multiple levels – caste, gender, age and class. In this way, the *Sardar* holds a unique position in social hierarchy of the region, which is manifested by the bondage that they exercise. Breman’s (1974) famous paradigm of coexistence of patronage and exploitation finds its typical application here.⁸⁸

Note that the bondage may well mean voluntary choice (Genicot, 2002). Studies on tied-labor agreements show how it becomes beneficial for both parties to enter into a tied agreement of master-labor relationship – for instance when risk-averse laborers get an insurance against wide job market fluctuations (Bardhan, 1983). For an immigrant risk-averse laborer in Dhanbad, the only way of securing a job at a colliery is to gain membership of one of the *sardar*’s cohorts. The *sardar* offers debt to the laborer during times of need and thus binds him further. The theory of adverse incorporation (Wood, 1999; Hickey & du Toit, 2007; Phillips, 2011) also illuminates the adverse terms which laborers agree to accept to join the employment. In particular, one of the insights proposes that poverty necessitates prioritizing short-term gains and practical needs at the expense of long-term strategies for accumulation and achievement of security (Wood, 2003). Important here is to appreciate that, while the entry into the bonded labor market seems to be voluntary, the key is the legitimacy of the set of options available to the laborer at a given time (Genicot, 2002, Steinfeld, 2001). This legitimacy crucially depends on their existing vulnerability, which may be exacerbated by the enmeshed social and family structures of their obligations (O’Neill, 2011). The conditions of bonded labor are therefore not *ex ante* forced, but manifested in the lack of exit options for the laborer. This is created by withholding payments, threatened or actual violence, indebtedness and/or confiscation of documents (Phillips, 2013, p. 178). These

⁸⁸ See also, Breman (2007, 2010)

vulnerabilities are also high for migrant workers (Bauder, 2006; Cohen, 2006). This is exactly the case of bonded labor in Dhanbad.

Even today, moneylenders in Dhanbad largely comprise of the erstwhile colliery owners and *sardars*.⁸⁹ Large numbers of mine workers are indebted for life and some official efforts towards ‘rescuing’ them have been mentioned.⁹⁰ These moneylenders are ‘*the pehalwans and musclemen, having active links with the lower echelons of the management of the BCCL and sections of trade union leadership. Their methods are certainly ingenious; forging loan documents, or persuading a borrower to sign blank sheets of paper, plain blackmail, and occasional snatching of a worker's paypacket are only some of the methods adopted by the moneylenders.*’⁹¹ In many cases, a typical moneylender would be a trade union leader as well as an employee of BCCL (Sinha, 1976, p. 53). Indeed, the ‘*careful perpetration of primitive cultural practices... which drives the workers to drink and indebtedness*’ (Dhar, 1979, p. 691) is a characteristic of Dhanbad.

5.4. The Rise of Labor Unions

The labor unions of India were to a large part, byproducts of the freedom movement. The nationalist leaders thought of unions as a powerful medium to organize people in large numbers against the British (Heuzé, 1996, p. 309-310). Given the concentration of sizeable labor in the coalfields, it is no surprise that unions made inroads there in the 1920s (Roy, 2013, p. 102). National sessions of unions like AITUC (All India Trade Union Congress) in Dhanbad were unprecedented shows of labor strength that were unseen in mining territories until then. The *sardars* noticed these changes taking place at political levels and the power was attractive. Being endowed with chunks of labor cohorts, they felt their comparative advantage in assuming the role of union leaders. The labor unions therefore emerged in a top-down fashion in this region. Instead of a labor collective electing their leader, the labor intermediary (*sardar*) became the self-appointed leader of a union that was created by his own bonded labor.

⁸⁹ See for instance, Correspondent (1976), “At Moneylenders’ Mercy,” 11 (11) *Economic and Political Weekly* 409. See also, Sinha (1976), in which author narrates the story of a woman in the Dhanbad coalfields who had taken a loan of Rs. 400 several years ago, but had already paid Rs. 4800 as interest when author met her. In another case, a middle aged worker had paid Rs. 9600 for a loan of Rs. 200 he contracted for ten years earlier.

⁹⁰ One of the records mention about someone called Ania, who had taken a loan of Rs. 600 in 1960 with a monthly interest rate of Rs 60. This continued until 1976 when he was rescued by the administration. In another case, a sweeper and his wife were paying Rs. 140 out of their total earning of Rs. 160 towards a loan they had contracted. During 1976, the moneylenders have been known to charge 10% weekly. See *ibid* (Correspondent).

⁹¹ *Ibid* (Correspondent).

By this time, legislation had been promulgated (Indian Trade Union Act, 1926) to formally institutionalize trade unions in India. This Act allowed the formation of a union with a minimum of seven members (section 4); immunized the office bearers of the union from conviction (with reasonable restrictions) (section 17 and 18); suggested guidelines for the use of union funds, including salaries of office bearers (section 15 a), recommended an allowance for members suffering illness/accidents (section 15 f and g), and even the use of union funds for political purposes (section 16). Crucially, not all office bearers (only a certain proportion⁹²) of the trade union were supposed to be actually engaged or employed in the industry with which the union is associated (section 22). In addition, it did not have any provision for the disqualification of office bearers⁹³ and amalgamation of trade unions was allowed (section 24), which could make them bigger and more influential.

The provisions of the Act – as can be seen – made it tempting for anyone in power or popularity to be a union leader. The Act also vested significant powers in the hands of the union office bearers. As Weinstein (1966, p. 404) reminds us, *‘one necessary condition for the development of racketeering in the labor movement was the development of a favorable policy towards organized labor.’* The *sardars* took this opportunity of exploiting the favorable legislations. Through support of the mine owners, whom the *sardars* had historically been colluding with against bonded laborers, the *sardars* created unions and became their leaders. The classic agency cost naturally crept in. The labor was disempowered, and employer-*sardar* nexus seamlessly transferred to the employer-favoring inclinations of union leaders with little voice to the workers.⁹⁴

This is an important lesson for legal design and policy making. Incentive structures are primary nodes around which institutional design must be weaved. With a lack of appropriate incentives in place, relationships will always be biased in favor of the more powerful party. Laws which govern relationships within an organizational framework should be particularly mindful of these risks. It

⁹² This proportion is 50% by way of amendments, as of now.

⁹³ This was added as section 21 A by amendment in 1964. Now, the disqualification is in the event of young age (less than eighteen), and conviction. But office can be held if five years have elapsed from the release.

⁹⁴ It will be pertinent at this juncture to observe the interesting parallel in the motivations of union leaders in Dhanbad from pan-India unions at large. Chibber’s (2005) insightful work shows us that post-independence, organized labor allowed its own political agenda to be assimilated by the ruling Congress party’s priorities, which favored capitalists and employers. Through historical facts, he shows that the roots of the Indian working class’ organizational weaknesses lie in the State’s deliberate efforts to make alliances with domestic capital which compromised the labor question right after independence, and the labor leaders’ strategic error of subordinating their interests in favor of a political alliance with the ruling party (p. 34). The unfriendly institutions prevailing then magnified these weaknesses (p. 33), and the mistakes of the past still hold lessons for the present (p. 34). A very stark illustration is found in Dhanbad.

is also important to contextualize this law making exercise. In a setting where union leaders are expected to appropriate the power relations the law is seeking to create, it is absolutely essential to embed provisions in the same design, which arrests the possibilities of misuse of such power. This never happened in the Jharia coalfields.

Additionally, a consolidated worker-friendly labor union did not develop in the region due to the overwhelming proliferation of small mines in the region, which continued until nationalization in the early 1970s. These tiny mining units were unorganized, contributed little to the overall production and were worsening with time.⁹⁵ For instance, by the time mines were nationalized in the early 1970s, 61% mines were unorganized and private in nature, producing merely 10% of total coal.⁹⁶ This implies that these small mines presented an obstacle to the systematic exploitation of coal reserves, thereby calling for their amalgamation with bigger mines – but it never happened due to the government's indifference.⁹⁷

Table 3 offers some insight in this direction. Even though they had a significantly higher share of employment collectively; at the individual level, the labor cohorts from these mines were very small. During 1955, 50% of the mines employed not more than 150 workers, and this share reduced only to 41%, even when output doubled over this period.⁹⁸ This shows that labor was extremely fragmented in the region. These small units of labor could never muster up an informed thinking or courage to develop themselves into a cohesive union which favored their own cause. On the contrary, their rights were appropriated by their *sardars*, who focused on material gains from the mine owners.

Even the bigger mines were characterized by labor centric production, reflected by a lack of mechanization and woeful labor conditions (Srivastava, 1979). Indeed, even as late as 1945, only 16% of the coal mines were electrified, and yet they produced 64% of total output (Ghosh, 1977, p. 151). Indeed, the profits of small mines were dependent on how much of it could be squeezed from the labor's wages – indeed employed laborers were paid significantly lesser than the statutory wages (Kumar, 1981, p. 759).

⁹⁵ The data that follows here has been compiled from various reports by Kumar (1981)

⁹⁶ Calculated from Kumar (1981, p. 758).

⁹⁷ The effort towards rationalization of the structure of the small mines was taken up by the Committee on the Amalgamation of Collieries in 1955, which proposed a legislative intervention to compulsorily amalgamate small mines. The government ignored these recommendations and opted for voluntary amalgamations. Given that at their micro level, these small mines were profitable, voluntary mergers hardly happened. See, Reserve Bank of India, (RBI) Report of the Working Group on Coal Industry, Bombay, 1972; p 6

⁹⁸ Calculated from Kumar (1981. p. 758-759)

Number of workers: series 1	0-50	51-150	151-300	301-500	501-1000	above 1000		
1955	240	185	149	90	90	99		
1957	194	181	158	101	104	104		
1959	207	178	145	93	112	119		
Number of workers: series 2	0-50	51-150	151-250	251-400	401-800	801-1200	1201-1600	above 1600
1960	185	178	111	90	124	66	46	48
1963	162	177	122	91	141	70	50	66
1966	157	156	98	99	131	73	44	65
1969	145	137	84	92	145	66	41	58
1971	155	163	80	90	128	68	45	52

Table 3: Size of mines by daily employment.

Source: Kumar (1981)

5.5. Nationalization of the Coal Mines

The proposal for state acquisition of the coal mining industry was executed in 1971 and 1973 (in two phases), as an attempt to achieve the development and socialist goals of the government. The announcement of a government take-over of private mines was made public just a day prior to the order. At the time, the government also announced that all mine employees and workers would be retained under the State-owned enterprise, and that there would be no layoffs. For this purpose, the government asked the private mine owners to provide lists of staff and workers in their mines.

This was seen by the colliery owners and *sardars* as an opportunity, not only to acquire a permanent government job, but also to expand their networks in the proposed State-owned enterprise. This, they realized, could be done through filling the State enterprise with people from their own networks. Since the lists of workers never existed in small collieries, the colliery owners and labor contractors had to *create* these lists overnight. And overnight they did create it - populating it with new names of people who had never worked in the mines but who could be called upon from their villages. Many *sardars* inflated these lists, with names of their entire villages⁹⁹ jotted down. Many of these names were fictitious – the idea was to bring someone known later, and a new name would be given to him. The existing laborers were loaded up in the roster as well.

⁹⁹ I was told even the names of domesticated cattle were put up in the roster.

This was unprecedented, and was set to change the structure of labor-relations in the industry for time to come. The new State entity, Bharat Coking Coal Limited (BCCL) soon found on its rolls – mainly at the lower echelons – many of these *sardars*, their relatives, friends and other acquaintances. As Dhar (1979, p. 691) notes, *‘just before the formation of BCCL, Surajdeo Singh [a prominent mafia and labor union leader of his time] had all his men posted in key positions as payment clerk, surface-in-charge, camp-lamp-in-charge, overseer, etc. All these people, approximately 500 in number, were absorbed by the BCCL, thus enabling Surajdeo Singh to influence management decisions and grab the lucrative contracts for coal transport and sand-stowing.’*

Over time, they offered jobs to many more of their relatives and BCCL was soon full of corrupt officers, colluding with their patrons. The unions in BCCL were formed soon with many of the powerful *sardars* or their acquaintances acquiring prominent leadership positions. The labor – as earlier – obeyed the *sardar*, and not a new bureaucrat who was to supervise production in the mines. The management succumbed to the old power structures as it found it increasingly difficult to subvert the interests of those who handled things on the ground. BCCL reflected a new bottle that was filled with all old juice, which had not changed in its color or smell. Heuzé (1996), strikingly notes, “...the nationalization of the coal mines ... did not only induce an unprecedented expansion of patronage and a parallel economy in Dhanbad, but it was also the moment of a significant change in social relations...” (p. 360).

6. Making Sense of the Mafia Today

We can see how the hypotheses developed in section 3 are satisfied in the preceding discussion. *Sardars* emerged as labor intermediaries in the mines – which were characterized by the metering problem – given the shortage of labor during the initial several decades (*hypothesis 1*). This made them indispensable over time. As patrons of the laborers, who they would bring from regions like Eastern UP and Bihar, they would constantly exploit the laborers, bonding them in ties of caste, debt and obligations. When unions were introduced into the region, they – unsurprisingly one can say now – assumed the positions of union leaders.

We also noticed, evinced by the debt and other forms of exploitation that labor unions may have experience agency problems, in part because of the *sardars* coming from other (higher) castes. More importantly, none of the *sardars* actually rose to union leadership from within the ranks of union members. They had never been laborers themselves, but only labor intermediaries. This led to an exacerbated agency problem in the union where union leaders and union members did not

have their interests aligned (*hypothesis 2(a)*). Union leaders (*sardars*) colluded with the employers at the expense of union members (laborers) for several decades, until the leaders formalized their position by contesting elections and becoming political leaders of the region. One of the reasons they could continue in their exploitative role, without suffering from internal rebellion is because they had bound the laborers through various informal arrangements, like debt and obligations (*hypothesis 2 (b)*). We will dwell on these arrangements in detail in next section.

Then, during nationalization, a change of ownership took place without any significant institutional alteration and led to the continuation of the same labor relations that had been carved out over the past seventy years (*hypothesis 3*). The *sardars* further intensified the fossilization of the labor apparatus of the industry by bringing more laborers from their native villages, and binding them to the same cultural and relational patterns that had existed. In addition, to continue their dominance in the industry, they also used this opportunity to push people from their network into the newly formed State entity, BCCL. In times to come, this paved the way for solidifying their position in the industry.

Forty years since nationalization, the labor cartel has intensified over time, and labor unions continue to control power in the collieries. The union leaders have begun contesting local elections and securing their power through democratic processes. The first mafia in the region was B.P. Sinha, who rose to prominence as a labor union leader in the 1960s. He mobilized the labor under him on promises (many of which were indeed delivered) of labor welfare, and began extorting money from coal buyers and mine owners.¹⁰⁰ His power came from the massive labor monopoly he had. The poster child of the Dhanbad mafia was Surya Deo Singh. He was born in a small town of Ballia in eastern UP, and began his stint as bodyguard of B.P. Sinha. He was also a small time moneylender in the Borahgorah coal mines (Dhar, 1979, p. 691) and after Sinha's death, assumed power. He started his own union, *Janta Mazdoor Sangh*,¹⁰¹ which has '*long exerted influence over BCCL officials, who allow [their members] to run rackets that include theft of coal to sell on the black market and controlling trucks that leave the mines*' (Daniel and Williams, 2014). He developed strong connections with the State bureaucracy to secure all major public works and labor contracts. He contested in elections of the Bihar Legislative Assembly and won a seat. His popularity grew. He would hold large gatherings and meetings in his palatial home in Dhanbad, and by the early 80s, he owned more than a hundred lorries, three cinemas and several real estate

¹⁰⁰ BP Sinha was a school teacher when he joined the Socialist Party. Later, Congress co-opted him to look after their trade unions in the region. B.P. Sinha is considered to be the first mafia of Dhanbad.

¹⁰¹ For union's interaction with political changes in the country during late 1970s, see A.S. (1980), "New Aspects of Coalfield Politics," 15 (49) *Economic and Political Weekly* 2046.

properties (Heuzé, 1996, p. 234). The norms of labor union cartelization and mafia-type activities, as seen through the pilferage and sale of coal in black markets, falsified workers' contracts, illegal warehouses and coal sale, stealing coal, non-performance of government's contracts and indeed, appropriating tax from coal buyers, became commonplace. In time, the mafia assumed a more plebian and populist appearance condemning policies of the government and colliery administration, sympathizing openly with miseries of the working class, undertaking popular and visible measures of redistribution. While simultaneously manipulating workers through threats and bondage measures that carried on. Everything happened with the tacit collusion of both the State and its administrative and judicial wings in connivance. Singh contested elections from the Jharia constituency, winning in 1977, 1980, 1985 and 1990. He died in 1991. Today, the legacy of the institution of the mafia he created is carried forward by his family, referred to in local media as 'Singh Mansion.' His younger brother Ramadhir Singh took up the empire, who is now joined by their sons Sashi and Sanjeev.

Over time, many other families have followed a similar pattern. A rival gang was started by Suresh Singh, who had a similar history. Suresh Singh was the prime contender of 2009 elections but lost to Kunti Devi, wife of Surya Deo Singh. He was later shot dead at a wedding in December 2011 by the Singh Mansion gang. Satyadeo Singh was an ex-colliery owner who had to sell off his mines during nationalization (Dhar, 1979, p. 691). He became a contractor for laborer due to his connections with *sardars*. Another mine owner was Navrangdeo Singh who has also followed suit (ibid.). In last few years, Dhanbad has witnessed the rise of a mine worker Dhullu Mahto, belonging to one of the local communities, who has begun to challenge the Singh Mansion. His rise was very similar to that of BP Sinha. He slowly organized workers under him and made his union. He attracted the workers of small coal companies – these companies outsource mining from small pits for big companies. They look for contract work, and Dhullu Mahto has slowly mobilized them under his union. Called as the 'new mafia' by people in Dhanbad, his influence can be felt in many collieries that have become his empire (Daniel and Williams, 2014).

7. Institutional Analysis of the Mafia's Relations with the State, Buyers and Labor

Tullock's (1967) and Kreuger's (1974) imagination of rent seeking may find a suitable description in the mafia activities in Dhanbad, particularly after delving into the historical narrative. The mafia's existence rests on their position as labor union leaders which enables them to extract heavy rents. To further understand their position and how they appropriate rents, we examine the manner and reasons for which laborers, buyers and the State tolerates the mafia's rent seeking behavior.

It is clear that mafia organizations operate triangular and independent relationships between the coal buyers (who they collect GT from), the laborers (who they keep tied to themselves) and the State (through BCCL and its corrupt officials). An institutional analysis into these three relationships helps us to dig deeper into what enables the mafia to sustain its exploitative and often-violent tendencies. We are concerned here, with the institutional reasons that incentivize the bodies of labor, buyer and the State to continue tolerating the activities of the mafia. While history guided us to see the sources of mafia, this section helps us to understand the sustenance of the same.

7.1. Toleration by Laborers: The Union's Informal Arrangements to Tie the Workers

How does a labor union in a democratic set-up achieve its objectives of engaging in mafia activities and still assume a position of power? Indeed, unions are elected democratically and on paper fulfill all its regulatory obligations. Yet, they are able to run their illegal activities in a highly transparent manner. To understand this, we need to understand the social context in which unions emerge and the picture of social relations that underpin the labor relations observed. As Dhanbad shows, it hovers around (a) caste-based relations, (b) debt bondage, and (c) threat.

7.1.1. Caste

The caste system in India is a deeply entrenched form of social hierarchies that segregates people along occupational lines. The categories are highly feudal in nature, with upper castes enjoying a status of respect, while lower castes remain subservient to the upper ones. Centuries of domination and control by the upper castes over lower ones has produced a very consistent set of relationships that permeate through all regions of the country. In fact, caste-based preferences have trumped market-based expectations – something theorized by Akerlof (1976) long time ago.

Almost all workers in mines come from lower castes of the region and their originating villages. All labor leaders belong to the upper caste. The domination of the upper caste that mandates respect and veneration is an informal institution that workers are little able or desirous to deviate from. When an upper caste *sardar*, or a labor union leader asks for support, the lower caste workers feel socially compelled to give it. My fieldwork exhibited this consistently. And since caste is hereditary, the means of social control becomes permanent over time through intergenerational osmosis. As people belonging to the upper caste, the union leaders enjoy a considerable patron-type respect. Indeed, to sustain the feeling, they offer widely publicized working class favors. For instance, fighting for the reinstatement of workers' jobs, enabling some of their rights that are not

too costly, offering them money during illness and for their children's marriage are some of the similar things.

Indeed, none of the labor union leaders have emerged from the working class (except Dhullu Mahto, alluded to above). They all come from outside, lured by profits and domination, and continue to operate in the political process. They have strengthened their hold through dynasty politics which utilizes the caste-based hierarchies of the region.

7.1.2. Debt

Debt bondage has continued entirely in an informal manner, with little support from formal law and channels. The interest rates hardly reflect market values and run on the fancies of the union leaders. This opacity is due to the cartelization of labor, and the caste networks which forbid escapement. Due to the hereditary transfer of obligations in social settings of the region, the end game situation never arrives. The debt and patronage extends across generations. The de facto social contract mandates that sons will repay the sums owed by father, and this is one of the primary reasons for the persistence of debt bondage across India (Bremar, 2007). Over time, the bondage has occupied the role of neo-bondage, signifying a less personalized, shorter term, more contractual and monetized arrangement (Bremar, 2010).¹⁰²

7.1.3. Threat

Finally, the mode of tying comes in form of direct threat. Workers who do not comply with expectations laid on them by union leaders are simply killed. Documentary evidence of the killing of miners is not unusual if one looks at newspaper reports, yet, several deaths are hardly reported (a fact that surfaced during my fieldwork). Of those that are, there has been little State intervention or prosecution largely because the reports are not filed for homicide. Rather, the death is considered a natural cause. The threat of life may not impinge on a miner not loading a truck, but perhaps one who is instigating others against the leader. Betrayal and inflammatory rabble rousing attracts the biggest threats.

¹⁰² The Indian social fabric asserts hereditary privileges as well – institutional provisions favor hereditary hiring in BCCL, with almost nine trade unions in the coalfields coming together in 1986 and demanding that preference for descendants and other relatives of existing employees during recruitment should be made systematic (Heuzé, 1996, p. 324).

7.2. Empirical Evidence for Toleration by Laborers

It is unclear however, the extent to which each of these factors contribute to the bondage compulsion. I conducted fieldwork which verifies these claims and suggests that debt obligation is perhaps the strongest factor binding laborers to the *sardars*. An independent viewpoint is developed through talking to the workers themselves. During May 2014, I had a chance to interact with 18 miners (all male) in a particular colliery dominated by Singh Mansion. The responses verify the ideas developed above. To keep it objective, all my questions had a Y/N answer. See table 4 below.

QUESTION	Response: Yes	% saying yes
Do you owe money to the sardar	16	88.89
Have you ever taken money from sardar for emergency	18	100.00
Have you ever thought of boycotting the payment	1	5.56
Are your payments always on time	15	83.33
Are you carrying forward the debt of your father/parents/uncles	9	50.00
Do you take loans from banks (only through sardars)	2	11.11
Have you visited a bank branch	1	5.56
Have you complained about usurping to police or BCCL	0	-
Do you pay a monthly interest rate of 8-10%	18	100.00
Does more members of your family work around here in mines	16	88.89
Did your father work here as well before you	15	83.33
Do you originally belong to this region	9	50.00
Do you belong to lower caste	17	94.44
Can you read/write	1	5.56
Do you know that you have a, b, c rights	1	5.56
Has union helped you in medical emergency	17	94.44
Has union helped you in court cases, and other disputes with BCCL	15	83.33
Are you teaching at least one of your children	14	77.78
Do you think you want your children to work in the mines	0	-
Do you think they will end up working in the mines	13	72.22
Has the sardar visited your house	17	94.44
Do you like your sardar	17	94.44
Did you vote as he suggests, to the union leader	17	94.44
Would there be a problem if you hadn't voted for him	16	88.89
Has anyone of your family member been killed due to labor conflict	1	5.56
Have you known of at least one instance of a miner homicide	16	88.89
Were they killed by union leaders	0	-

Table 4: Results of interviews with 18 miners in a mafia-infested colliery

The table indicates very crucial pivots over which union loyalty revolves. Debt indebtedness proliferates until this day. At the same time, engagements with formal banking are virtually non-existent. This is an important point. Due to hereditary linkages, debt is carried forward, and due to the institutional features of feudalism generated by the caste-system, boycotting the payment is really not an answer. Workers don't want their children to follow their occupation but are still not very hopeful because of various forms of informal tying arrangements. Workers also exhibit some sort of duty-bound respect for the *sardars* and union leaders, suggesting that they may have helped them materially at some point. Threats are commonplace, although openly citing them is rare, as my interview revealed. Most of the workers are inadequate in their educational attainments and hardly aware of their rights. Union leaders utilize this opportunity, as demonstrated by the moneylending rate of close to 8-10% in the region (at the time of interviews), which is exceedingly high and makes escaping the debt trap virtually impossible.

7.3. Toleration by the BCCL

If the labor union's labor monopoly poses a significant cost to the employer, one can imagine some level of resistance to emerge. The employer (BCCL in this case) may attempt to check growing union's power by assuming control over union behavior through direct negotiation or indirect political influence. For militant-type unions (Reid and Kurth, 1990), the legitimate use of force from State enforcement apparatus may be used. But unions in Dhanbad have an option to respond through the political mobilization of workers that would thwart BCCL's efforts. Considerable research has shown that labor unions are often politically connected, which inflates their power.¹⁰³

¹⁰³ For a rich review of earlier literature, see Masters and Delaney (1987). In particular, the union-political party alliances has been a prevalent form of industrialization in all industrialized nations, with the 'reservoir of working class votes' (Piven, 1992, p. 2) fueling the growth of socialist and labor parties. Unions who founded political parties in countries like Britain, helped found them in places like Denmark and Norway, and were set up by political parties like in Italy, France and Germany (Streeck and Hassel, 2003; Von Beyme, 1985; Western, 1997). Intuitively, this is not difficult to imagine. Unions have control over large masses of voters, and are in advantageous situation to swing political wave towards any direction.

Streeck and Hassel (2003) offer an illustrative account of this relationship in the *International Handbook of Trade Unions*. Through their study of the genesis of unions in the US and Europe, they show that (a) dominant unions are politically unified, (b) politically fragmented unions are usually highly politicized, and (c) the more politicized trade unions are, whether politically fragmented or otherwise, the more encompassing they are in industrial terms (p. 343). A preliminary look at unions around the world shows the convincing power of this argument. Elsewhere, Masters and Delaney (1987) give an illustrative account in their literature review of the importance of the union-politics nexus. They show that usually, union members support their union's political involvement (p. 338), there is a distinct 'union' vote in national elections (p. 343), unions are also explicitly involved in host of electoral processes, including campaign financing and lobbying legislators (p. 344). Freeman and Medoff (1984, p. 206) label unions as 'political powerhouse,' if one looks at the resources used in political contestations.

More importantly, this also erodes the motivation of the employer because union leaders can mobilize their workers against the employer. If the employer is the State, the motivation is further reduced.

Secondly, and very importantly, union leaders in Dhanbad have bought-out the employer since (a) the rents they seek are sufficiently high, and (b) the employer is a State-owned enterprise and they can be bribed affordably. Here, for the state apparatus and BCCL, the case is simply a redistribution of rents. Corruption in India's coal sector is widespread. Mafia bodies have bribed the State agencies to the extent that bureaucrats and civil servants that act harshly on mafia activities are soon transferred to other locations.¹⁰⁴ The BCCL officials collude with unions to ensure their rents are guaranteed and State-owned enterprise suffers.

One of the ways to explain why it would be optimal for the employer, BCCL in this case, to collude with the labor contractor, is to use a game theoretic framework with the two players having two different strategies. BCCL is the principal, which employs laborers in the mines through the labor contractors. The labor contractors are union leaders who control the laborers and extract the rents through engaging in mafia activities. The rents impose a cost on the organization and its employees. The workers tolerate it since they are bound through informal arrangements and are usually threatened. Here, I show, why would BCCL tolerate it and furthermore, why collusion between BCCL (principal) and the mafia (intermediary) is sustainable.

I follow Marjit, Rajeev and Mukherjee (2000) here. Assume that the BCCL officials, who are the agents of some principal, like, say, the State are capable of reporting the crime to higher officials where indictment is confirmed. There is an effort e exerted by the agents to detect the criminal activities of the labor contractors, and they suffer a cost of $c(e)$. It is also assumed that $c'(e) > 0$ and $c''(e) > 0$. This means that the disutility of exerting an effort increases at an increasing rate.

Indictment of a contractor depends on the probability p of detection, which is an increasing function of e . In other words, probability of detecting a contractor is therefore: $p(e)$, where $p'(e) > 0$ and $p''(e) < 0$. This means that the probability of detection increases at a decreasing rate.

¹⁰⁴ This was revealed to me in an interview with a Superintendent of Police of the region, Ms Kusum Gupta, who was removed from Dhanbad when she cracked down on mafia plans vigorously (see also, section on Methodology in Chapter 1).

Also, agents (BCCL officials) may not have endogenous incentives to report the crime since the net loss to the organization due to unhindered mafia activity is not imposing any cost on them. This is a natural byproduct of a public limited government-owned enterprise.

The contractor, if indicted will pay a fine of αR , where R is the payoff arising out of the mafia activities and α is the penalty rate, $\alpha > 1$. The contractor here has the option of offering a bribe B , to the BCCL agent, where $B < R$. However, the agent may be caught receiving the bribe with a probability q and may have to pay a fine of L . Hence, payoffs for the agent when s/he receives bribes is, $B - qL$. Note that both q and L are exogenously determined and are dependent on how much the principal (the government here, for instance) is honest and alert.

Both the players have two strategies. The BCCL agent may choose to indict (or report, or catch) the criminal labor contractor, or not to indict. The labor contractor may choose to engage in mafia activity or not engage in it. The sequence of moves will be, first, the agent deciding the level of effort, and secondly the contractor deciding whether to engage or not engage in mafia activity. Finally, the agent decides whether to report or not report. Indeed, the only reason why an agent will not report is if s/he is given the bribe.

CASE ONE (Agent reports, Contractor does not engage in mafia activity)

$$\text{Payoffs for Agent: } \pi_a = -c(e) \quad (1)$$

$$\text{Payoffs for the Contractor } \pi_c = 0 \quad (2)$$

CASE TWO (Agent reports, Contractor Engages in mafia activity)

$$\pi_a = -c(e) \quad (3)$$

$$\pi_c = R\{1 - p(e)\} - \alpha R p(e) \quad (4)$$

CASE THREE (Agents accept bribe and does not report, Contractor does not engage in mafia activity)

$$\pi_a = 0 \quad (5)$$

(Note that contractor will not bribe when s/he is not engaging in mafia activity)

$$\pi_c = 0 \quad (6)$$

CASE FOUR (Agent accepts bribe and does not report, Contractor engages in mafia activity)

$$\pi_a = (B - qL)\theta_i p(e) - c(e) \quad (7)$$

$$\pi_c = R\{1 - q\} + (R - \alpha R)q \quad (8)$$

The dominant strategy for the agent is not to report when the contractor is honest. The agent is better off not exerting the effort e when the contractor is not engaging in any mafia activity.

When the contractor is engaged in mafia activities, the agent can either remain honest and report the activity, or take a bribe and tolerate the activity. This will be true if

$$(B - qL)p(e) - c(e) > -c(e) \quad (9)$$

$$B > qL \quad (10)$$

But is engaging in mafia activity, the dominant strategy for the contractor? Indeed, this is the case, since engagement in mafia activity always gives a positive payoff to the contractor as long as $R > B$, which will be the case, as long as both α and q are small (see (8) above). For a public sector organization in a country with high levels of corruption, the value of q is rather low, which also encourages (10) to satisfy. The Nash bargaining solution could therefore, at low values of α , be when the contractor engages in mafia activities and offers a bribe to the agent.

7.4. Coexisting the Mafia's Welfare Loss and Toleration

Here, we illustrate that the intermediary can often result in a joint-payoff reduction when he steps in, unless he contributes to the joint surplus. Imagine the payoff function for agents and employees (laborers) as denoted in figure 3, where Y and X axes represent the payoffs for BCCL and employed laborers. When an intermediary in form of a labor contractor appears in the picture, the total amount of rents shared between BCCL and the laborers is reduced. This is depicted in the dotted line. However, when the intermediaries push the Nash equilibrium from E_1 to E_2 , the net payoffs of both parties is reduced by δx and δy for laborers and BCCL agents, respectively. The labor toleration comes from the informal arrangements of tying (caste boycott, indebtedness and threat) and pose a higher cost than δx to laborers, while that of BCCL comes through bribes, where $B > \delta y$. In fact, for as long as $B > \delta y$, it is indeed in the interest of the agents to continue to receive bribes and let the contractors continue their mafia activity.

In addition, mafia contractors have offered a service in the collieries, namely organizing laborers for the teamwork production of coal. This has addressed the metering problem historically, and BCCL officials tolerate some of the mafia's activities implicitly in lieu of this service. Further, many of these BCCL officials have colluded with the union leaders since nationalization, owing to the informal connections that characterize the nature of such quid pro quo relationships.

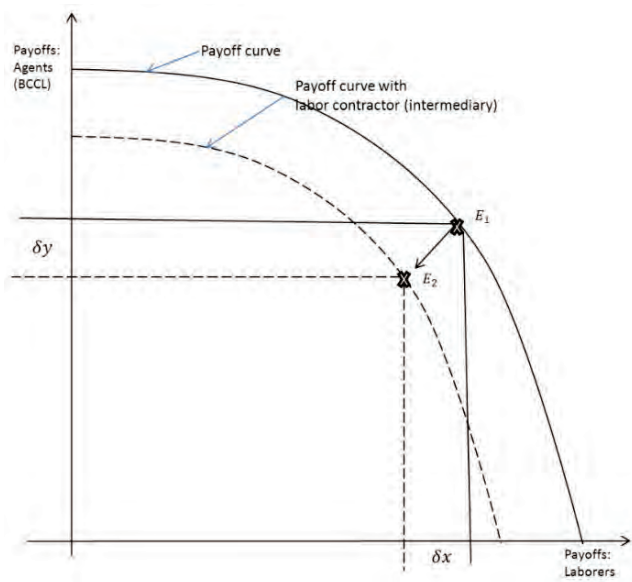


Fig. 3: Shift in Nash bargaining solution due to the presence of a mafia intermediary. If however, bribes to agents are greater than δy , and laborers are tied through other informal arrangements escaping which is costlier than δx , the new equilibrium E_2 will be sustainable.

The result may be disturbing: with corrupt officials, it may be impossible to deter mafia activity. But this is the fact about why and how BCCL tolerates the mafia. At the same time, the incentives for laborers to rebel against their exploitative leaders is thwarted through the host of informal modes of tying arrangements that the leaders adopt.

7.5. Toleration by Coal Buyers

As far as coal buyers are concerned, they get the service of sorted coal and therefore are also not the real victims since they can always transfer the costs to the final consumers. Being spread geographically and thinly sharing the cost, they also suffer from the classic problem of collective action, thus failing to assert their voice collectively. They remain satisfied with the cost of having an extra service and passing the cost to consumers as long as it is fixed, which it indeed is. The key here is the certainty in the transaction. My fieldwork indicates that those costs do not change since the relationship between the mafia and the buyers over time has become stabilized. This is not to say that the buyers would not welcome mafia closure, but their toleration is rather easily rationalized.

Coase's 'Payola' paper (Coase, 1979) helps us explain the behavior of coal buyers analytically. In understanding the history of payola payments and arguing for the inefficiency of banning such payments, Coase extolls the inherent value of those payments which may also be depicted in the coal case. In the radio and television industry, payola payments were 'bribes' paid to include certain material in the broadcast program. Its ban in 1960 was motivated by beliefs that not only will small music publishers be disadvantaged in this system, but also that merit will become secondary to ones' ability to pay payola. Coase challenged these views suggesting that firstly, most small publishers had thrived under payola and actually resisted its ban, and secondly that radio stations will only accept an optimal number of payola payments since they are sensitive to airing poor music. It will not be in their interest to air only payola-paid poor music because they don't want to lose their consumers. Coase argued that payola introduced a price system which allocated resources efficiently in the music industry.

The mafia in Dhanbad charges a payola-type payment, although the difference is that the bribe-givers (traders) do not necessarily have an option. An alternative way to view this transaction is to see if buyers would offer payola-type payments to the mafia if they had not been coerced? If the fee is fixed, they would surely pay an additional charge to ensure the loading of proper coal (and not stone boulders) into their trucks. And to avoid the transaction costs of dealing with miners, they would much rather contract with the miner leader, the mafia himself. For the coal buyers, analytically there is no difference between a service charge and the goon tax (bribe). From the mafia's standpoint too, the value of goon tax will be an optimal value that ensures the buyers do not switch collieries. This is indeed, not to say that coercion in mafia-driven mines is a socially desirable activity. As that is why their activity is another form of rent seeking. However, from the buyers' perspective, toleration is not difficult to imagine.

8. Preliminary Findings and Proposals for Reforms

The paper showed how the rent seeking of labor unions may turn into mafia organizations in an industry characterized by agency problems embedded within. It has two seemingly conflicting propositions that are advanced simultaneously. Firstly, it shows that labor unions could turn into highly exploitative machineries. When laborers are politically weak, dispossessed and voiceless; while the leaders historically come from more powerful social contexts, exploitation and patronage can coexist in labor relations. Secondly, it also shows that the toleration of such unions and collective bodies can be a result of the service that such bodies render, regardless of their exploitative nature. For instance, they could solve the metering problem in team work and lead to

some productivity gains. In Dhanbad, they also help coal buyers to get coal sorted in the collieries. Further, they act as political conduits for workers and have the ability to push for their demands at the BCCL offices. The coexistence of both the exploitative and productive roles of these mafia-type unions holds interesting lessons for policy reforms.

The study pushes the frontier of knowledge in three distinct directions. Firstly, it is a step towards understanding how mafia activities can be legitimate industries of a developing country, which are labor intensive. As an empirical finding, we have also estimated the average social cost of the mafia activities in the region. Secondly, the study digs into the nuances of labor market theories, and discovers that black boxes of unions need to be opened up to view the agency costs in it. Using tools of economic history, law and economics, the paper illustrates how the history of union formation gives us insight in to the unions' extractive behavior, and shows how social institutions get locked in. Thirdly, the study cultivates the interest in understanding intermediaries, who are pivotal functionaries of informal markets like India, regardless of whether the market mobilizes outside or against the law.

Upon careful observation, we find stark similarities between the origins of union-parties alliances in the nineteenth century East Central Europe and post-independent India. The working class in both places suffered from low levels of socio-economic development '*of limited proportions, generally low skilled and politically impotent*' (Dauderstädt et al., 1999, p. 22). Western Europe unions rose from the bottom of the ranks, while that in East Central Europe (specifically in the coal mining belt) and India were churned out of an internal top-down hierarchy, elitist and fragmented processes (Lewis, 1996; Mair, 1998).¹⁰⁵ One can imagine that the rise of labor union in India's coal belt resembles the rise of a dictatorial government and its subsequent institutionalization. The case study details how labor unions were formed in the coal belt of Dhanbad and offers an illustrative account of why unions could be extractive and yet sustainable at the same time.

The L&D scholar is back in our picture. What lessons can s/he draw from this study to effectuate policy reforms in the area of mining natural resources that is often the most contentious public sector issue? After the recent spates of corruption in coal mine allocation by the government, public

¹⁰⁵ The relative change between East Central and Indian working class organization came in the wake of communism, where the socialist driven labor unions declined in the former countries (Avdagic, 2004). India experienced a socialist growth post-independence, and specifically in coal sector, got it nationalized in 1971-73. That is where Indian story changed.

opinion in India is taking the issue of coal very seriously.¹⁰⁶ The government is considering privatization of coal in years to come. In an institutionally charged atmosphere as regards to policy making, this study sheds light on an important area.

In order to avoid the institutionally flawed governance transition from private to public, coal mines became infested with mafia elements that have latched onto it until today. In the new proposed regulatory transition, the government needs to take special care to bring about a more promising institutional change which can assure a mafia-less regime. Taking clues from this chapter, the next level of institutionalization definitely needs a more rigorous procedure of ownership exchange, which excavates hidden interrelated actors and their relative locations in order to lay out the incentive structure embedded in the present organizational framework. Union leaders reshuffling needs to engage with the workers themselves, and a more solid design of union policies must be carved out. Indeed, privatization may be an opportunity to locate the extractive institutional elements, and weed them out.

The study shows that government should provide the services that the mafia is providing and that it can definitively do so at much cheaper cost. Laborers don't need to be tied through debt. Nor is there a need for the buyers to pay extra for the loading of coal they have already purchased. In fact, the laborers payment can be topped-up by the buyers themselves, without the need or use of mafia in between, which leads to an inflated dead weight loss. Thirdly, the corruption entrenched in the system because of the mafia increases rent seeking activity considerably. We observe the intermediary and are convinced that the services of the intermediary are more extractive than facilitative in this case.

The question is, how to weed the mafia out? The linkages of intermediaries show that this can happen if either of the three linkages of the mafia is cut. To address the problem of corruption (addressing the mafia-BCCL link) or a strong enforcement machinery (addressing the mafia-buyer link) will not be an answer. However, a strong drive of the State towards freeing the debt-bonded labor severs the labor relations-mafia linkage, and this may have a promising impact on their patronage structure. Worker empowerment is the key, and to date, this has hardly been the policy solution proposed in relevant circles. Additionally, the legal framework needs to be carved out which pushes the State towards such a direction.

¹⁰⁶ See the story in Guardian, at <http://www.theguardian.com/environment/2014/sep/01/coalgate-india-supreme-court-narendra-modi> last accessed on 5 June 2015.

9. Next Steps in Understanding Informality and the Law

One might question, why did not all other mining territories in India witness a similar union-mafia nexus? Firstly, all other mines have inferior quality of coal, which promises far lesser rents. But secondly, and more importantly, in other collieries around the country, unions came much later (post-independence), when the capital structure was already concentrated in the hands of the independent government. This means that no other mine (except Raniganj) saw the evolution of labor relations and intermediaries in the same way as Jharia. As far as the other profitable mine of Raniganj is concerned, the communist government in Bengal (Raniganj is part of Bengal province) enabled the proliferation of radicalized unions which arrested agency costs.

This chapter showed one way to address problems found in informal markets that are active in illegal goods/services. But what happens when the informality arises due to a lack of clarity in the law, and assumes a criminal color? The previous chapter discussed markets outside the law that are not illegal in nature. It showed how informal institutions, like trade credit, arise and sustain over time, and how intermediaries become important pillars to have the market perched on them. In this chapter, however, we moved our discussion to an informal market that operates explicitly against the law, and showed how the intermediaries have become so powerful that they have assumed an institutional mafia status, extracting huge rents from the system. But there are informal markets, which work against the law *de facto*, and yet the intermediaries remain decentralized. This could be a market where legality and illegality are functions of State morality due to the lack of a universally sound legal/moral character of the work.

We move our attention to the informal market for sex work in the next chapter. Sex work (or prostitution) has attracted varying levels of legality and countries around the world have experimented in multiple ways, with its legal/illegal labeling. I enter the debate through informality, and use empirical work conducted in New Delhi to show how we can better understand the *de facto* illegal informal business activity and dynamics of this trade. We therefore, move from an a-legal, to an illegal, to a *de facto* illegal form of informal market. The three cases together offer a rich narrative to propose directions for possible policy reforms.

10. Chapter Three Summary

This chapter delved into the emergence and sustenance of the mafia in the rich coalmines of India. I dig into the historical evolution of the institution of the mafia by observing the relationship between mine owners and workers across a period of time. I notice that erstwhile supervisors of

workers in the mines turned into a mafia after nationalization. These supervisors were intermediaries that emerged due to a metering problem, which was more pronounced at an institutional level in the mines. Over time, the informal relations between workers and supervisors made them indispensable for the workers. With the introduction of labor unions in the region, these informal relations were formalized, and after nationalization, these intermediaries, in form of a mafia began. I estimate the cost of this institution at 9.3% of the total sale of coal and attempt to understand what characteristics of a natural resource industry can give rise to mafia type institutions. The mafia is understood as an intermediary between miners/laborers and mine owners, and between buyers and mine owners. Over time, the role of the labor intermediary transforming into union leaders and then into a mafia explains how informal institutions outside the law can continuously form and re-form themselves; and what policy implications can be drawn from this to aid our understanding of law and development.

CHAPTER FOUR: AN ALTERNATIVE VIEW OF SEX WORK IN INDIA - ANOTHER VIEW OF INFORMALITY

1. Prostitution and the Law

Often regarded as “the oldest profession in the world” (Drexler, 1996), prostitution today is built on complex legal structures. And yet, whether “actively prohibited, tacitly condoned, formally regulated, or a combination of these,” (Vanwesenbeeck, 1994) it remains a thriving industry with some estimates placing the global trade in prostitution at revenues of \$186 billion annually.¹⁰⁷ Currently, many countries are considering amending their legal approaches toward prostitution, not only for the health, empowerment and safety of the prostitutes and clients, but also to profit from the revenue generated by the profession.¹⁰⁸ This paper attempts to add to this debate.

1.1. Legal Imaginations of Prostitution

Even though the United Nations Convention of 1949 has condemned all forms of prostitution,¹⁰⁹ different legal approaches to prostitution can be seen around the world. They are broadly categorized into legalization, prohibition, and toleration. Legalization accepts the institution of prostitution and gives certain legal rights to sex workers, often accompanied by registration, licensing and compulsory medical check-ups. A form of this is practiced in Germany and the state of Nevada in the USA. More than a hundred countries have explicitly criminalized only some aspects of sex work.¹¹⁰ While other countries, like the United States (except the state of Nevada), Iran, China, Cuba, Vietnam, and South Africa, have outlawed it completely.¹¹¹ An

¹⁰⁷ See Havocscope Database, available at <http://www.havocscope.com/tag/prostitution/> last visited on Sep. 14, 2013.

¹⁰⁸ Jessica N. Drexler *supra* note 12.

¹⁰⁹ See, Convention for the Suppression of the Traffic in Persons and of the Exploitation of the Prostitution of Others. Available at: <http://www.ohchr.org/Documents/ProfessionalInterest/trafficpersons.pdf> last accessed on 5 August 2015.

¹¹⁰ 2010 Global Report, *Report on the Global AIDS Epidemic*, 120-143, UNAIDS (2010), available at http://www.unaids.org/documents/20101123_GlobalReport_Chap5_en.pdf (last visited on Mar. 8, 2012); United Nations General Assembly, *Report of the Secretary-General – United to end AIDS: achieving the targets of the 2011 Political Declaration*, A/66/757. Available at http://www.unaids.org/en/media/unaids/contentassets/documents/document/2012/20120402_UNGA_A-66-757_en.pdf (last visited on May 1, 2012).

¹¹¹ ProCon.org, *100 Countries and their Prostitution Policies*, (2009), available at <http://prostitution.procon.org/view.resource.php?resourceID=000772> (last accessed on Mar. 8, 2012); For Vietnam see Asian Pacific Resource and Research Centre for Women (ARROW), MGD 3 in Vietnam, available

innovative legal approach to regulating the sex trade, practiced in most Scandinavian countries, comes in the form of criminalizing the purchase of sex but not the sale of it (hence clients are prosecuted and not the prostitutes) (Gould, 2001; Ekberg, 2004). Other common legal responses cast the net on anti-trafficking laws so wide that they capture elements of consensual sex for money within their purview. Many municipalities attempt to thrust commercial sex into statutory categories of “public decency,” “morality,” zoning/health regulations, and “nuisance” laws, thereby giving wide latitude to policemen to coerce and harass sex workers in the name of the law (Burris et al, 2010).

In most countries the laws governing prostitution have been drafted so that the institution of prostitution is *de facto* criminalized.¹¹² These laws have gained support over the nineteenth century and subsequent feminist debates, which have extensively argued that prostitution is morally undesirable and a manifestation of male dominance over women. However, this common understanding of prostitution has been increasingly challenged, giving rise to both national and international debates. The liberal contractarians argue in favor of decriminalization in order to recognize prostitutes as holding the same rights as anyone else engaged in any other form of labor. The feminist school supporting criminalization and the liberal contractarians seeking decriminalization it, form the two extremes of the ongoing debate on the institution of prostitution.

1.2. Lack of Empirical Work

Even though prostitution has attracted an enormous body of research dealing with the legal, sociological and political aspects of the trade, empirical and economic work is not as voluminous. Part of the reason can be attributed to the difficulty in procuring reliable data, since in the presence of coercive laws, the market pushes itself underground. Indeed, no documented data can exist for such a market, even when data-less studies are producing opinionated voices frequently. This paper attempts to fill this gap and understand more closely the market for sex work in India. Through primary unstructured interviews, I attempt to understand the market and show how it operates underground at the informal level to establish what the cost of such an operation is, how the risks are distributed and how the coercive legal architecture, which affords

at http://www.mdg5watch.org/index.php?option=com_content&view=article&id=96&Itemid=164 (201) (last accessed on Mar. 8, 2012).

¹¹² The Washington Times reports that prostitution is legal in fifty percent of countries, illegal in thirty-nine percent, and ‘limited legal’ in eleven percent (which includes India), available at <http://www.washingtontimes.com/multimedia/image/prostitutionjpg/> (last visited on Sep. 15, 2013).

abusive powers to State enforcement authorities, deal with it. I collect data and analyze it to see hidden answers and patterns therein. In doing so, I argue for the need to consider decriminalization of the profession. Much of the academic literature builds its case for decriminalization largely out of its concern for the agency of sex workers, which remains subordinated due to pimps. My empirical work conversely reveals that pimps are forms of intermediary in this informal market, who provide protection against the state enforcement authorities and opportunistic clients. Estimating the cost of intermediaries, the paper is able to provide an institutional view of their service.

1.3. A Short Note on Caveats

A few quick notes are in order here. *First*, throughout the text, we use the term sex workers to indicate prostitutes. This stems from our preference for recognizing the agency of sex workers. *Second*, without diluting the importance of heterogeneity of sexuality (male or transgender prostitutes), sex worker will mean “female sex worker” and client(s) would signify male member(s) throughout this text. *Third*, we do not dwell on trafficking in this paper – a major oversight as some would say. This restricted view is taken so that an unalloyed picture of prostitution helps us to analyze it in its insulated form, which could aid a simplistic understanding of a complex practice. In addition, there is no reason to believe that all sex workers in India are trafficked. Further, incorporating trafficking will make the work too ambitious to handle.

Fourthly, it is important here, to qualify our view of the concept of decriminalization. Decriminalization is the removal of criminal status from a certain behavior or action. Technically, it may not be more than a legislative or a court order expressively decriminalizing an activity (consider decriminalizing homosexuality by stroke of a pen, for example), but it is the manifestation of a massive judicial reform and therefore symbolizes the will and opinion of the people. Having minority religious beliefs is no longer a crime, but would have been unthinkable in earlier centuries. Similarly freedom of speech and organization are forms of decriminalization that took place earlier, just like the recent release of homosexual behavior from judicial constraints (Uitermark and Cohen, 2005). But decriminalization does not necessarily mean complete deregulation, and the government may show concern by installing regulatory bottlenecks against specific forms of the activity – consider drug use, or euthanasia, where different complex regulatory forms have been put into place to prevent misuse (ibid). Legalizing an activity is different from decriminalizing it. The former entails the government’s prescriptive efforts to allow an activity with regulatory guidelines to govern its operation.

Decriminalization is explained by preventing the State from intervening in what they believe to be a private matter. Decriminalization therefore acts as an indicator of a worldview (ibid). For the purposes of our paper, decriminalization would mean that the State takes its hands off the market for sex work as such. Part of the motivation stems from the cost of State intervention, and part of it comes from our belief that sex worker collectives – which are already working in many cities – are likely to ensure control of the trade through self-regulatory pursuits.

Prostitution in India is a major problem as regards to poverty, exploitation and gender-based crime (Nair and Sen, 2005), making it an important market to study. Many variables at cross-country levels in developing nations are similar, thus suggesting that many of our conclusions can cross-navigate through other such countries. The paper relies on information collected from a large neighborhood of New Delhi, the Indian capital. The remainder of this paper is divided into six parts.

Part 2 locates where this paper sits within existing literature. Part 3 explores the legal landscape in India concerning prostitution. Part 4 dwells on the idea of victimless crimes and theoretically argues for the decriminalization of sex work. In part 5, I explain a brief structure of sex work in New Delhi, while in part 6, I document the empirical work and lay out my findings. Part 7 discusses the findings. Part 8 explores the contours of decriminalization and engages with the mechanisms of this intervention. Part 9 concludes offering proposals for policy reforms.

2. Debates on Prostitution

2.1. Radical View

Two self-proclaimed feminist groups dominate the debates on prostitution – the radical and the liberal. The radical, anti-prostitution feminists (also called neo-abolitionists) derive their argument from (a) the poverty-driven forced nature of the occupation that leads to exploitation (and trafficking), and (b) prostitution's characteristic of reinforcing male dominance over women (Barry, 1995; MacKinnon, 1993; Lederer, 2001; Farley et al. 2003, 2005; Jeffreys, 2004). The logic is that given the coercive nature of trade, consent is never free. Women with the fewest choices available resort to prostitution, and prostitution is characterized by violence against sex workers. As a “harmful cultural practice,” prostitution has been considered an activity that involves significant exploitation, both psychological and physical (Jeffreys, 2004). In some ways, one can view prostitution as slavery (Lederer, 2001).

2.2. Liberal View

Liberal feminist groups (sometimes called neo-regulationists) challenge such views and argue that women may make an independent decision to engage in sex work and that their choice must be respected (Nagle, 2001). According to this scholarship, trafficking is different from prostitution, where the former is coerced (and therefore need to be criminally dealt with), while the latter may not necessarily be forced when based on women's use of their own bodies as labor (Saunders, 2005). The notions of sexuality, as O'Connell (1998) reminds us, are outdated and hinge on a construction of sexuality that is a product of patriarchy, creating a need to remove the parallax from the view that prostitution is a large monolith of women's exploitation. Therefore, for these scholars, the right approach is a rights-based approach. If self-determination is a pivot of feminist politics, then decriminalization will enable sex workers to engage in their work, just like any other employment. Instead of abolishing sex work, society needs to check the unsafe working environment for sex workers. Criminalizing prostitution does more harm than good because it increases their chances of being exploited. In line with this reasoning, there is significant literature on the activity being forced to slip into underground, luring associated illegal activity, including trafficking (Weitzer, 2005).

2.3. Indian Scholarship

In India, the feminist movement has echoed the gender essential voices, reinforcing the idea that Indian prostitutes, as Kotiswaran (2001) remarks, are '*mere sex slaves who are invariably trafficked into prostitution and who, as victims, do not have the ability to speak for themselves or their communities.*' They have rested the issue of prostitution on three pillars: (a) deliberate silence on the issue in a cultural context of heterosexual monogamous marriage, (b) violent victimhood, depriving the label of labor from sex-work, and (c) the invocation of the sex-work collectives' lens of choice and identity (Gangoli, 2008). Overall, arguments on both sides abound in India too.¹¹³

¹¹³ Recently, Gloria Steinem, a leading voice in the movement against prostitution visited India. Another leading voice from the other side of the debate criticized her in an open column: Svati Shah, 2014, "Gloria Steinem vs. Prostitution in India," *Huffington Post* 28 November. Available at http://www.huffingtonpost.com/american-anthropological-association/gloria-steinem-vs-prostit_b_6198614.html last accessed on 19 December 2014.

2.4. Gaps in the Literature

Regardless of the side of debate one wants to read, scholarship is unbiased in asserting that sex workers indeed face extreme violence. Farley et al. (2003) found that almost three quarters of prostitutes have been physically assaulted, two-thirds have been raped, and around ninety percent of them wished to leave the trade but could not do so due to a lack of adequate financial means.

Many papers also document incidents of police extortion (for India, one of the early works is by D'Cunha, 1991). Jayasree's (2004) extensive reports on the experiences of sex workers in India suggests that sex workers do not accept victimization or criminalization as an option and indeed possess agency. However, most of the concerns of feminist literature (which is indeed significant) remain largely theoretical or rhetorical, with little focus or demand for empirically sound data. In addition, there has been little systematic effort to understand the role of intermediaries like pimps in the market, who not only make the trade possible but are also almost unanimously considered the sources of violence in the market for sex work.

The economics of prostitution has been disparately researched.¹¹⁴ Each of the studies that focus on economic aspects of sex work are localized in their scope and limited in their inferences. Part of the reason lies in scholars' hesitation to view prostitution as work, leaving little room for alternative imagination. Levitt and Venkatesh (2007) offer a compelling empirical study on street-level prostitution in Chicago. Yet, this study is merely illustrative and doesn't aid to any rigorous analysis of the profession beyond explaining the mechanism of it. Cameron et al (1999) have studied the male prostitute market in the UK empirically. This is again, an illustrative study of this labor market. Reynold's (1986) work is noteworthy in arguing that regardless of the legal rule, prostitution will continue, but with varying incentives and disincentives. It also showed that by decriminalizing prostitution, governments can reduce its social costs and increase the social benefits related to the profession. A recent and ambitious study by Dank et al (2014) has attempted to map the underground sex economy and network of traffickers in the sex commerce in USA, by studying eight major cities, and estimated its size at lying between US\$ 39.9-290 million. However, the authors do not dwell on the question of legality of the trade.

¹¹⁴ Edlund and Korn (2002) offer a detailed review of economic studies in this context. Economic studies on sex work has also received criticisms, since scholars often feel that economic analysis shouldn't be applied to human life. See Radin (1996).

A unique pan-India survey of sex workers has recently been published (Sahni and Shankar, 2013), which is very insightful. This was a survey of 3000 sex workers across India, and its primary finding was that there is a strong economic rationale and agency involved in prostitution, when women choose to take this as a profession which offers a higher income than their previous jobs. Other region-specific works are valuable too. Ramseyer (1991) for instance, studies indentured prostitution in Imperial Japan and finds evidence that these contracts were aimed at securing credible commitments and hardly led to slavery. From an organizational point of view, this is an interesting entry point to study sex work, although highly specific. Symanski (1974) empirically studied brothels in Nevada, but the study is only demonstrative rather than general.

Edlund and Korn (2002) conducted several studies on sex work, which have attempted to map out the average payment of sex workers in certain place and time. They compare sex work payments with average earnings in another type of profession sex workers could have joined. For instance, some relevant studies include Muroi and Sasaki (1997) estimate that Thai sex workers earn twenty-five times more than a housemaid. Davis (1993) observes the market in Munich, showing sex workers' earnings to be at least more than double that of per capita income. Montreal's study also yields a similar result (double than per capita – Ford, 1998). In Indonesia, sex workers earn much higher than a mid-level civil servant (Jones et al, 1998). Nagaraj and Yahya's (1998) study of the Malaysian market pegs sex workers' earnings to be six times any unskilled work. Each of these studies indicate prominently, the low opportunity cost of sex work in diverse economies.

In New Delhi, we discover similar conclusions. However, none of these studies explain the idea of choice that the sex workers have in whether they engage with an implicitly contracted intermediary or not. That is the type of analysis which has potential to lead to understanding the organizational framework and choice architecture of sex work, which can direct more meaningful policy reforms.

Further, sizeable scholarship remains rhetorical and builds on existing frameworks. This makes a large amount of literature in this area rather unoriginal and trite. This is one of the reasons that prostitution is viewed as an institution ignoring considerable heterogeneity in the profession across countries, regions, and class (Goyal and Ramanujam, 2015). It also re-emphasizes existing categories and nomenclatures, and coagulates existing consciousness. We intend to study an organizational form of sex work in a specific case to nudge future research to engage with key stakeholders in the process. For us, the key stakeholder in question is the pimp. Even

though the study focuses on India, there are many general conclusions that show potential application across other developing nations.

3. The Indian Legal Landscape on Prostitution

Soon after independence, India became a signatory to the UN International Convention for the Suppression of Traffic in Persons and of the Exploitation of Women, New York, 1950. This led to the enactment of the Suppression of Immoral Traffic in Women and Girls Act, 1956 (SITA).¹¹⁵ The Act had a tolerant approach towards prostitution yet clearly showed signs of lawmakers grudgingly accepting prostitution as a necessary social evil. The Act underwent an amendment in 1978 and later, due to changing scenarios and debates in the international context, was further amended in 1986, entitled to the Immoral Traffic in Persons Prevention Act, 1986 (ITPA).

The ITPA is only a cosmetic surgery over SITA.¹¹⁶ The substantial aspect of the Act, the criminalized view of prostitution, remains. Section 2 (f) of the ITPA defines the term *prostitution* as ‘...the sexual exploitation or abuse of persons for commercial purposes ...’¹¹⁷ Thus, the concept of prostitution is necessarily driven by sexual exploitation or abuse. Consensual sex which does not involve sexual exploitation or abuse (even if commercial) is not prostitution in the first place. Hence, if prostitution is construed as consensual sex for money, it is *per se* not illegal. However, the problem is that even to profess consensual sex for money, sex workers need to engage in a number of other activities. These activities are expressly prohibited in law. For example, ITPA prohibits anyone from maintaining a brothel and living off the earnings of a prostitute. Procuring or inducing and detaining a woman for prostitution are criminal activities, as well. There is a geographical restriction, as the activity cannot take place in a public place or a notified area. Most importantly, ITPA imposes a ban on soliciting or seduction for prostitution. Prostitution cannot take place without explicit or tacit soliciting, and therefore this section (section 8) is hugely criticized by activists (Sahni et al, 2008). Another clause vests power in the Magistrate, who can order the removal of a prostitute from any place

¹¹⁵See the Law Commission’s Sixty-Fourth Report on SITA, 1975, available at <http://lawcommissionofindia.nic.in/51-100/Report64.pdf> (last visited on Sep. 15, 2013). The Report maps a historical background and describes the scope of the Act in detail.

¹¹⁶ The change in the title and scope signifies two important aspects, namely (a) the drive to ‘suppress’ traffic has been replaced by the need to “prevent” it and (b) the words “Women and Girls” have been replaced by the term “Persons,” recognizing that individuals of both sexes, and eunuchs, are trafficked in for prostitution (D’Cunha, 1991).

¹¹⁷ The Immoral Traffic (Prevention) Act, 1986. Available at <http://www.childlineindia.org.in/CP-CR-Downloads/Immoral%20Traffic%20Prevention%20act%201956.pdf> (last visited on Sep. 15, 2013).

within her/his jurisdiction if s/he deems it necessary. And notably, there is no punishment for the client of the prostitute.

Therefore, while consensual exchange of sex for money is not criminal, many things typically associated with the activity are illegal. Since the activity itself cannot be insulated from the other transactions that will come along with it, it is impossible to engage in consensual sex for money without attracting criminality. The travesty of the written law in India in general, and of ITPA in particular, is that this has resulted in a wide disparity between how the law views an activity and the way it is followed. Socially, legally, economically and even culturally repressed, sex work takes place underground, where exploitation by the State's enforcement machinery is exacerbated. Public perception and popular imagination fill the vacuum of indeterminacy in this regard, which only reinforces the unfavorable mental constructs of prostitution in India.

No surprise then that through local legislation and discretionary arrests premised on public morality and criminality drawn from other associated acts, 'prostitution by choice' is a legally infeasible alternative. The ITPA is only one of the legislative tools invoked in cases of prostitution by enforcement officials, and a range of other vaguely worded laws is more frequently used in convicting sex workers. The Indian Penal Code 1860 itself has provisions for trafficking and slavery of women and children. It also has several clauses that deal with offenses that restrict sex workers professing the trade. For instance, Section 268 (Chapter XIV) deals with offenses related to public health, safety, convenience, decency, morals, and public nuisance. These are vaguely designed laws that empower police against sex workers when the former want to exploit or extort money from the sex workers (Sahni et al, 208).

Similarly, Sections 269 and 270 deal with spreading of infectious diseases, which are used to directly or indirectly target sex workers by the hands of the State. In addition, there are many State-level police laws, municipal laws and statutes related to beggary, railways, public decency, health, and nuisance that are used more often than the ITPA to harass the sex workers (D'Cunha, 1991). Therefore, without due deliberation or strategic operation, the legal enforcement apparatus has discovered many ways in which it is able to exercise discretion in its methods of policing and exploiting sex workers.

4. The Idea of Victimless Crimes and Prostitution

Prostitution has often been labelled as a victimless crime. It will be pertinent to view this idea, since it builds the argument on the theoretical front.

4.1. The Concept

Theories on victimless crimes argue that such crimes do not have an identifiable or pleading victim, even though the act itself may be illegal (Frase, 2002). Gambling, illicit drugs and prostitution are often labelled under this category. These activities take place in private and because parties do not have any incentives to report them, they don't produce victims in classical sense. The tendency for such criminal activity is to slip underground and continue (Schäfer, 2013). In the absence of any incentive to report by the victim, wide latitude is given to the police to monitor such practices, and consequently, offers them potential to abuse their powers.

Victimless crimes are generally considered to have an inelastic demand, which acts as an incentive to continue the wrongdoing despite criminal sanctions against it. Such inelastic behavior of consumers only ends up pushing the prices of the goods/services with penalties (Becker et al, 2006). Driven by the demand, these crimes produce secondary crimes, and create new criminals in the eyes of the law, even when they otherwise may simply be law abiding citizens. In other words, given the inelastic nature of the product/service and negligible reporting, punishments only lead to increased prices, making the activity more clandestine.

In cases like India, there is no punishment for the client of the prostitute, thus making sex workers the residual bearer of the risks involved in their profession. A simple text book on microeconomics will tell us that prohibiting the supply of a product/service with inelastic demand will only push the prices up. But because the demanding party is never convicted, they have no incentive to pay high prices. Eventually, the entire trade slips underground and risks increase. This keeps the cost increasing for sex workers, even while the price does not rise in the same proportion. What Sweden did is exactly the opposite. They criminalized the demand and decriminalized supply, which turned out to be successful and is slowly being adopted in other places (Goldberg, 2014).

Victimless crimes therefore, not only put an undue stress on enforcement costs, but also exacerbate criminal tendencies. Hence, there is a strong practical rationale for repealing the laws that criminalize them (Schur and Bedau, 1974). Also society may not want to prevent a victimless activity which harms only the actors (Morris and Hawkins, 1970). Lott and Roberts (1989) use the basic microeconomic model to discuss the incentives provided by what they call 'one sided enforcement' and show that it is cheaper to use enforcement against victimless crimes if the transaction is observable. But given the clandestine nature of most of these

operations, including prostitution, the police needs undercover agents to control it thus rising enforcement costs. Surveys of police officers themselves reveal that they consider it futile to control victimless crimes (Wilson et al, 1985). Not only do they inflate unorganized crime, but victimless crimes are also considered to be inefficient, since they increase the burden on state's administration (Bergelson, 2013).

4.2. Prostitution as a Victimless Crime

Certain critiques of such a policy maintain that these crimes are not necessarily victimless. Prostitution, it is often argued harms all women (Roach, 1999). Sometimes citizens who have different ethical judgments suffer a loss in their utility with such activities taking place around them (Wertheimer, 1977). Gambling and drug addiction is known to have negative externality as well. Further, while there may not be identifiable victims who can complain, there is surely invisible victimization (Morris and Hawkins, 1970; Wertheimer, 1977). Regardless of these critiques, it can convincingly be ascertained that there are indeed some crimes which are not reported.

What is distinct about victimless crimes that compels us to see their implications differently? Police apprehends the offender based on information they receive, either during their monitoring efforts or in the event of someone (mostly the victim) reporting a crime. In cases of little or no reporting, most of the cost of apprehension of the criminal is the cost of monitoring alone. This shows that depending upon the reporting rate, it is more efficient to switch to investigation from monitoring as a device to capture criminals (Mookherjee and Png, 1992). For example, people normally wouldn't report environmental crimes, and hence they need more monitoring, while for murders, investigative efforts are more efficient.

Victimless crimes are – by definition – characterized by no reporting. The only way to arrest the criminals here is monitoring. When the police official catches an offender, s/he always faces a choice between letting the offender go and arresting her. The cost of forgoing the arrest is a function of (a) the social cost of letting the offender continue her activity, and (b) the risk the police official bears for losing their job (or getting demoted) if s/he deliberately frees the offender.

Notice that in victimless crimes, the risk of a superior police officer reprimanding the junior for forgoing an arrest is negligible. This is because, in an unreported crime there is no reason for the superior officer to question the subordinate officer, since the information of an unreported

crime – by definition – will never travel. Also, even while the social cost of letting the offender continue her activity is significant, the private cost to the police official is rather low. In crimes such as gambling, prostitution or illicit drug, consequently, the costs of foregoing an arrest reduces considerably. And amongst these instances, prostitution has an even lower cost, since cases of prostitution do not have any significant externality given that its scope limited to only the consenting individuals who engage in the act,¹¹⁸ unlike for example the case of illicit drug addiction, which can lead to other crimes like mugging.

When the cost of forgoing arrests is low, the cost can be compensated for by the offender herself in the form of a bribe. Since the size of bribe depends on the cost of forgoing the arrest, which is very low, relatively poor offenders will also be able to purchase their freedom, depending on how high the cost of capital is.

There is another reason that makes the likelihood of bribe in prostitution and consequently that that the crime be committed under tacit police collusion, very high. We know that apprehension in prostitution is a function of the monitoring cost incurred by the police alone. Also, the offender is locked-in in her location because changing brothel from one geographical space to another is not easy. Hence, the switching cost is high. Consequently, one can imagine this market running on idiosyncratic knowledge (Williamson, 1975, 1979). Information in this market is highly symmetrical for those working in the market, and highly asymmetrical for those outside. This means that the marginal cost of monitoring is very low. In other words, once the police has identified a brothel running in a neighborhood, the additional cost of identifying another brothel, or to identify the same brothel next time, is low. This encourages police official and brothel owners (or prostitutes) to arrive at a specific value, as a payment per time period to lend certainty to the transaction. From the perspective of the criminal, this bribe is no different from a tax imposed on the criminals (sort of an excise duty say) (Sisk, 1982).

The idea of reconsidering criminalizing prostitution, as a victimless crime therefore, is driven by the analytical impulse of impossibility to reduce or stop it. A *low* and *determinable* cost of forgoing an arrest therefore makes the possibility of a *sustainable* bribe very real. This only pushes the activity underground, exacerbating victims' abuse even further.

¹¹⁸ Only those people who are affected by prostitution indirectly – for instance, who live by the houses converted into brothels and face a utility reduction may suffer a cost.

One may think that this treatment of victimless crimes in theory should not be different from a crime where the criminal has not been identified. For instance, if a victim in their complaint cannot identify the offender, the police official will always have an incentive to let the offender get-off scot free when she is caught, because no one would be there to report police's complicity. In some sense therefore, it is possible that enforcement against crimes with victims could also behave analytically the same way as it does for victimless crimes. This presents a contradiction then.

This conflict is reconciled in two ways. Firstly, a report from a victim means the information has been recorded for the police official's senior to take note. Failure to apprehend the offender in an officially registered complaint comes at the cost of loss of reputation for the said enforcement agency and official as well. Failure to identify the offender of a reported crime reflects poorly on the official's competency. Over time, a reducing score in competency can pose the official risk of losing their job or being demoted. This increases the cost of forgoing arrest, and consequently, the monitoring cost. The value of bribe needs to exceed the monitoring cost, and often offenders may not be able to offer such a huge bribe. Indeed, in cases where crime is particularly aggravating a social setting, even rich offenders with a low cost of capital may not be able to satisfy the enforcement official with a bribe.

Secondly, freeing the offender often happens. This is possible either when the entire agency is corrupt, or when the stakes are too low. But this is possible, if the victim has not been particularly distressed to continue pushing her case, and has recorded only one time offence, which is not necessarily going to be made public.¹¹⁹

5. Sex Work in India and New Delhi

The theoretical construction laid out in the preceding section tells us that as a victimless crime, prostitution should go underground and continue with tacit approval of enforcement authorities who will charge a bribe) for their tolerance. But there could be many sex workers and appropriating the tax from them all would attract very high transacting costs. In addition, this transaction itself is illegal and cannot take place at individual levels for fear of being exposed. Secondly, like any hidden illegal activity, there is always a risk of being apprehended by strict

¹¹⁹ In India, crimes such as rapes and atrocities against untouchables (lower castes) are often hardly investigated because of little pressure from mainstream society which would have raised the cost of forgoing arrest. This has however, been changing in last four years with social drive towards more empowerment to disadvantaged groups in the country.

and honest police officers, as well as, the risk of violence by clients or gang members against which there will be no legal recourse. In essence, there is a crucial need to maintain contractual obligations outside the law so that market is able to run effectively. Similar to many other informal markets, to ensure that there is an order outside the law, middlemen emerge who offer protection to sex workers against the police, gang members and violent/renegeing clients. These middlemen could be brothel managers, or simply pimps. My fieldwork attempts to understand their role and costs.

India presents sizeable evidence of this trade. By the government's estimates, there may be about three million prostitutes in the country¹²⁰ and the growth of their numbers in the last decade¹²¹ points to a correlation between economic growth and prostitution (Rosen, 1982). Sex workers have been subject to disempowering laws and coercive State institutions throughout (Rajan, 2003). Issues related to gender, health, rights and livelihood are at the heart of debates surrounding sex work in India. In the context of poverty and agency, the debates on whether to decriminalize sex work in India gain enormous importance.

New Delhi is India's capital, and home to more than 20 million people. Its red light area is known as GB Road (the official name is Swami Shraddhanand Marg), located very close to the center of the city. GB Road is one of the largest red light areas in Asia, along with Sonagachi in Kolkata and Kamathipura in Mumbai, which have attracted significant scholarship from various economic, social and anthropological accounts. Since the labor (prostitute) market of red light areas has a standard architecture and uniform underpinnings, it does not offer valuable and new findings. My primary survey of GB Road revealed that the sex workers pay a standard 60% of their fee per client, to the brothel owners. The high level of standardization in this informal market is exemplary, but nothing more than this is new in my survey. I will return to this during the further discussion.

¹²⁰ Ministry of Women and Child Development, *Indian Country Report: To Prevent and Combat Trafficking and Commercial Sexual Exploitation of Children and Women*, 4 (2008), available at <http://www.unodc.org/pdf/india/publications/India%20Country%20Report.pdf> (last visited on Sep. 12, 2013).

¹²¹ Upasana Bhat, *Prostitution 'increases' in India*, BBC NEWS DELHI (2006), http://news.bbc.co.uk/2/hi/south_asia/5140526.stm (last visited on Oct. 2, 2013).

6. Empirical Work

6.1. Classification and Cohorts

Sex work in urban regions usually takes place either in designated red light areas of the cities, where it is common knowledge, even though explicit advertisement is prohibited. In the red light areas, brothels are run by brothel owners (pimps) and sex workers live in these brothels. This setting is historically prevalent in all parts of the world – their ghettoization is a compromise between social morality and the inelastic nature of demand for sex work. Clients come and are often solicited by catcalling, since competition is high. The police tolerates sex work here, but has a fixed monthly payment from each brothel as cost of toleration. If there is pressure from civil society or other political players, particularly on the news of trafficking or under-age prostitution, police conduct raids. These raids are also conducted if monthly payments don't reach the respective police stations in time.

Outside the red light areas, sex work takes place in a decentralized setting, in hidden brothels of regular localities, often unknown to the neighbors. Sex workers either visit the place during their work hours or are solicited by the pimp running the brothel when the client comes. Sometimes sex workers arrange clients themselves and use these brothels for a chance to engage in the activity (note that they cannot usually profess this trade in their own homes). This type of sex work, for the purposes of our study is called 'home based' prostitution (HB). In addition, sex workers often stand on the street and solicit clients themselves, without the aid of any pimp. They are independent street workers, entrepreneurial in nature and generally operate at night. This type will be known as 'street based' prostitution (SB). Interestingly, these three types of market for sex work are mutually exclusive in their labor type. So a given sex worker would normally belong to one of these markets during a given period. She may quit the red light area and join HB prostitution, but once she is in HB, she remains in HB, unless she wants to quit that. It is rare that a sex worker acts as an SB or HB at the same time. Their choice is an important variable we will study below.

However, non-ghettoized sex work (HB and SB) has received very little attention in empirical scholarly work. This is primarily because the decentralized nature of this underground activity offers enormous difficulty for data collection. Studies have noted that women have begun moving out of red light areas to the non-ghettoized form of sex work, but the mechanisms of the new locations are not entirely clear. This was the principal motivation for my focus on non-ghettoized sex work.

6.2. Survey Setting

I chose to study the areas of Rohini and Sultanpuri located in the north-west of Delhi (map in the figure 1), and developed a questionnaire (see figure 2) to interview 100 sex workers in the region. Data collection was made possible by assistance from the staff of '*Drishtikon*,' an NGO that works on AIDS prevention. It is important here to mention that interviewing sex workers on personally guarded information (or any other subjects) requires a level of trust that is not easy to attain. The NGO works in AIDS prevention and their fieldworkers are acquainted with the sex workers of the region for a long time. It is through their network that I could gain entry and the trust of sex workers to meet and request them to furnish information, on the grounds of secrecy. They were asked questions about the preceding week. Thus, the responses may reflect situation on any of the week(s) during this six months period, obviating the need to study seasonal effects, if any. Detailed methodology is mentioned in Section 7 of Chapter 1.



Fig 1: Map of New Delhi, with Rohini and Sultanpuri at northwest.

The response category in the questionnaire covered four broad categories (figure 2). *First*, was the demographical - Name, Area, Sub-type, Marital Status, Origin, Sex work experience (in brothel, outside), Parallel Profession, Children and their schooling. *Secondly*, and importantly, the weekly account of trade - Number of clients, price per Client, share of pimp, household expenditure. *Thirdly*, the violence incidents – by who and how did the rescue happen. And *fourthly*, their subjective preference of whether they think the profession is safe and why did they choose a particular type of sex work (HB as opposed to SB or the other way round).

नाम (Name)	एरिया (Area)	सब-टाइप (Sub-type)	आयु (Age)	वैवाहित (Married)?
आप कहाँ की रहने वाली हैं? (Where do you come from?)	आप कितने समय से सेक्सवर्क में हैं? (Years of experience in sex work)		क्या आपका परिवार आपके काम को जानता है? (Does your family know your profession)	
क्या आप यहाँ से पहले ब्रोथेल में थी? (Were you in brothel before)	अगर हाँ, तो वहाँ से क्यों छोड़ा? (Why did you leave the brothel)	क्या आप इसके अलावा और कोई काम करती हैं? (Any other profession)	उस काम में कितना कमाती हैं? (How much do you earn there)	
आपके कितने बच्चे हैं, और उनकी आयु कितनी है? (Children and age)	क्या वे स्कूल जाते हैं? (Do they go to school)	क्या आप चाहती हैं कि वो कुछ अलग काम करें या इसी काम को करें, और क्यों? (What do you want them to do in life?)	क्या आपको लगता है कि ये काम सेफ है? (Do you think your work is safe?)	
पिछले हफ्ते में आपने कितने क्लाइंट को अटेंड (एनकाउंटर) किया? (How many clients did you have last week?)		एक एनकाउंटर में क्लाइंट से कितने पैसे लेती हैं? (How much do you charge from your client?)		आपके हाथ में इसमें से कितने पैसे आते हैं? (How much do you get in-hand from your earnings?)
क्या पिछले हफ्ते आपके साथ क्राइसिस (violence) हुए हैं? (Did someone harass you last week?)	किसके द्वारा हुए? (गँग, क्लाइंट या कोई और?) (Who committed the violence?)	किस तरह के क्राइसिस (violence) हुए हैं? (गँग अथवा क्लाइंट) (What type of violence?)	उस क्राइसिस (violence) से छुटकारा कैसे मिला? (How did you rescue yourself?)	
क्या पिछले हफ्ते पुलिस द्वारा क्राइसिस (violence) हुए हैं? या कोई और उत्पीड़न? (Did the police harass you last week?)	पुलिस के परेशान करने का कारण क्या था? (Why did the police harass you?)		उसके चंगुल से कैसे निकले? (How did you rescue yourself from police?)	
आपका पिछले हफ्ते कितना जेबखर्च हुआ? (How much did you spend last week?)	कहाँ कहाँ खर्चें हुए? (On what items did you spend money?)			
यदि सब-टाइप home-based है, तो आप street-based में क्यों नहीं जाते? (Why don't you move to street-based?)	यदि सब-टाइप street-based है, तो आप home-based में क्यों नहीं जाते? (Why don't you move to home-based?)			

Fig. 2: The Questionnaire used for fieldwork (Translations in parenthesis after the question)

6.3. Results

The results of the survey were extensive, as shown in Table 1. From a demographic standpoint, the age varied from 18 to 55. Mean age was 30 years. 79% were married, with the mean number of children at 2.5. Only 17% belonged to Delhi. 42% came from states neighboring Delhi, but the vast majority, 41%, came from far flung states. 3% came from Nepal. Their experience of sex work ranged from 15 days to 26 years, with a mean experience of 7.6 years. The fact that 68.5% haven't informed their family members about their profession exposes the stigma associated with the trade.

Per week, the number of client visits reached up to 60, with the mean value of 23. The mean charge per client was Rs 529.50 (\$10) (this is the mean price of sex work service incurred by the client). 7% of the subjects had worked in brothel (GB Road) before. For each of these subjects, the reason for leaving brothel was to acquire more money, and also freedom.

When asked if they consider the profession safe, 88% replied 'no.' Market exhibits enormous violence against sex workers, from three main sources: the police, violent clients and gang members. In our study, pimps were not usually the source of violence, except in rare cases.¹²² The weekly violence rate was as high as 42%. This means 42% of sex workers admitted to having being coerced into some form of violence or the other – monetary expropriation, forced into sex, mugging or taking away their money, threats, beatings and physical abuse. Of these almost 20% suffered violence at the hands of violent clients (8% of total sample), either due to reneging in payment or in forcing sex workers into certain acts. Almost 10% of violence is from gang members who demand money or free sex. Only one case involved violence by a pimp, who was male. Much of the violence actually involves policemen. In my sample, almost 70% of those who suffered some kind of violence suffered it from police – this is almost one third of the total sample. Many have to offer a bribe or perform an unpaid sexual act with them. Some run away.

Analytically, valuable insights can be gained by understanding the dynamics of the trade across the two sub-types: HB and SB. HB sex work necessarily involves the need to use a pimp's services. This comes at a cost of commission that the pimp takes off the price per client. At SB

¹²² As explained above, they come to the homes run as brothels by pimps either when they have client already, or when pimp asks them to come because he has made a client ready. Sometimes they come on their own waiting for clients to come. In this way, there is considerable freedom that sex workers enjoy here.

level however, there is no pimp. The sex workers solicit clients on their own. SB prostitution attracts violence from police, pimps and gang members which is prevented to a large extent in HB by the pimp. Hence, one of the factors which determine the choice of HB versus SB is how much cost is sex worker willing to incur. They can choose to be SB and avoid the pimp's commission, but then attract the cost of violence. On the other hand, those who remain indoors have to part with their earnings but also suffer far less violence.

My fieldwork reveals an important finding here. Firstly, that the standard commission of pimps is 50% of the earnings.¹²³ This gives us reasons to believe that sex workers consider the risk differential between SB and HB is more than 50% of their earnings and would choose to be indoors as HB and purchase the service of pimps at 50% as a result.

Consider their earnings, across the two categories. Per client, HB sex workers' mean earnings are Rs 338 (after deduction of pimps' commission), even though the mean price a client pays is Rs. 616. The balance is taken away by pimp.¹²⁴ In SB sex work, mean price per client is Rs 270, which is the same as their earnings per client since there are no pimps involved there. In other words, SB workers, charge only 43% of the price charged by HB sex workers. Yet, effectively, because the latter have to forgo almost half their earnings to pimps, SB sex workers' per client earnings end up being around 80% of their HB counterparts, on average.

In addition, SB sex workers have more clients visiting them so the weekly total earnings of both SB and HB is almost the same. The mean number of clients in SB sex work is 29 per week, while that in HB is 23. HB sex workers' weekly earnings amount to Rs 7957.33 (after the deduction of the pimp's commissions), while that of SB is Rs. 8003. From the point of view of revenues, the choice of SB and HB therefore should be identical.

But SB subjects have to suffer more from violence, deal with more clients, and often have to resort to undertaking sexual acts in the bush fields.¹²⁵ In terms of violence, among the HB sex workers, around 30% suffered some kind of violence in the preceding week, of which 46% had

¹²³ Few instances do not reflect the 50% commission. This is because the sex worker is very new (few days) and parts much more than 50%. Secondly, it is possible that sex worker is a relative of the pimp and they live together. Thus, the entire money is taken by pimp and put in household expenses.

¹²⁴ Notice again, the value is not exactly 50% since there are some subjects who either keep all money because they are pimps themselves, or give most of it to the pimp if the person lives and works as a family member with the pimp.

¹²⁵ This was verified by several sources in my interviews. This is because often clients may not want to take the sex workers to their places, thus ending up having to perform the act behind the bushes. Needless to mention there is higher incidence of police extortion in such cases.

police involvement, the rest being from others. In the SB cohort, 80% suffered some kind of violence, with 88% of those cases involving police atrocity. The ratio of violence in SB to HB is 2.67, and amongst those who suffer from violence the police extortion ratio of SB to HB is 1.91. On an average therefore, we can safely assume that SB sex work is almost and at least twice as risky (in terms of violence) as the HB sex work. With almost equal take home monetary payoffs, there is little doubt that women would prefer HB sex work.

This is indeed evident in the data. SB sex workers are in general, more than 20% older than HB. The mean age of HB sex workers was 28.3 and that of SB was 34.6 years. We know that the demand, expressed through price of sex work, has a high negative correlation with the age of the sex worker. When sex workers grow old and unable to find as many clients, they are forced to switch to SB for more clients. SB sex workers usually find more clients – as also evident in my survey – because street makes more clients available. With no pimps, the transaction costs of finding a sex worker is much lower on the street, attracting more men. It is like an open market transaction where more customers are available. Secondly, the price per client is lower in the SB type. This also attracts more prospective clients. Indeed, when SB subjects were asked their reasons for the choice of their type (SB or HB), most indicated the accessibility of clients. This is also exhibited in their experience. The mean experience of sex work for HB was 6.3 years while in SB was 11.6 years. When asked from HB, the reason for the choice of their type (HB or SB), around 65% replied safety and other related concerns (24% feared their anonymity was the main reason).

This is a very important insight. We realize that the choice of sex workers will always be HB, *with* the pimp rather than SB. Both HB and SB sex workers have almost same amount of earnings. But the cost of professing in a SB environment is very high, as compared to HB. In this sense therefore, there is little choice that sex workers have in terms of choosing the type. These finding suggests that the cost of risk is therefore, significantly higher than 50%. Pimps offer a service that – even though appears costly – is still preferred to being on the street. In other words, one needs to expand the view of pimps as intermediaries in this market.

	Total Sample N=100	Home Based N1=75	Street Based N1=25
Age (years)			
Mean	30.03	28.35	35.08
Mode	24	24	38
Range	18-55	18-55	18-48
Origins *			
Delhi	17%	21.3%	4%
Neighboring states	42%	41.3%	44%
Far flung states	39%	29.3%	48% ⁺
Nepal	2%	2.7%	0
Experience (years) ^a			
Mean	7.2	6.02	10.7
Mode	2	4	15
Range	0-26	0-26	0-25
Marital Status ^π			
Married	79%	73.3%	96%
Unmarried	19%	24%	4%
Widow	2%	2.7%	0
Children			
Yes	73%	34.7%	96%
Average number	2.6	2.26	3.4
Children's Age Range ^u	1-30	1-30	2-30
Family Aware?			
Yes	29%	21.3%	52%
No	63%	70.7%	40%
Brothel Experience			
Yes	6%	8%	0
Any parallel profession?			
Yes	1	1	0
Number of clients last week ^a			
Mean	24.07	22.53	28.68
Mode	20	20	20
Range	0-60	0-60	15-60
Price per client (Rs.) ^a			
Mean	529.5	616	270
Mode	600	600	225
Range	100-1500	100-1500	175-400
Earning per client (Rs.) ^β			
Mean	321	338	270
Mode	300	300	225
Range	0-1000	100-1000	175-400

	Total N=100	Sample N1=75	Home Based N1=25	Street Based
Weekly Earning (Rs.)				
Mean	7968.8	7957	8003	
Mode	5000	5000	4500	
Range	0-28000	0-28000	3150-18000	
Violence in past week				
Yes	42%	29.3%	80%	
No	58%	99.8%	20%	
Violence Categories [∞]				
Police	66.8%	54.5%	88%	
Client	19.04%	27.3%	10%	
Gangs	11.9%	4.5%	20%	
Pimps	2.4%	9.09%	0	
Is sex work safe				
Yes	10%	9.3%	12%	
No	88%	88%	88%	
Choice for HB				
Safety		65.3%		
Anonymity		26.7%		
Choice for SB ^δ				
Accessibility of clients			60%	

Table 1: Summary of the Fieldwork

All values are to nearest places of decimal. When the total doesn't add to 100, it means some didn't respond or denied responding.

*: Neighbouring states include Haryana, Uttar Pradesh, Rajasthan, Uttarakhand. Far flung states include West Bengal, Bihar, Madhya Pradesh, Manipur, Assam, Gujarat, Maharashtra, Orissa, Sikkim

+: All 48% are from Bihar

α : Some subjects provided range, and I have taken the maximum value of that range. This doesn't affect the comparative statistic, which is what we are mainly interested in.

π : Does not include whether they are divorced or separated

μ : Does not include children beyond school going age

β : For SB sex worker, earning per client is the same as price per client, since there is no pimp (commission) involved here

∞ : Percentage doesn't add to 100 in case of SB because some suffered violence from more than one source

δ : Response categories outside accessibility were diverse and inconclusive

The relationship between violence and the sex workers' type (SB or HB) is reflected in the regression table below. Violence is significantly and negatively correlated with the sex worker being HB. Also, HB sex workers being of lower age is significant. As the table shows, and as evident from summary statistics of the survey, violence is the prominent reasons for sex workers

not to choose SB, and they are happy to pay 50% of their earnings to pimps to ensure their protection.

It must be mentioned here that my fieldwork reveals that the brothel owners in the red light area of Delhi – GB Road – have a fixed service charge of 60% (as mentioned earlier). This is only a little more than the charge of pimps in non-ghettoized surroundings. However, both existing research (and our fieldwork) showed that red light areas are suffering from an exodus of sex workers to non-ghettoized categories (Flowers, 1998; Miller, 1993; Harris, 2012). Not only are pimp charges are lower in HB, with almost equivalent protection, but also HB sex work comes with significant freedom and agency. 7% of our subjects had been in a brothel before and their unanimous response of their reason to leave brothel was higher earnings and freedom, without loss in safety.

VARIABLES	(1) violence_dum	(2) type_dum	(3) earning
type_dum	-1.639*** (0.378)		8.075 (8.202)
Age	0.0380 (0.129)	-0.269** (0.137)	0.806 (0.965)
experience	0.00176 (0.0471)	-0.0556 (0.0444)	1.788 (1.369)
Constant	0.835 (2.059)	5.961*** (2.302)	3.192 (15.16)
Observations	100	100	100
R-squared			0.008

Table 2: Results after regressing type, age and experience against violence and earnings
Standard errors in parentheses and *** $p<0.01$, ** $p<0.05$, * $p<0.1$

7. Exploring the Results

We have two important findings from our empirical work. Firstly, even though the middlemen (pimps) in the market charge 50% of the income of sex workers, the latter still prefer to be working through them rather than independently on streets. Secondly, those sex workers who do not work with pimps report significantly higher incidences of (mainly police) violence. Coupling these two pieces together, this paper is indicative of police atrocity – and not pimps domination – as the main

reason for considering decriminalization or other forms of legalization of sex work. At the same time, I acknowledge that it is difficult to imagine decriminalized sex work will knock out pimps in the market,¹²⁶ since the activity will be necessarily in need of protection from, say, violent clients, gangs or perhaps for arranging clients and locations. But with the possibility of police extortion minimized, pimp commissions will reduce substantially. And sex workers will have to make a choice of their professional risks in a more informed manner.

7.1. Existing Scholarship on the Role of Pimps

This research therefore diverges from existing scholarship on the pimp-prostitute relationship. Flowers (1998) and Millers (1993) show that entrepreneurial and independent prostitution has been steadily increasing. This might not be true in societies where prostitution is de facto criminalized and the police is corrupt. Sex workers may be leaving brothels in red light areas, but surely pimp services haven't suffered any decline. Williamson and Cluse-Tolar (2002) attempt to understand the relationship between pimps and sex workers and show that despite such studies pimp controlled prostitution needs serious research. But even they focus on violence in pimp-driven sex work. This as we suggest, could be a description of only some kind of pimps. Our fieldwork shows that violence protection is the primary service of pimps in societies with corrupt law enforcement authorities.

Pimps have been the subject of studies since the 1960s and 70s, mainly in sociological resources.¹²⁷ Even recently, there is almost unanimous agreement that street-based prostitutes undergo high levels of mental and physical victimization (Williamson and Folaron, 2001; Williamson and Baker, 2009). Yet, mention of pimp-controlled prostitution is always perceived in a way that lends an impression of a more miserable life for a sex worker under a pimp (Dalla, 2006; Williamson and Baker, 2009, p. 32-34). Specific studies that have compared pimp and non-pimp prostitution often lead to the conclusion that the former suffer more violence and a higher risk of victimization (Norton-Hawk, 2004).¹²⁸ This is evidently not the case in independent sex work in Delhi, which is almost always pimp-controlled.

¹²⁶ This has not happened in Germany for example, even after legalization of sex work. See for e.g., Meyer et al (2013).

¹²⁷ See, Heard, 1968; Goines, 1972; Slim, 1969; Williamson, 2000

¹²⁸ Specifically, Norton-Hawk (2004) mentions, "*Pimp-controlled prostitutes are more likely to be single, to have failed to complete high school, to be non-White, to have never held a legitimate job, and to come from exceptionally dysfunctional families. Pimp-controlled prostitutes were younger when they had their first sexual experience, first used illegal drugs, and first engaged in prostitution.*"

7.2. Diverging Results of Our Study

What could be the reason for these new findings on pimps in our study? Indeed, almost all of the literature, which relies on studies done in the developed world, shows that pimp violence exceeds exploitation in non-pimp based prostitution. One of the primary differentiating characteristics of these countries from the developing and least developed societies – in the context of sex work – is level of police corruption. Transparency International Reports are indicative of this at multiple levels. We believe that police corruption sets developing countries apart from the developed world in this context, because with high police corruption present in developing countries, there is a higher level of police violence, which necessitates the need for a pimp in developing countries more than developed ones.

This is further supported by my fieldwork which showed higher levels of police violence as compared to violence by clients and gang members. This explains why most studies often mention the high and increasing share of independent prostitution. And no wonder that in our case study we find that the pimp (HB) prostitution is thrice the number of SB (independent) prostitution. My interviews with sex workers activists shows that this is indeed the case, even outside the area of my sample. If societies have corrupt, violent and dishonest police, pimps will assume the role of middlemen, offering services of protection in addition to arranging clients. The lower share of pimp based prostitution, therefore, may be explained by the fact that a pimp's service menu would be smaller in societies with tolerant and relatively honest police. An increasingly corrupt police necessitates the use of pimps since they possess a comparative advantage or lower opportunity cost to face the challenge of police exploitation.

Countries like India, which have little regard for the rule of law, are natural breeders of deplorably corrupt state enforcement systems. Exploiting the underprivileged – particularly prostitutes who are ignorant of their legal rights and always at the peril of a more powerful institution, is business as usual for them. In such an environment, any illegal activity which has a low elasticity will shift underground in connivance with the police. This connivance is brought through intermediaries in such markets. Pimps are these intermediaries in sex work. They absorb the transaction cost of the trade and provide protection, in addition to other services. They charge 50% of sex workers' earnings, although home based sex workers do not earn any less than the 'un-pimped' street based ones. With the possibility of exiting pimps, sex workers still prefer to stick with them.

It is important to mention here that this paper does not intend to push an argument that pimp-controlled women are free from violence. Indeed, violence, enticement and manipulation by pimps is well documented in literature (Maher, 1996; Miller and Schwartz, 1995; Sterks, 2000; Williamson and Cluse-Tolar, 2002), and we make no claims to refute it. Few cases in our study expressed a hostile environment that pimps have often maintained, and one subject from the SB cohort made pimp's subordination the reason why she wouldn't want to join HB sex workers. Pimps instrumentality in trafficking is indeed prevalent. We only direct the attention of this literature towards evidence that there may be a need to understand the pimp's role in the market for sex work further. Their removal from sex work in India is not guaranteed with the decriminalization of legalization. However, their role will surely reduce. Indeed, pimp-controlled women are subordinated and exploited, and they have been often regarded as the main perpetrators of trafficking. In so far as we do not delve into questions of trafficking, our conclusion has merits. We therefore modestly argue that decriminalization of sex work is imperative in such societies to minimize terror by police and prompt the reduction of the pimp's commission.

At this juncture, it is imperative to look at the arguments generally pushed in favor of retaining the criminalization of prostitution. Raymond (2004) surmises those arguments succinctly. In particular, the case of Germany (and sometimes Victoria in Australia and in Netherlands) is used as a failed experiment to legalize prostitution. It suffered astonishingly high levels of trafficking from Eastern Europe after legalization (IOM, 1998). Similarly, the sex industry swells with legalization (Daley, 2001). Studies have also shown that release from the legal clutches pushes the activity even more underground (Raymond, 2004). There are also arguments that there is a higher level of violence against women in a legal setting (Raymond et al, 2002). Some also believe that legalization tends to commodify a woman's body, further encouraging young men to treat women as sexual merchandise (Sullivan and Jeffrey's, 2001). Citing how little women have control over their preference for usage of condoms, scholars also point out that legalizing policies do not promote women's health (Raymond et al, 2001), and in a similar vein, does not increase a women's choice for the profession. They also argue how much prostitutes themselves want to have the profession criminalized (Raymond, 2001).

All these arguments are profound in their own right, but they show only one part of the picture. International trafficking as a problem needs a surgical solution and there is no reason to believe that trafficking rates are lower in an environment of criminalized-prostitution. Rich European countries suffer from this problem particularly because legalization has also been complemented by relaxing border controls under European integration policies. Only 3% of sex workers in our sample were from outside India, and all from Nepal, which does not have any border control with

India.¹²⁹ The industry expanding with legalization may only be a reflection of it coming over-ground. In other words, the expanded industry shows us the true size of the market, which could definitely be lesser than the true size which existed earlier. In addition, any expansion of a criminal activity after legalization is symptomatic of social demand becoming more explicit. If morality considerations are kept aside, there is no compelling reason for such expansion to be bothersome. After all, the purpose of releasing legal constraints was not to reduce the profession, but to make it safer for women. Prostitution increases with economic growth (Rosen, 1982), but this does not mean growth is harmful.

The argument that legalization pushes the profession more underground can largely be explained by the fact that many women do not want themselves to register (Schelzig, 2002) for anonymity reasons. This is one of the reasons that we argue in favor of decriminalization rather than legalization. Most studies that show increasing violence after legalization rely on interviews with trafficked sex workers, and so it is not surprising to find these results. Indeed, with legal barriers removed, sex workers may not only be free from police atrocity, but may also have legal recourse against violence. This freedom also enables sex workers to refuse a client who does not agree to use of condom – she will agree to the demand only if she is gaining more than the expected cost of sex without condom. In a setting of criminalized sex work, she may succumb based on the pimp's fears and can't even report client duress. The idea that legalized prostitution removes the immorality associated with it inducing young men into the commodification of a women's body is similar to the argument that carbon trading should be banned because it legitimizes pollution at a cost. But then, the question is, what is the alternative? Criminalized prostitution is not commodifying a women's body any less. Finally, the idea that sex workers themselves want the profession to remain criminalized is a very incomplete view, ignoring cross-country and social dynamics. Sex worker collectives in India have always argued for a decriminalized form of prostitution that gives them more voice and empowerment.

8. Engaging with the Decriminalization of Sex Work

By and large, the body of literature favoring prohibition bases its arguments largely on the experience of the developed world, without realizing significant differences at social and economic levels between countries. India for example, suffers from acute poverty and a lack of suitable employment options for a significant portion of the workforce. Women (and even families)

¹²⁹ There are high-priced escorts (prostitutes) in Delhi, who often are women from rich background (and even East European countries), but their entry in the profession is usually considered to be under full consent and choice, given their backgrounds. See Lee (2008).

resorting to sex work as a compulsion from economic impulses need an alternative economic order that enhances the chances of a decent living for themselves, rather than a prohibition of available means of livelihood. Such a prohibition conflicts with basic human rights more than social morality. We do agree that the idea of exacerbating intra-country trafficking problems with the decriminalization of prostitution is not entirely unfounded. But that cannot be the reason for not reconsidering the existing deplorable situation of women's freedom. A policy of decriminalization should ideally be complemented with creating better education and employment opportunities (particularly for the children of sex workers), very strict enforcement against trafficking and significant police reforms. Indeed, Sweden's example shows how the change in law which penalized the purchase of sex (rather than sale of it) began to exhibit results only after extensive police reform and education changed the attitude of law enforcement in this direction (De Santis, 2014).

The paper demonstrated that sex workers in India may choose to remain with pimps, rather than go independent on the streets due to risk of violence at the hands of police and State enforcement authorities. They do so even if they have to part with 50% of their earnings to the pimps. The pimps in such markets act as an intermediary who offers protection at a price, and clearly this protection is worth more than 50% of the sex workers' earnings. While this indeed builds a case for the decriminalization of sex work, albeit for a slightly different reason. Sex workers need freedom from coercive legal institutions rather than intermediaries, who I expect will not be knocked out of the market even after decriminalization (which is often the conclusion of sizeable research). Pimps offer other services than protection. But surely, decriminalization will drive away exploitative policemen from the industry, and no longer for want of protection against police, the commission pimps are able to charge will drastically reduce. This will aid to more savings for sex workers and increase the efficiency of the market.

The idea of decriminalizing sex work here is offered as the tool to remove the State's involvement in sex work in India. Considerable harm has already been done by the inefficient and corrupt power of the State's law enforcement agents at multiple levels. Sex workers have suffered at the hands of an abusive colonial law enforcement body (Kotiswaran, 2001), and this has continued unabated under independent India's police force. Forms of legalization will create new ways for the State to design and define the contours of the trade, which may only convolute the existing legal repression beyond reform. Decriminalization is a neater way of removing the State's control and influence. More importantly, decriminalization – as opposed to regulation – even though a weaker form of legalization, reflects more clearly the imprint of changing moral codes and social principles. Decriminalization of prostitution affords agency to the women involved, and morphs the

institutional prostitution to de-institutionalized sex work. There is an element of dignity and freedom inherent in the process of decriminalization, pivotal for reform in this area. The informality of the profession needs to be a-legal, rather than illegal.

On the ground level, this means that police will not harass sex workers and actually receive complaints from them if they have been ill-treated. The change here will not take place instantly and only coupled with police reforms will they slowly begin to trickle in. Also, note that when sex work does not attract criminal charges, it will be easier to remove victims and perpetrators of trafficking from the profession. As it stands an illegal activity meshes up with another beyond recognition. But illegality can be technically insulated in a neater fashion from decriminalized enterprise.

Decriminalization in addition to its reflectivity of changing social mores, can also be seen to possess the potential to change them. The idea of expressive law is useful here. Scholars have claimed that law has an expressive function in addition to a sanctioning function (Sunstein, 1996; Lessig, 1996; Mazzone, 1999). The expressive theory argues that courts play an important role in the expression of social values.¹³⁰ Social values, as manifested in social norms, arise from multiple sources. Law functions to coordinate these sources by creating a focal point and discovering a new equilibrium (McAdams 2000, 2005). Sometimes, instead of merely discovering the equilibrium, law can create it. In doing so, the law attempts to change social norms without changing social values, making focal point creation the first expressive use of law (Cooter, 1998, 2000). This is where the decriminalization of sex work can be highly instrumental. In addition to generating the possibility of release for sex workers from the clutches of the police, decriminalization can also help to align social morality with a principle that regards a woman's safety as more important than her so-called character.

The results come from empirical work conducted in a large residential area of New Delhi. One may question the extent to which these results can be generalized across India and indeed, in other parts of the world. The fieldwork conducted in our study illuminates alternative view of sex work by understanding the dynamics from an economic point of view. For a variety of reasons, we believe the study to be fairly general across most of India, if not other developing countries

¹³⁰ Hart, in *Punishment and Responsibility*, argues that altering behavior is one of the uses of criminal law. See also Hart (1961) where he says, "There are many techniques by which society may be controlled, but the characteristic technique of the criminal law is to designate by rules certain types of behavior as standards for the guidance either of the members of society as a whole or of special classes within it." See also Garland (2012), where the author suggests that Durkheim believed expression of social values is the *most* important function of law.

(although we do feel it can inform policy making or encourage research in other neighboring countries on similar lines). This is because of: the homogeneity of solidarity movements across red light areas in various cities in India, the common aspects of police extortion and rescue efforts, the construction of the industry in both red light areas and in non-ghettoized settings, the average low-income cohorts of sex workers, the universality of coercive legal structures and the demand for freedom from the State is surprisingly similar across India (Sahni et al, 2008; Sahni and Shankar, 2013). The comparable socio-economic conditions of sex workers and the means through which they are exploited¹³¹ encourages me to look at the generality of my study with optimism.

The article makes a tiny dent in the existing scholarship. While the main policy suggestion does not differ from the liberal contractarians, the fundamental reason for it differs. This difference also captures (a) the need to observe prostitution as an economic enterprise which, (b) like any other informal market creates its own institutions, (c) including middlemen whose role needs to be understood more carefully and to (d) inspire future research in this area. In the hope of continuing this conversation and the replication of such primary studies, I remain.

9. Lessons for Policy Reforms

This chapter delves with policymaking directly. Lawyers have grappled with the question of prostitution, and whether it should be criminalized or not. Soon after independence, the Constituent Assembly in India was vested with the task of creating a Constitution for the newly formed country. The Committee debated the question of sex work in detail. For instance, the following is an excerpt of the discussion between two members of the Assembly, where the issue of criminalization was being resisted.

Shri Brajeshwar Prasad: Mr. President, Sir, I feel that the gravity of the situation has not been realized . . . My Friend Shri Deshmukh spoke in the vein that probably it can be abolished or abrogated altogether. I do not agree with him on that point. Prostitution is a very old institution – as old as the hills and it cannot be abolished. The roots of this institution lie deep in our human nature. The only thing that we can do is to regulate it . . .

Shri R.K. Sidhva: Mr. President, I was rather surprised at the attitude of Shri Brajeshwar Prasad. He says this institution is centuries old and it cannot be abolished. Prostitution in India is a disgrace and shame to us and it is regrettable that Shri Brajeshwar Prasad should advocate its

¹³¹ This was evident in my interviews with activists and scholars active in Indian sex work discourse.

continuance . . . It is a disgrace and shame to society that this kind of thing should be allowed to continue . . .

Shri Brajeshwar Prasad: If you abolish, the whole thing will go underground.

Almost seventy years after independence, the same questions remain unanswered. For a scholar in L&D, the answers are simple. A radical scholar would want to abolish it and let law be clear about it. A liberal would want it to be legalized. But thinking in binary terms comes at the risk of washing away so many legal possibilities, like decriminalization. More importantly, the motives are misaligned from reality. Bypassing pimps may not be feasible. They are an economic intermediary around which the trade revolves, and may continue to revolve. However, decriminalization will reduce their commission significantly, thereby affording more empowerment to sex workers. A micro-view of the issues at hand leads to a more informed judgment about what and *why* we should intervene, if at all. The State, even if it adopts a liberal approach, must be mindful that the only way to evict intermediaries is to be able to offer the same service that they are offering, at a cheaper price. If it cannot, then it is important for the State to recognize the role of the intermediary, and strengthen it, so that the exploitative side effects of using an intermediary are arrested.

We do not have the answers at the moment to help us design a framework for a decriminalized market for sex work. Future research needs to shed light on this area from that perspective. However, the starting point is clear. The customized private ordering amongst sex workers who work outside the red light districts is crucial to imagine the map and scope of prostitution in India. The empirical work we engaged with in this chapter is instructive in the sense, as it helps us to reimagine the contours of an activity which has been termed illegal by a faulty construction of the law. At the same time, it allows us to see why the lens of informality is a more powerful tool to view this issue. Digging deeper into the industry, we find a clandestine industry running that requires creative ways to deal with the problem.

We have come at a juncture in this book, where our understanding of informal markets has been greatly enhanced by looking at three, entirely unrelated markets in India. While it convinces us of the pluralistic manners in which markets govern themselves, it also shows us how certain central binding threads permeate through these markets. Informal intermediaries are one of them. They act as crucial links between various players in the market and govern most labor relationships. Understanding these intermediaries is a neat way of understanding the institutions of these markets, and developing countries in general. We conclude our findings in the next chapter.

10. Chapter Four Summary

This chapter has been concerned with the market for sex work (prostitution) in New Delhi. My focus here are independent sex workers, who work outside the designated red light areas and are relatively freer, and so provide a useful case for understanding choices made by informal workers in an industry whose legality is under question. I observe sex work from an informal work perspective. I divide the sex workers outside red light areas, into two cohorts – those availing the services of a pimp and those who are not. Pimps act as intermediaries and by estimating various quantitative parameters, I attempt to determine their economic role. I show how their value lies in offering a service, which is protection from police (mainly), gangs and violent clients and arranging clients. Sex workers purchase these services because they act as risk absorbers in this trade. Policy implications follow.

CHAPTER FIVE: INFORMAL NORMS AND THE LAW: WHAT DID WE LEARN?

When men are friends, they have no need of justice, while when they are just, they need friendship as well.

Aristotle, Nicomachean Ethics, book 8, Ch.1

1. Norms and their Persistence

In his latest book, Francis Fukuyama (2011) narrates a compelling story. He paints a suggestive picture through his example of Melanesian society, inhabiting in the Pacific in several hundreds of tiny islands. The diversity of this group is so huge that by one count, there are more than 1,319 languages in Melanesia – that is one language per 716 square kilometer.¹³² These islands have been inhabited for more than 30,000 years. When British troops left the islands, they installed their Westminster style of government there. The existing socio-political framework was relational and community driven. The tribes – for centuries – had hunted for their own tribesmen/tribeswomen and had a community leader, called the *Big Man*, responsible for gathering and sharing of the bounty for his tribe. Without redistribution in his tribe, the Big Man would lose his status. The concept of electing a leader that would govern everyone in the group of islands was totally unheard of. No wonder therefore that the democratic models of the West were an utter disaster in the islands, with enormous political turmoil and instances of rent seeking (May, 2003). What Westerners view as rampant corruption is basically what the Big Men have always been doing there – ‘to redistribute resources to their kinsmen,’ which now instead of pigs and shells are revenues of mining companies.

This story offers a window to appreciate what lies beyond our textbook universes of theories. Any installation of a new legal order comes with its own value system. Its imposition on a society which runs through a different value system could be hugely counter-productive. Through the example of private ordering, embedded in Indian informal markets and their heterogeneity, I show in this book that policy responses are most effective when complemented by existing value systems.

In the cases of informal markets in India, I show that understanding the intermediaries should precede intervening at any level in the existing informal market space. Most policy options claim

¹³² Consider Solomon Islands for example: the tiny island group has a population of 523,000 and has distinct 74 (of which four are extinct) languages! Even though English is the official language, hardly 2% of the population speaks it.

their weight against the intermediaries, who in popular wisdom, are considered evil sources of exploitation. While that may be true in some cases, we realized that they exist to serve particular economic functions in that market. If that function can be fulfilled by the State more efficiently, then they should be replaced. If not, the State should engage with them, complement their services, or strengthen their presence to enable a higher level of institutionalization.

In this chapter, I revisit the lessons learned in previous chapters, after engaging into a brief discussion on what informal norms are, and what can they offer for our understanding of law and development. This chapter shows why legal reform processes haven't worked. In doing so, the focus of the inquiry is on whether 'fixing' the law makes sense or not in the first place. Locating my study in the framework of Law and Development (L&D), I show why and how informality – broadly defined – needs to be captured if we are to understand the link between law and development. I will invoke the findings from the book chapters and argue for a more substantive and centralized view of legal pluralism, in place of legal centralism.

2. Informal Institutions

There is little disagreement among social scientists today that the important determinants of the socio-economic performance of societies around the world are its institutions. A rich literature shows the powerful influence institutions can have in creating the economic (North and Thomas, 1973; North, 1990), sociological (Powell and DiMaggio, 1991; Brinton and Nee, 2001) or political (Acemoglu et al, 2005) structure of a society. Institutions, as North (1990) defines it, are “the humanly devised constraints that shape human interaction.” (North, 1990, p. 3).

North classified institutions as formal and informal. While the formal institutions are laws and rules which are written and expressed in record (for example statutes, regulation, bylaws, Constitution etc.), informal institutions are those that are followed through unwritten social norms. Informal social norms are socially shared and unwritten rules of behavior that are created, communicated, and enforced outside of official channels. Societies have evolved from personal exchange with kith and kin, to generalized impersonal exchange through contracts (North, 1990; Dixit, 2004). Yet, many societies today remain characterized by personal relationships in their business transactions. These societies are not run by standard contract or property rights but through informal social norms (Ellickson, 1991).

Rittich (2006) argues that “*rather than the antithesis of law, now informal norms may supplement or even supplant formal law in the facilitation of business transactions.*” Informal institutions not

only fill the gap left by formal law, they also reflect a distinctive approach to the provision of justice. Since they operate at the community level, they earn a sense of credibility. In this sense, community evolved social norms are in a better position to negotiate and act as a redistributive tool, rather than formal rules that are bound by the formalistic approach of law.

Indeed, informal institutions are the backbone of social interactions, not just for economic development (North, 1990) but also for politics (Helmke and Levitsky, 2004). The term has been applied to a large number of phenomena like personal network (Wang, 2000), social capital (Stiglitz, 2000), clientelism (O'Donnell, 1996; Lauth, 2000), corruption (Böröcz, 2000; Darden, 2002), unorganized markets (Harris-White, 2010), mafias (Lauth, 2000; Collins, 2003), civil society (Boussard, 2000; Manor, 2001), traditions and culture (Dia, 1996; Pejovich, 1999), development economics (Kerekes and Williamson, 2008).

In particular, informal institutions are witnessed in the everyday operation of informal and unorganized markets. These informal market institutions evolve in a customized fashion, crafted by historical events, unique to each society. Young (1998) calls it the local conformity/global diversity effect, and this has been documented in several settings.¹³³ It is imperative therefore, to examine carefully the determinants of institutions and how society can effectuate institutional change (North, 1990). Institutional change is not easy however. It is a slow and gradual a process that moves with glacial pace. More importantly, through the framework of path dependency (Arthur, 1994; David, 1985; Pierson, 2000), the theory of institutional change explains, *inter alia*, how often inefficient institutions get locked in history. Over time, the switching costs become too high. This is also what we observe from the fossilization of intermediaries in informal markets. It becomes important to observe the informal markets at their institutional level therefore. This requires us to peep into history in order to estimate the cost of operating these businesses outside the law.

Institutions are complex results of human behavior that lend some predictability to our exchanges and interactions. Informal markets are a result of such interactions. In the absence of formal law, informal markets generate a body of rules and institutions that offer the much needed certainty in their transactions. For such institutions to be stable, they need to be followed by everyone, be applicable in diverse situations and should lead to desirable outcomes. At the same time, they should have internal and inherent mechanisms for enforcement, lest chaos fills the space left by

¹³³ See for example, Young and Burke's (2001) to investigate the effect on agricultural contracting

unenforceable (implicit) contracts. Outside the regulatory net, informal markets are governed through many micro-institutions which enable its sustenance.

3. The Importance of Informal Institutions for Understanding Law Reform Processes

Cultural norms are entrenched deeply within the cognitive abilities of humans, which are hard-wired within them and reflect the institutions they grew up in (Denzau and North, 1994). If transplanting policies were so easy, then, societies would not have diverged in their economic indicators. After all, the knowledge dissemination (of say, improving economic well-being as a result of improving factors of production) should yield the best practices everywhere. But institutions are path dependent and not easily replaceable.

Therefore, even while De Soto's (1989) prescription of legalizing informality make logical sense, intuition for those who belong to this society tells them to tread over this path rather cautiously. Ostrom (1990, 2005) has reminded us of the efficient private ordering embedded in informal management of common resources, where formal law's interjection is often undesirable. In Nepal, for example, the government tried to nationalize forests since they thought small forest-based communities were not able to address the problems of deforestation; which was disastrous (Varughese and Ostrom, 2001; Waltner-Towes, et al 2003).

3.1.The Need to Dig Deeper for Policy Reforms

This is what I have attempted to show in the book, by exploring evidence from India. I excavate social norms that remain embedded in small and informal businesses that work outside and sometimes against the law. Note that informal markets are classic examples of markets which run on informal institutions. And since they capture the majority of markets in the developing world, they are too important to be ignored. I estimate the costs of the informal market institutions and help view these markets as sites of informal governance. Informal markets are indeed unique sites to enter the debates on L&D. Their small-scale, extra-legal nature make them appropriate laboratories for experiments on legal reform, and their historical, path dependent character deliver a resisting attitude in them. Such institutional contestations manifest in fascinating narratives that may help guide scholarship in this direction.

3.2.Locked-in Inefficient Institutions

My study also shows an interesting feature about the path dependency of informal institutions, that we consistently see to be embedded in informal markets. All institutions emerge to fulfil some gaps in the market, some of them reduce transaction costs while others may not necessarily do so (consider coal mafia study, for example). Those which do not, also ensure that inefficient institutions are weeded out. Over a hundred years ago, Menger distinguished between ‘organic’ and ‘pragmatic’ institutions where the former are un-designed outcomes of an individual’s pursuit of their self-interest, while the latter emerges as a conscious contractual design (Menger, 1883 [1963]). Elster (1989) imagines an intermediary state where institutions may have come about organically but when it began serving certain elites, it was pragmatically preserved by the same elites. Citing both Menger and Elster, Bardhan (2000, p. 226) highlights why the historical evolution of land rights in developing countries resulted in inefficient institutions, *inter alia*, in the landlords’ resistance to land reforms, which would dilute their social and political power. This is something we observed in our second case, of coal mafia.

An alternative way to understand the fossilization of inefficient institutions is to view the social dynamics as a result of interaction between elites and non-elites during moments of institutional change. Significant scholarship has shown that elites have a prominent role in locking-in the status quo. Brezis has produced insightful works with her co-authors (1999, 2013). Acemoglu et al (2005 and 2006) have shown more formally, the persistence of elite control. Plurality of non-elites evolves institutions and enables a reduction of inequality due to competing interest; but a unified minority elite stifles such efforts (Etzioni-Halevi, 1997), thus increasing the gap between elites and non-elites. Elites serve their own self-interests solely and in doing so, they create institutions that work to the detriment of the masses (Engerman and Sokoloff, 1997), either through regressive redistribution policy (Justman and Gradstein, 1999) or by withholding investments in human capital lest the masses acquire a political voice (Easterly, 2001).

Through this discussion, we understand that the biggest hurdle to law reform processes is the fossilized elites in the law-reform process itself. Hence, a State sustained on expropriation is unlikely to engage in law reform. Also, if the law reform is cutting the profits of the elites in question and if the elites have sufficient political influence, such processes may be thwarted. However, there is no denying that the law reform process cannot be ignorant of the informal institutions embedded within the socio-economic architecture of the markets. Informal markets indeed offer a neat way of understanding this.

3.3. Intermediaries

The study brings to the fore, the role of the intermediary in informal markets and their role as pivotal players in sustaining informal institutions. Intermediaries emerge to fulfil an economic function which the market demands, absorbing part of the transaction costs at a price less than the cost. Heuzé (1996) emphatically mentions that *'[h]istory shows that ... the intermediary recruiter or the middleman has always manifested his power and his autonomy. He remains, throughout India, a central figure in the social relations that are the pivot of the world of labor'* (p. 133). Further, he mentions, *'The intermediary is indeed, from a certain perspective, the social king, if one understands by that, someone who capitalizes wealth and power'* (p. 391).

Yet, Indian scholarship on the economic intermediary in informal markets has been rather limited. I show through these three case studies, the emergence and continuum in which the informal intermediary thrives. They develop institutions in response to market conditions, absorb transaction costs and charge a price for their services. They can do so through their advantageous position in terms of liquidity, information, influence and network or simply path dependency. To engage in any policy reform process, it is therefore imperative to observe the institutions of intermediaries in any market.

Emphasis on securing formal contractual frameworks will not result in any meaningful intervention until the contracts offer what the intermediary cannot at a cheaper price. There is a need to dilute the excitement of reform proposals that talk about the formalization of the markets, or of addressing the market informality through the demand or supply side of the equation. If there is a button which needs to be pushed to alter the institutional structure of markets, it is at the level of intermediary, and not near the seller or the buyer.

4. Evidence from India

In studying informality, academics and policy makers frequently suffer from a 'regulatory' bias, viewing all actors in this economy as subjects who lie in waiting only to be eventually re-appropriated by the law. From this standpoint, intervention strategies tend to be pitched only at the level of the normative - legal reform, domestic implementation of International Labor Standards, reducing costs of entering into the formal system etc. Policy responses remain embedded in locating gaps in regulatory frameworks, challenges in applying labor laws to informal enterprises and strengthening labor law enforcement regimes. This approach needs to be supported by an understanding of informal markets through an institutional perspective.

India is a typical case. The informal sector in the country employs more than 90% of its workforce. And yet, for its size, it has attracted rather little research. Development economists who have committed themselves to understanding this gigantic economy have often relied on macroeconomic or theoretical models, offering wide-ranging policy suggestions. But very little empirical work is done. This is largely because there is no availability of micro-level data about the informal sector, which is not a surprise. Furthermore, undertaking primary work is very difficult, given the clandestine nature of many such businesses. I decided to delve into three unorganized markets to see what was lying beneath the stereotypical imaginaries of informal markets in literature. It was indeed, fascinating.

4.1.Agra's Footwear Cluster

Agra is a city in north India, famous for the Taj Mahal and India's largest leather footwear making cluster, which is at least three centuries old. Much of the manufacturing takes place in households, since shoemaking is a labor intensive trade. There are more than 5000 household units where shoemakers (artisans) make shoes with the help of their family members; and even slightly bigger units also do not employ more than 5-10 artisans.

Shoe trade in India runs on credit. That means shoes are purchased by wholesale traders in Agra on credit, and they in turn sell it on to other traders or retailers around the country on credit. Only when the customers pay the retailers for their shoes do the traders and shoemakers get their money. This typically means that the shoemaker sells the goods now, but receives his payment (usually three months) later.

Such trade credits are commonly observed in many markets. However, the Agra footwear trade credit system is peculiar in two respects. Firstly, the market being informal, there is a need for credible commitments (the trader should not renege on his promise later). Secondly, shoemakers here, unlike in other (and definitely formal) markets, are liquidity constrained. They are poor manufacturers who need cash today so that they can buy raw materials tomorrow. How does this traditional market address these problems?

The institution that solves the problems is what I call, *parchi*. Traders issue a *parchi* to shoemakers when they buy shoes from them, mentioning the amount and due date on it. This *parchi* becomes tradable in the market at a discount. There are intermediaries in the market (called *aadhatis*) who will purchase the *parchi* and pay the shoemaker, the mentioned amount less an interest

(discount). At maturity, the intermediary goes to the trader and collects the sum. The interest rate on the *parchi* depends (only) upon the creditworthiness of the trader who issued the *parchi*. This means that if the trader has a bad credit history, and is known to renege on his promises earlier, interest rates on his *parchi* would be high, thereby deterring the shoemaker to approach this trader (the interest rate on *parchi* is a cost to the shoemaker). Hence, to attract good shoemakers, traders need to keep their interest rates low, which consequently makes them commit credibly. At the same time, shoemakers in need of money can easily liquidate the *parchi* through the intermediary.

The institution of *parchi* has continued in last several decades without any influence of third party, State enforcement apparatus, and in the face of many institutional shifts that this market has undergone since independence, such as: partition-induced-migration, the collapse of Soviet Union which was the largest exporting country and liberalization which opened up the market to competitive Chinese goods. The resilience of the *parchi* system is extraordinary.

My survey data reveals that the average interest rates on *parchis* is around 17% p.a. This is approximately 5% points higher than the prevailing bank interest rates for an equivalent loan. Shoemakers and traders still prefer to trade with intermediaries rather than approach the bank. This shows the transaction costs of credit delivery in formal channels must rise up the *effective* interest rates, thus deterring market players from approaching the bank.

For scholars of L&D, there are important policy lessons here. Should law attempt to ban the intermediaries here who seemingly exploit poor shoemakers and replace them with formal easy-loan-shops in the market? Or should they facilitate the intermediaries with complementing institutions to enhance the gains from the trade? Clearly, the bank's costs of securing credit information on every trader in the market is prohibitory. Intermediaries however, possess this idiosyncratic knowledge (Williamson, 1975) by virtue of their experience and presence in the market for a sufficiently long time. Empowering the existing frameworks could perhaps be a better idea. Shoemakers can be offered loans separately, on easy terms, to ensure a richer choice menu. Formal law can help create information channels, empower shoemakers and develop a friendlier tax regime, but uprooting the intermediaries here may result in uncomfortable divergences between policy aim and results.

4.2.Dhanbad's Coal Mafia

Dhanbad is a city in the western mine-rich state of Jharkhand, and is an administrative unit for the most lucrative coal mine in the country, *Jharia*. This coal-belt is infested with mafia, who extort

money from coal buyers when they arrive at the collieries to load up their trucks with coal. How is it that in a nationalized industry, they have held onto this role and sustained it through time? Particularly, when the government's efforts to get rid of the mafia has been ineffective, what policy response can be generated?

Upon digging the history of coal mining in the region, I discovered the importance of labor relations that have developed over time for sustaining the mafia's position. Due to a prevailing metering problem in the mines (Alchian and Demsetz, 1972), mine owners employed labor supervisors (called as *sardars*) who would source laborers from nearby regions and 'control' them. With the introduction of labor unions in India, these *sardars* assumed the position of labor union leaders, colluded with mine owners at one level to exploit the laborers, and patronized the laborers on the other level, offering loans in time of need and resolving their disputes 'seemingly' in their favor. The debt bondage of laborers with *sardars* exacerbated over time and when coal was nationalized in 1971, the *sardars* fossilized their positions, ensured 'their' laborers continued and installed their loyalists in the State agency vested with coal interests of the country. In other words these *sardars* assumed the institution of a mafia. Soon, after amassing a huge social capital, they contested elections and secured their positions at the level of government.

Today, mines are divided between the mafia families. When a private coal buyer seizes a contract of coal, he is responsible for collecting it. The buyer at the colliery site meets the representative of the mafia. The latter charges (extorts) a specific value called GT (*goon tax*), which is to be paid before coal is loaded onto the buyer's trucks. Denial from the buyer to pay this tax results in a mafia member asking laborers not to load coal in the truck, or to load it without sorting. This sorting is important because collieries have coal and stones heaps mixed up. A laborer needs to pick coal boulders and not stones and they will do as instructed by the mafia member. The buyer cannot bring his own laborer and the reason the laborer will listen and obey the mafia member is because he is not only bound by *sardars* through debt, but also receives a voice against the employer (government) through the *sardar*.

There are caste based linkages that assume high prominence in laborers' tying with *sardars*. The *sardars* are the intermediaries who offer a service to both buyers and laborers, which hasn't been provided by the State. This is close to the results arrived by Gambetta (1993) in his study of Sicilian mafia.

My empirical work reveals the average value of GT to be approximately 9.3% of the total value of coal purchased. Since the coal buyers will transfer this cost to the customers, this is the weight the

mafia adds to the coal transactions in the country, which mostly depends on coal for satisfying its energy needs. This is a service charge for offering sorted coal to buyers and extending 'seeming' help to laborers during time of need.

What are the policy responses here? An ardent supporter of the rule of law will claim this corrupt practice to be banned, with strict enforcement from the state. Such efforts have indeed taken place but with little success. A careful study of embedded institutions informs us that the key to addressing this problem is to break the labor cartels of the *sardars*, who are now members of Parliament and union leaders. This can happen if the services offered by mafia, on both sides (buyers and laborers) are provided by the State. Labor outsourcing done through articulating existing caste relations, helping most of them out of their debt bondage will solve the problem on its own. Second, if the delivery of coal is streamlined, then without touching the existing institutions of patronage within a colliery, the extortion will reduce. Indeed, all this should be done if the price of doing so exceeds, say, an average of 9.3% of the value of coal purchased through these channels.¹³⁴

The study on coal mafia is symptomatic of how informal norms embedded in a society could assume contours of the illegal, under certain situations. In doing so, I direct the attention of scholars of informal markets to appreciate the private ordering present in illegal activities, which are as important and as instructive as in other markets. The illegality of the market is not the main thrust of the case, since for many, illegal markets do not form part of informal markets (even though there is no particular reason to think so). The idea is that private ordering, anywhere, is relying on existing informal institutions and effective policy response (which is particularly important in illegal markets) should pay due attention to these institutions rather than installing high enforcement mechanisms which could be costly and/or ineffective if they overlook underlying structure of social norms.

4.3. Delhi's Sex Work

New Delhi is India's capital, and has a large red light area, in GB Road near central Delhi. However, recently, sex workers has been spreading outside red light areas, as independent prostitutes. They work as home-based (HB) sex workers where they utilize the services of a pimp to fetch clients or secure a place where act could be done, or both. Some others work as street-

¹³⁴ True value to be kept in mind should be much higher than 9.2% since debt bondage is a human rights issue, and I do not intend to imply that it is quantifiable. Actually, one should address the problem regardless of costs involved due to the exploitation of the laborers.

based (SB) sex workers, soliciting clients on the street, working without the aid of any pimp. The dynamics of new forms of sex work, outside red light areas, is relatively less understood and I approach the profession from the perspective of informal markets.

Prostitution *per se*, is not illegal in India. However, everything else associated with sex work (like soliciting, or professing in/around a residential neighborhood) is forbidden by law. This effectively criminalizes sex work. The result is that the victimless crime shifts underground, and sex workers utilize the services of a pimp, not only for soliciting clients but also for protecting them from police, violent clients and gang members. The question was, why sex workers who work independently would require the services of a pimp.

My extensive survey revealed interesting findings. The average per client charges for SB was also significantly lower than HB. However, the (weekly) earnings of both the cohorts (HB and SB) remained almost the same (approximately Rs 8000, which is equivalent to \$130). This was because of two factors. Firstly, SB charge less but receive more clients than the HB, and secondly, HB sex workers pay 50% (almost standard) of their earnings per client to the pimp who has either secured the client, vouching for safety, or has provided the place where the trade can be professed. Yet, sex workers preferred HB to SB. This was evident from the average age. The average age of SB cohort was around 20% higher than that of HB. In terms of their choice between the two types, SB sex workers do not get enough clients at a good price given their age and are therefore forced to work on streets independently. But why else would independent sex work as HB be more preferable to SB?

Turns out, the incidence of violence in SB is 50% more than in HB. The pimp offers protection to sex workers from the police, gang members and violent clients. Digging into the data on violence against sex workers further, I discover that the incidence of police violence is approximately 66%, while clients, gangs and pimps themselves represent 19%, 11% and 2% respectively. In SB, the incidence of police violence is almost 90%, compared to around 50% in the case of HB. And at the level of HB, most of the violence is conducted monetarily, which is dealt with by the pimp.

A policy maker may either be an abolitionist, arguing in favor of criminalizing prostitution for the sake of protecting the sex workers, or a liberal contractarian, suggesting decriminalization of the trade to empower sex workers even further. Understanding the market in the contexts it is embedded within, decriminalizing makes more sense - albeit for a different reason than espoused in relevant literature. One should decriminalize sex work in India, not because it saves and empowers women against pimps, but because pimps are necessary in the trade to prevent police

atrocities against sex workers, which is the biggest problem. Coupling this data with the theory of victimless crimes, I argue that decriminalization is an appropriate policy response for disempowering the police, to reduce the threat faced by sex workers and thus reduce the level of commission pimps are able to charge, to bring more balance to the market rather than trying to knock pimps out of the system completely. This recognition is important because it captures within itself, an informally stable relationship of stakeholders in this process, which is exactly where the policy response must be targeted at.

5. Conclusion: Lessons for Legal Reform

The three cases add substantive value for cultivating an informed judgment of informal markets, legal reforms and L&D. We notice valuable interesting patterns. The three cases show that informal markets will *inevitably* rest on the institution of intermediary for their stability. Intermediaries lead to a reduction of prohibitive transaction costs in these markets. The intermediaries serve a specific economic function which is understood through their role in absorbing the transaction costs. The price of their services is dependent upon the elasticity of demand of the market as well as the extent to which their advantageous positions make them intrinsic to the social and institutional setting of the market. The advantages of using an intermediary lies in their access to idiosyncratic knowledge, crucial networks with the elites and their path dependent historical evolution which remains fossilized.

I also find that there is no universal welfare impact of informal markets. Contextual factors determine the extent to which these markets are sites of exploitation or not. Inflating the regulatory space to include these markers within the ambit of the law is not an answer to problems inherent in these markets. Reducing transaction cost is. Hence, formal institutions that seek to reduce transaction costs will be more effective in formalizing these markets. This is not to say that formalization is always desirable.

Legal reform questions cannot and *should not* ignore existing institutions present in a society. Recognition of a variety of paths towards growth and development is crucial for engineering new models of governance. This means that the law can play multiple roles, including no role at all (Upham, 1994). Top-down approaches to transplanting institutions necessarily need to take cognizance of the existing frameworks through which social order is being sustained. Similarly, efforts must be taken to evaluate if the existing frameworks are indeed the most suitable ones. If that is the case, then formal law must strengthen and solidify these frameworks. If not, institutional change should be as minimal as possible, perhaps tweaking the incentive structure slightly. Bold

and sweeping reforms that run counter to the age-old practices usually attract collective opposition, and new laws end up becoming legal relics, preserved in text books alone. If ‘people respond to incentives’ is the first principle of economics, then lawyers can do a considerably better job in social engineering, by adhering to the first principle. This requires an assessment of existing (however informal) norms, which are currently responding to or creating some incentive mechanisms. These incentive mechanisms may not need to be tinkered with at all.

Secondly, often legal reform in one sector influences many other allied sectors. Such institutional externality is essential to be captured in policy prescriptions. When gains from the next level of institutionalizing is high, then it needs to be seen, what factors are working in this newer form of institutionalization, and if these factors will be available in the social context of these reforms. Building ATM machines in an area where people do not use bank cards is an exercise in futility.

Informal markets are interesting sites to study this. Since they comprise of all activities and income generation that fall outside the ambit of governmental regulation, taxation and social security; they work through privately ordered norms, which may or may not be efficient. While the informal economy functions, for many, as an important safeguard against low employment in the formal sector and against forces of impoverishment, this modicum of security comes at the price of fiscal losses, labor vulnerability and an inefficient economy with low-productivity. In addition, the existence of the informal economy also tends to undermine the respect citizens have for the government, thus contributing to weakening systems of law and governance. This makes it important for policy reforms.

Caught in a thick moment of institutional change, contemporary regulatory frameworks around the world are negotiating their receptivity to open-ended standards, flexible regimes, participatory decision making and contractual relations in matters of State’s instrumentality in labor relations. Yet, the origins of normative orders are distinctly and acutely legal. This puts an undue emphasis on regulatory agencies and institutions which seek to bridge the gap between formal and informal in a rather confounding set of social priorities. Regulatory agencies develop an artificial sensitivity to the interaction between politics and justice in dealing with informal markets through the ‘magic’ wands of law.

One can see the prospects for appreciating the value of legal pluralism here (Griffiths, 1986; Merry, 1988). There is a need for recognizing that growth and economic development are not entirely dependent on one set of legal formulations, but rather on a variety of legal and informal orders. The unintended consequences of legal centralism are far too many to be cited here. Suffice to say

that universal legal orders inevitably knock out many other, perhaps more desirable, possibilities of development alternatives, or design an unwieldy and useless architecture of principles that become museum entities. A one-size-fits-all approach poses serious limits to the expansive and innovative solution seeking tendency of humans. For centuries, societies have developed norms that benefit themselves. There is a merit in taking a pause and observing what they do. By doing this, L&D scholars exhibit not just a far greater understanding of their own discipline, but also develop an empathy towards others.

Ibrahim Shihata, the General Counsel of World Bank between 1983 and 1998, faced with difficult problems during the end of the 1980s. At the time, loans to the Third World, rife with inefficient and despotic governments, risked being ineffective but Articles of Agreement of the Bank forbade them to consider ‘political’ criteria in lending (Upham, 1994). Shihata drafted a memorandum distinguishing ‘governance’ from ‘politics’ and recommended the consideration of ‘governance’ in doling out loan awards. Governance, was explained to mean the ‘rule of law’ and the World Bank’s priorities began orienting towards a ‘government of laws and not of men.’ Shihata says, *“Reform policies cannot be effective in the absence of a system which translates them into workable rules and makes sure they are complied with.”* (Shihata, 1991, p. 85).

A consensus on this view is rather diluted now. The book showed some signs as to why. While rules and compliances are necessary, we are not sure if the causality is unidirectional. In other words, even though literature suggested the importance of a rule of law society, we are not sure with emergence of new scholarship whether the rule of law is a necessary determinant of development, or an element of development itself which one needs to aspire for. If we look at micro-elements of social structures – as this study showed – we are convinced that even in the absence of a formal legal regime, societies have evolved effective norms which run the show. In such a case, it is more important to understand those norms and the different kinds of private ordering embedded within the socio-economic structures rather than imposing a blanket notification for a rule of law society. Rule of law may be an outcome of legal reform processes, but not necessarily a condition for it. Markets work in fascinating ways, and appreciating these ways is the first step towards understanding the path towards sustainable development.

6. Chapter Five Summary

This chapter concluded the book. It revisited some of the important concepts on which the arguments were based. It explained the idea of the informal institution, its general applicability in social sciences and its contribution to the literature of law and development. Consequently, the chapter established

the importance of understanding informal institutions as a basis for undertaking a legal reform process. Continuing the echoes of the three cases from India in this literature, the chapter summarized the cases and provided lessons for legal and policy reform.

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SUMMARY

The central inquiry of this work aims at understanding how do informal markets function outside the formal contract and property rights framework, and in doing so, what kinds of institutions do these markets develop. I attempt to answer these questions through case studies of three markets in India, namely, footwear cluster in Agra, coal-mines mafia in Dhanbad, and sex work (prostitution) in New Delhi. Locating the study of informal markets and institutions in broad literature of law and development, the thesis advances policy suggestions that would be useful in a general context of unregulated markets in developing countries.

More than 90% of Indian workforce is informal, thus making it a very important market to be examined. This thesis builds on data I collected through primary research in three such Indian markets and identifies the micro-institutional framework that guides the functional order of transactions that lie 'outside the law.' In general, my findings reveal that every informal market is hinged on an intermediary, who, in absorbing the otherwise high transaction costs at a price, affords stability to the market. For relevant policy interventions therefore, it is crucial that the intermediating institutions are examined carefully.

The first case explores the historic and prominent footwear cluster in Agra in northern India, where poor shoemakers have to sell their shoes to rich traders on credit. To address the problem of liquidity, intermediaries have emerged in the market, who purchase this credit at a discount, with the discount rate dependent on the creditworthiness of the trader to who the credit was given. This incentivizes traders to fulfil their promises to pay on the due date, lest the discount rate on their credits increase and shoemakers stop going to them. My fieldwork reveals this discount rate is approximately 5% more than the bank's interest rates, and I show why market participants still choose informal intermediaries rather than the banks, and offer policy suggestions.

The second case examines the case of mafia in rich coal mines of Dhanbad, in eastern India. Mafia appropriates certain 'tax' from every coal buyer, which my fieldwork indicates lies at an average of 9.25% of the coal value purchased. This history of mafia evolution shows that labor contractors in British India coal mines were needed for addressing metering problem, and since then, they assumed enormous labor monopoly. During nationalization of Indian coal mines in early 1970s, these contractors assumed the roles of labor union leaders, who began engaging in mafia-type activities. Coal mines in India are nationalized. This case reveals how informality can be embedded in formality, and offers policy suggestions for development reforms in such industries.

The third case studies independent sex work (outside the red light areas) in a prominent neighborhood in New Delhi. My fieldwork shows that sex workers who use the services of the pimp are actually less prone to violence from police, clients and gang members, and have no less earnings than those who do not use the services of the pimp even after discounting the pimp's service charge. This shows that pimps essentially act as intermediaries in presence of exploitative law enforcement machinery. To reduce their influence, the paper argues for decriminalization of sex work, as a policy advice.

At a general level, the thesis explores the importance of understanding local institutions and not universal policies. If law is an effective tool for development, then it has to adequately appreciate the heterogeneous institutions located within the market frameworks.

SAMENVATTING

Centraal in dit proefschrift staat de vraag hoe informele markten functioneren zonder het gebruikelijke formele raamwerk van contracten en eigendomsrechten, en welk type instanties in de marge daarvan tot ontwikkeling komen. Ik tracht deze vragen te beantwoorden aan de hand van casestudy's van drie markten in India, te weten de schoenenhandel in Agra, de kolenmijnmaffia in Dhanbad en sekswerk (prostitutie) in New Delhi. Dit onderzoek naar informele markten en instanties is binnen een bredere context van juridische en ontwikkelingsliteratuur geplaatst, wat de beleidssuggesties die in het proefschrift worden gedaan mogelijk interessant maakt voor onderzoek naar ongereguleerde markten in ontwikkelingslanden in het algemeen.

Ruim 90% van de werkende bevolking in India is actief op informele markten, en onderzoek naar deze markten is dan ook van wezenlijk belang. Dit proefschrift is gestoeld op primair onderzoek dat ik heb uitgevoerd binnen drie van dergelijke markten in India en identificeert het micro-institutionele raamwerk dat de functionele werking waarborgt van transacties die buiten de wet vallen. Uit mijn bevindingen blijkt, dat elke informele markt scharniert rond een tussenpersoon. Deze biedt de markt een zekere mate van stabiliteit door tegen een bepaald tarief de anders hoge transactiekosten te absorberen. Relevante beleidsinterventies vereisen dan ook dat grondig studie wordt gemaakt van de instanties die als bemiddelaars optreden.

De eerste businesscase betreft een verkenning van de historische en prominente schoenenindustrie in Agra, in het noorden van India, waar arme schoenmakers hun schoenen op krediet moeten verkopen aan rijke handelaren. Het liquiditeitsprobleem dat daardoor ontstaat, wordt verholpen door tussenpersonen die in deze markt actief zijn en die deze kredieten met korting opkopen. Het kortingspercentage is daarbij afhankelijk van de kredietwaardigheid van de handelaar aan wie krediet werd verleend. Handelaren die hun betalingsbelofte niet op de vervaldatum nakomen, lopen het risico dat het kortingspercentage op hun kredieten oploopt en schoenmakers niet meer aan hen zullen verkopen. Ze zullen dus steeds proberen hun schuld op tijd in te lossen. Uit mijn veldwerk blijkt dat het kortingspercentage ongeveer 5% hoger ligt dan de rentetarieven van banken. In mijn proefschrift maak ik duidelijk waarom marktdeelnemers liever gebruikmaken van informele tussenpersonen dan van banken, en doe ik beleidsvoorstellen op dit gebied.

De tweede casestudy kijkt naar maffiapraktijken in de rijke kolenmijnen van Dhanbad, in het oosten van India. De maffia int van elke kolenkoper een bepaald percentage 'belasting', gemiddeld ongeveer 9,25% van de waarde van de aangekochte kolen (zoals blijkt uit mijn veldonderzoek). Aan de basis hiervan staan loonwerkers die ten tijde van de Britse overheersing in India nodig waren voor het oplossen van meetproblemen en sindsdien een enorm arbeidsmonopolie hebben opgebouwd.

Tijdens de nationalisering van de Indiase kolenmijnen in het begin van de jaren '70 van de vorige eeuw wierpen deze loonwerkers zich op als vakbondsleiders, die zich met maffia-achtige praktijken gingen bezighouden. De kolenmijnen in India zijn genationaliseerd. Deze casestudy laat zien hoe een informele markt in formele structuren kan zijn ingebed en doet beleidssuggesties voor hervormingen in dergelijke industrieën.

De derde casestudy focust op zelfstandige sekswerkers (buiten de rosse buurten) in een prominente wijk in New Delhi. Mijn veldwerk toont aan dat sekswerkers die gebruikmaken van de diensten van een souteneur minder last hebben van geweldpleging door politie, klanten en bendeleden en evenveel verdienen als hun collega's zonder souteneur, ondanks het feit dat ze de souteneur voor zijn diensten moeten betalen. Hieruit blijkt dat souteneurs feitelijk optreden als tussenpersonen in een markt waarvoor op uitbuiting gerichte wethandhavingsmechanismen zijn ingesteld. In het proefschrift pleit ik ervoor sekswerk uit de criminele sfeer te halen om de invloed van souteneurs tegen te gaan.

In het proefschrift verken ik het belang van inzicht in lokale instellingen in tegenstelling tot toepassing van universeel beleid. Als wetgeving een effectief hulpmiddel wil zijn voor ontwikkeling, moet daarin adequaat rekening worden gehouden met de heterogene instanties die een rol spelen binnen het raamwerk van informele markten.

Curriculum vitae

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Short bio	
<p>Yugank Goyal is final year student at EDLE. His thesis explores informal markets, and attempts to understand how do markets ‘outside the law’ evolve and sustain outside standard contract and property rights framework. He has, previously, taught at OP Jindal Global University, India, subjects like Economics, Law and Economics and Institutions. Earlier, he has worked in an Indian bank as Consultant on rural infrastructure projects. Yugank has published on intellectual property, prostitution, environment ethics and institutions, in general.</p>	
Education	
Bachelor of Technology (Mechanical Engineering), National Institute of Technology, Surat, India	2007
LL.M. (European Masters in Law and Economics), Erasmus University Rotterdam, University of Hamburg and University of Manchester	2008
Work experience	
Consultant, ICICI-Winfra, Kolkata, India	2008-09
Research Associate, OP Jindal Global University, Sonipat, India	2009-10
Assistant Professor, OP Jindal Global University, Sonipat, India	2010-12
Prizes and awards	
Merit Scholarship, NIT Surat	2003-05
Teaching Excellence Award, OP Jindal Global University	2012
Research Excellence Award, OP Jindal Global University	2012
Publications	
<i>President of India and Governance of Higher Education Institutions.</i> Universal Law Publishing	2015
<i>Gazetteer of Karnal</i> , Government of Haryana	2016
<i>Political Dynamics in Bihar</i> , Economic and Political Weekly Vol 50	2015
<i>Towards Decriminalising Prostitution in India</i> , Akron Law Review 47 (4)	2014
<i>Economic and Procedural Constraints for Compulsory Licenses in Medicines</i> , in Reto Hilty and Kung-Chung Liu (eds.), Compulsory Licensing. Springer	2015

<i>Ethics and Governance in Climate Change Debate: Need for institutional shift from Nation-States to Individuals</i> , in Hugh Breakey et al (ed.), <i>Ethical Values and Integrity of the Climate Change Regime</i> . Ashgate	2015
<i>Death of a Discipline: Locating Heterodoxy in Law</i> , <i>Journal of Indian Law Institute</i> 56 (4)	2014
<i>One View of Compulsory Licensing: Comparative Perspectives from India and Canada</i> , <i>Marquette Journal of Intellectual Property Law Review</i> , 18 (2) (2014)	2014
<i>Corporate Governance and Informal Institutions: a closer look at BRICS economies</i> , <i>Jindal Global Law Review</i> 5 (1)	2014
Book Review of Narayan Lakshman's <i>Patrons of the Poor</i> . Seminar	2012
<i>Need for Private Participation in Food Sector of India: Inefficient Parastatal Agencies and Growing Modern Food Market in India</i> , <i>Asian Journal of Public Affairs</i> , Volume 3.	2010
<i>For Pleasure or For Profit: The Promises and Perils of Art Markets</i> , <i>Caravan</i> (magazine)	2015
<i>The Algebra of Bihar Assembly</i> , <i>Live Mint</i> (newspaper)	2015
<i>Development Index with Missing Links</i> , Op-ed, <i>the Hindu</i> (newspaper)	2013
<i>Group Captive Plants can solve Industrial Units' Power Woes</i> , <i>Deccan Herald</i> (newspaper)	2016
Others	
External Consultant to NALSAR University of Law, Hyderabad, India, for advising them on <i>Skill Development Legislation of the government of Andhra Pradesh</i> , commissioned by government of Andhra Pradesh, India	2016
Lead Author and Coordinator of preparing, <i>Gazetteer of Karnal, Government of India</i> (forthcoming April 2016), commissioned by government of Haryana, India. Gazetteers are government publications, acting as Encyclopaedia of regions	2016
<i>Scheme for Group-Captive Power Plant, through Co-financing in Small Scale Clusters in India</i> , <i>Financing Sustainable Development: Ideas for Action</i> , World Bank Report (September 2015) (with Ranjan Ghosh)	

EDLE PhD Portfolio

Name PhD student : Yugank Goyal
PhD-period : 2012-2016
Promoters : Prof Dr Hans-Bernd Schaefer
Prof Dr Klaus Heine

PhD training

Bologna courses	year
Game Theory and Law	2012
Economic Analysis of Law	2012
Behavioural Law and Economics – I	2012
Statistics	2012
Experimental Economics – Methods	2012
Behavioural Law and Economics – II (enforcement mechanisms)	2013
Experimental Law and Economics – Topics	2013
European Securities and Company Law	2013
European Competition Law and Intellectual Property Rights	2013
Specific courses	year
Seminar ‘How to write a PhD’	2013
.....	
Academic Writing Skills for PhD students (Rotterdam)	2013-14
Seminar Series ‘Empirical Legal Studies’	2014
Seminars and workshops	year
Bologna November seminar (attendance)	2012
BACT seminar series (attendance)	2013-14
EGSL lunch seminars (attendance)	2014
Joint Seminar ‘The Future of Law and Economics’ (attendance)	2014
Rotterdam Fall seminar series (peer feedback)	2013
Rotterdam Winter seminar series (peer feedback)	2014
Presentations	year
Bologna March seminar	2013
Hamburg June seminar	2013
Rotterdam Fall seminar series	2013
Rotterdam Winter seminar series	2014
Bologna November seminar	2014
Joint Seminar ‘The Future of Law and Economics’	2015
.....	
Attendance (international) conferences	year
Efficacy and Validity in Informal Markets: Hart and a little bit of Hindi, Validity in Law, University of Groningen,	Dec 2015
Idiosyncratic Knowledge and Informal Markets, Long-Term Processes of Socio-economic Development, Volkswagen Foundation, Hannover,	Nov 2015
Docent at Institute for Global Law and Policy, Harvard Law School, 2012 (Cambridge), 2014, 2015	2012, 2014, 2015
Sociology of Informal Markets, for the stream of ‘Governance and Development in the Age of Globalization,’ at Brown International Advanced Research Institutes (BIARI)	June 2015

<i>Economics of Sex Work in India</i> , Harvard Law School,	June 2015
<i>Compulsory Licensing and Health Impact Fund: Case of India</i> , Global Health, Global Justice 2015 Conference, Ryerson University	May 2015
<i>Formality vs informality interaction: reflection in institutions and practices</i> , FUB-HSE Doctoral Seminar, Higher School of Economics, Russia,	April 2015
<i>Institutional Analysis of Informal Markets: Evidence from India</i> , Joint Seminar on Future of Law and Economics, organised by Université Paris X, Erasmus University Rotterdam and Maastricht University,	March 2015
<i>International Labor Law, Exclusion and Governance: Unpacking Informality</i> , Third World Approaches to International Law (TWAAIL), American University in Cairo	February 2015
<i>Market for Art in India</i> , Winter School on Art Law and Value, OP Jindal Global University and Institute for Global Law and Policy, Harvard Law School, January 2015	January 2015
<i>Using an Expired Product: Revisiting Wealth Maximization in Law</i> , Conference on Philosophy of Law, Debrecen Law School	December 2014
<i>Problem with Anthropomorphizing Nation States in Climate Change Debates: Focus on Informal and Heterogeneous Domestic Institutions</i> , Workshop on Values Informing the Integrity System of the Global Climate Regime, University of Queensland and Griffiths University	November 2014
<i>Understanding Trade Credit Institutions in Small Businesses: History and Sociology of the Informal Footwear Industry in Agra</i> , Conference on Informal and Everyday Markets, Centre for Modern Indian Studies, University of Göttingen,	June 2014
<i>Informal Market Institutions: Evidence from Footwear Industry in India</i> , Ronald Coase Institute Workshop, Xiamen University	December 2014
<i>Scope and Duration of Compulsory Licensing</i> , Conference on Compulsory Licensing, Max Planck Institute for IP and Competition Law and Academia Sinica, Taiwan	December 2014
Teaching	year
Mathematics for Beginners, OP Jindal Global University	2015
Economics, OP Jindal Global University	2015
Others	year

