in violation of the minimum wage law in most cases and therefore both NDMEs and OAEs are illegal or at least extra-legal. In this chapter we develop models where the extent of governance and the existence of the informal sector are discussed in detail.

Pertaining generally to such a set of activities, we focus on one of the segments within the labour market that functions without proper adherence to labour regulations and the officially recognized collective bargaining process. These requirements are satisfied by the unionized high wage sector within the labour market. The inter-relationship between sectors, formal and informal emphasized by factor mobility constitutes the core of our general equilibrium analysis. For analytical simplicity and to avoid unnecessary complications we use the terms informal and unorganized interchangeably. This chapter incorporates an elaborate description of the issues that taxation and governance conjure up for prevalence of informal sector in the economy. The next section discusses the relevant literature in detail. This is followed by a description of the first model where weak governance and consequent proliferation of the informal sector is a conscious choice on the part of the government to avoid political pressure in event of non-performance. The other issue of corruption and sustenance of the informal sector is dealt within the following section. The main conjecture is that external reforms like trade liberalization and internal reforms, such as interest rate restructuring may have conflicting impact on the size of the informal sector. Consequently, political incentives for promoting informality and pure rent-seeking activities must both decline, when better access to the formal credit market drives more firms on to formal spheres. The last section provides a conclusion.

## THE ELABORATE VIEW

Before we move on to the analytical domain of models dealing with informal labour, we must offer a discussion on why and how the informal sector has emerged and whether it is a deterrent to the process of development. Is it partly a conscious choice of the state or is it something that is imposed on the state? The borderline between legal and extra-legal can be an endogenous political choice in a democracy, a thesis which has again been somewhat neglected in discussions on the politics and economics of development.

A couple of texts that set the stage for such discussions are by Hernando De Soto (2000) and Avinash Dixit (2004), albeit they are written from two different perspectives. De Soto's book *The Mystery* 

of Capital brings to the forefront the lack of property rights and legal contracts in the informal segment that locks in a huge amount of capital, blocking development all around. The policy of guaranteeing property rights and enforcement of legal contracts is expected to release capital for investment and growth. Dixit, on the other hand, talks about the lawlessness of economies that necessitates appropriately designed contracts for conducting business. Dixit's book is oriented mainly to varied treatment of the intricacies of contractual arrangements reflecting on the boundaries between legality and extra-legality that are often rather thin. De Soto's contribution draws on some casual empirical work and offers a range of persuasive anecdotes. Nevertheless, in a sense both admit the problems and complications that arise from informal economic activities. However, while De Soto's position seems in favour of legalizing the extra-legal, Dixit provides a workable structure within the domain of the extra-legal. Both these approaches indirectly hold the state and the regulatory structures responsible for the emergence of informal arrangements, and formalizing the informal seems to be the first best choice that is somehow not implemented by the state.

Contrary to these, two studies by Marjit et al. (2006) and Dasgupta and Marjit (2006) provide a political rationale on the part of the state to perpetuate informal arrangements. We use the first of these to develop a model in the following section. The essential arguments in Marjit et al. (2007c) complement the analysis from corruption and reform issues that also significantly affect the existence and functioning of the informal sector. Further, Marjit et al. (2006) argues that given the high incidence of poverty and absence of a social welfare system, a democratic state uses the informal sector as a buffer for the poor people. The extralegal occupations work as substitutes for social security and emerge as an innovative and effective redistributive strategy.

The degree of enforcement of property rights by itself becomes a strategic political variable at this juncture. Typically, in median voter models, tax is the only instrument for redistributing income from the rich to the poor. However, there can be alternative instruments as well, which are somewhat under-explored in the related domain. In the developing world, a majority of the workforce is employed in the informal sector in activities that are illegal or extra-legal. Studies by Choi and Thum (2004), Marcouiller and Young (1995), and Marjit (2003) deal with cases where government policies determine and interact with the size of informal or shadow activities. Allowing extra-legal activities to flourish, which amounts to a thriving informal sector, may be a conscious strategy on the part of the government in a poor country

since it helps in tackling the problem of unemployment and poverty. Sarcastically, one might coin it as the policy of 'development through the backdoor'. It often delivers the desired goals set by the government in power, essentially being in power for a long time. This is not unusual when frontal development initiatives turn out to be difficult owing to levels of vested interests within the government. Doubtless, such strategic negligence on the part of the government may be harmful for an environment fostering legitimate income generating processes. For example, allowing street vendors to congest the streets, ignoring illegal electricity connections, allowing people to sleep on the pavements or on railway platforms, and allowing slums to develop in public spaces may all reflect tolerance by the government and civil society alike, not necessarily on humanitarian pretexts.

For developing countries, it seems that the jury is still out on whether the state as an authority can set limits on the use of public space for private consumption, albeit there are well-defined rules one way or the other. In fact, this debate lies at the core of the larger choice between formality and informality, which requires further clarifications in similar contexts. Recently, a few studies, such as those by McKenzie and Sakho (2010), Dabla-Norris et al. (2008), and Fugazza and Jacques (2004) discuss the channels leading to informality among firms. Of these, Dabla-Norris et al. (2008) finds that the quality of the legal framework is crucial for determining the size of the informal sector. If the legal system is functional, then the significance of taxes, regulations, and constraints are of limited importance. Not surprisingly, they also find that the firm size and the degree of informality are negatively correlated, although stringent legal norms, and not credit constraint so much, may still push larger firms to operate in the informal segment.

McKenzie and Sakho (2010) argue that tax registration for firms in Bolivia, where the incidence of informality is the largest in South America, leads to lower profits among smaller and larger firms, while it increases profits for mid-sized firms. They show that very small firms, deemed as own account enterprises, have little to gain from formalization. Conversely, firms which can grow to the extent of hiring six workers, too have little to gain from formalization as they end up paying more taxes without the added benefit of tapping the extra clientele. The ones in the middle, stand as the only group which thrives on aspirations of growing bigger and often realize such profits that come from the ability to show tax receipts as an instrument of reputation and consequently consumer confidence. Further, Straub (2005) argues that compliance

with formal registration procedures at a cost allows firms to benefit from key public goods, enforcement of property rights and contracts. This would ultimately enable firms to participate in the formal credit market as well. Access to the formal credit market, according to Straub, is evaluated against the relative costs of existence in either of these regimes and should be considered as a critical determinant of the choice between formality and informality.

It is possible that imposition of a high tax burden on the formal sector may create more informality in the system. The tax burden intended for redistribution and rehabilitation may be so high that those in the formal sector get dissuaded from working. They may choose to become net recipients by switching sides, drying up the tax base in the process. Thus, the problem is not one which lends itself to unmixed solutions. At the same time, it can hardly be denied that some of these extra-legal activities may actually hurt legal income earners by creating negative externalities both in the production process as well as in public life. In this context, once again a few recent attempts deal with the determinants of informality, such as that by Chong and Gradstein (2007). It proposes a simple theoretical model where the extent of informality is positively related to income inequality present in the country and is positively sensitive to the presence of weak institutions. The size of the informal sector is also negatively related to the economy's wealth. The choice of producing in the formal sector vis-à-vis the informal sector is based on the equality of expected utilities from the two decisions. The equality offers a critical income level below which all are poor and produce in the informal sector. As the country becomes richer, this cut-off point is pushed up leading to more informal units in equilibrium. This result must appear counter-intuitive and could lend itself to analytical reasons and empirical evidence for a large number of countries—developed and developing. It is based on the argument that the positive growth effect is countered by the negative effect on the size of informal sectors due to tightened institutional quality that follows economic development. Nevertheless, the study further establishes that both the proxies for tax burden and labour rigidity turn out to be not robust and are mostly not significant except for a limited number of specifications.

On the basis of these arguments, we now discuss two instruments in the hands of the government for redistribution—tax and governance. A relatively weak governance structure allows for extensive informality, which helps the poor but hurts people with tax paying capacity, whereas strong governance protects legal tax payers but increases the possibility

of social unrest as the incidence of poverty and inequality increases. The cost of sustaining governance is financed by income tax. All societies considered in various models, with different poverty levels and different extents of income inequality, face identical political support functions, and we do not consider totalitarian regimes. In most cases, as in this model that we discuss briefly, the political regime consists of a twoparty democracy. It is well known in the political economy context that policies targeted at satisfying the preference of the median voter help win elections. With the aid of a simplistic model we show that there is a reasonable case for strong governance and high tax for those societies that experience lower incidence of poverty and lower income inequality. Conversely, in societies where the incidence of poverty and income inequality is high, the level of governance is chosen to be weak, and the income tax rate is lower. If the government perceives that the effect of the tightness and rigidity in the level of governance on the informal income is not very strong, then also it might choose a relatively higher level of tax rate and regulatory controls. In this regard, we follow the standard 'political support' approach developed by Stigler (1971) and Peltzman (1976). Interested readers may also refer to Persson and Tabellini (2000) and Hillman (2003) for a textual treatment of issues related to the median voter approach. In addition, we offer a little more elaboration on this in Chapter 4.

The existence of an unorganized sector helps organized firms take advantage of liberal economic policies and in a way use a disadvantage to gain competitive advantages, locally and globally. This is adequately demonstrated in Maiti and Marjit (2008) and Marjit and Maiti (2007). Dasgupta and Marjit (2006) use a framework with unionized labour and informal workers and show that the state will have reasons to undermine the strength of trade unions and stealthily promote the culture of the informal sector, again to push forward liberal policies.

Essentially, therefore, these papers look at possible reasons as to why the state may be reluctant in clearly defining the boundaries of legal institutions and consequently choose an optimal degree of enforcement. In a related paper, Sarkar (2006) writes on the economic policies of the left-ruled state government in West Bengal in India and argues that the ruling coalition has encouraged proliferation of the informal sector as if on a clientele mode, such that they are always in a position to control the economic lives of the poor. This is also in line with the general tenet of the argument that the informal sector becomes a necessary element of a state-sponsored political strategy, especially when the institutions themselves are endogenously designed and their limits are manipulated

to obtain highest political returns. It may perhaps be best viewed as the well-known dilemma of rules versus discretion as exemplified in the macroeconomic theory in a different context (Barro and Gordon 1983). Institutional commitment specifies certain rules of the game as relatively sticky and not manipulable. On the other hand, the state sometimes needs flexibility to foster adopted policies and at times to steer political self-interest. The informal sector provides a great opportunity to practise discretion. A great many concerns behind formalizing the informal often miss out this simple motivation prevalent in a democracy. Marcoullier and Young (1995), an elegant piece related to the political issues discussed here, talk about the predatory state that uses informal arrangements to extract revenues.

We devote our attention to this issue in tune with one of the purposes of this book, that is, dwelling on a number of serious contemporary concerns regarding the organization of production in the informal sector for developing countries in general and for India in particular. One could extend the line of argument developed by Marjit et al. (2006) and Sarkar (2006) and analyse how the state actually renders a fairly organized form of political supervision and control of the unorganized sector in India. In fact, there seems to be a tremendous 'organized' intervention if one takes the case of the left-ruled West Bengal. The parallel informal economy employs people, leads to politically recognized and guarded activities, and generates revenues that are redistributed to strengthen political patronage. If markets and policies promote relatively unfettered growth of small private investments, poor people's dependence on politics and politicians will be far less and that undoubtedly poses a threat to the political power structure. Unlike in the developed countries politicians in India hardly have alternative occupations. Fully functional market capitalism, if it delivers, shall go against such entrenched vested interests. Yet, politicians need markets, to the extent that they absorb the poor and help them have an economically meaningful existence. The fear of social unrest and, worse, civil war or revolution powerful enough to shatter the very foundation of political power in a democracy seems to have driven important considerations behind the visibly large patronage of the informal sector acting as a pure substitute for front-door development efforts on the part of governments. It is this kind of trade-off that makes the informal sector a strategic conduit of development. This issue, to our understanding, remains a wide and open research question.

Another important departure from existing literature is the issue of governance. This relates our paper to the economics of corruption and

its impact on the informal sector. Interested readers may look at Choi and Thum (2004), Dessey and Pallage (2003), Gupta and Chaudhuri (1997), and Marjit et al. (2006), among others. Use of informal workers is illegal in our set-up since this involves violation of labour laws. We argue that if the producer is monitored and apprehended for operating an 'informal' segment, he faces a penalty, such as losing the license to produce the import-competing product, thereby losing tariff protection. However, he can escape by paying a bribe to the apprehending agent. It is reasonable to argue that the opportunity costs of such actions are increasing in the benefits received due to tariff protection. We develop an explicit Nash-bargaining structure to determine the equilibrium bribe. This outcome is internalized by the firm while deciding on the allocation of production and employment choices between the formal and the informal sectors. Our focus is on reforms related to the external sector involving a decline in the tariff rate and deregulation of the capital account, thereby causing the cost of capital (or the borrowing cost) to fall. This has been a worldwide phenomenon for some time now and real interest rates have drastically come down, especially in the developing world. For example, in India, one of the redeeming consequences of reforms has been a phenomenal increase in foreign exchange reserves and a sharp decline in interest rates.

## **GOVERNANCE AND INFORMALITY**

Drawing on Marjit et al. (2006), we consider a society that consists of two classes of people: the rich and the poor. The classes are homogeneous in themselves. In terms of distribution of workers and earnings in the labour market, we make some simplifying assumptions. The entire rich population is employed in the formal sector while the entire poor population finds employment only in the informal sector of the economy. The earnings in the formal and informal sectors are unequal: the rich earns Y in the formal sector, while the informal income of the poor is given by y < Y. The income distribution is highly skewed: the number of poor in society, n, far exceeds the number of rich, m. The poor want the government to adopt policies that raise their per capita income levels. We assume that the society exists in a democracy with two political parties competing in elections. 1 The political competition in this society provokes the incumbent government as well as all the political parties seeking election to support the position of the poor. Therefore, the government adopts a redistributive strategy that maximizes the per capita income of the poor.

We assume further that the government has two instruments at its disposal to operationalize the objective of redistribution. One is the conventional tax-transfer policy. The government taxes the rich through a system of income tax and transfers the proceeds to the poor. The other assumption is somewhat unconventional and quite unique to developing societies in general: the quality of governance is considered as a choice variable and includes issues like security of property rights, legal recognition and enforcement of contracts, controlling social unrest, and maintaining general law and order.

A weak governance structure results in the informalization of the economy. It is quite plausible that the existence of informal units helps to raise the income earning capacity of the poor at the cost of the rich. Thus, it too should be deemed as a mode of redistribution. At the same time, the acceptance of cohabitation between the formal and the informal also implies that the poor in the informal sector cannot be taxed. Therefore, the tax burden, not surprisingly even otherwise, is bestowed on the rich alone. Suppose it is a proportional tax,  $t \in (0, 1)$  This implies that if the rich earn an aggregate income Y, they pay a tax revenue,  $^2tY$ . The total tax revenue collected, mtY, is used for financing government expenditure, including the transfer S > 0. Everyone in the society across the rich and the poor receives the transfer. The index representing the quality of governance is denoted by g. A lower value of g implies a higher degree of informalization. Both Y and Y depend on g, while t affects only Y. The functional relations of Y and Y with t and Y can be written as:

$$Y(g, t)$$
 where  $\frac{\delta Y}{\delta g} > 0$  and;  $\frac{\delta Y}{\delta t} < 0$ ;  $y(g)$  where  $y'(g) < 0$ .

The argument put forth earlier explains the signs  $\frac{\delta Y}{\delta g}$  and y'(g). On the other hand, the explanation of the sign of  $\frac{\delta Y}{\delta t}$  is based on the assumption that the substitution effect dominates the income effect in the labour-leisure choice of the rich. Consequently, as the tax rate rises, wage income falls and an individual faces a lower incentive to work. We make the additional assumptions  $\frac{\delta^2 Y}{\delta t^2} < 0$  and  $\frac{\delta^2 Y}{\delta g^2} < 0$ . We also assume  $\frac{\delta^2 Y}{\delta t \delta g} = \frac{\delta^2 Y}{\delta g \delta t}$ . Regarding the redistribution programme, consider that it is not radical enough to lift the poor to the echelon of the rich; it leads only to marginal changes within the classes themselves.