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The Enforcement of Commercial Contracts in Ghana

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Summary. — Using case studies of manufacturing and trading firms, this paper documents how commercial contracts are enforced in Ghana. Interviews were guided by a conceptual framework emphasizing credible enforcement mechanisms and information asymmetries. Results show that compliance with contractual obligations is mostly motivated by the desire to preserve personalized relationships based on mutual trust. Harassment is the main form of debt collection. Other enforcement mechanisms — court action, reputation effects, use of illegitimate force — are less important. Contract renegotiation is common. The absence of reputation mechanism limits the economic reach of firms. Copyright © 1996 Elsevier Science Ltd

1. THE ENFORCEMENT OF COMMERCIAL CONTRACTS IN GHANA

Sub-Saharan Africa is often perceived as a part of the world where business is hindered by the lack of contract discipline. Because of Africans' laid-back culture, the argument goes, supplies are delayed, quality is unreliable, and payments come late. This raises the cost of conducting business as firms must hold precautionary stocks, inspect supplies carefully, and spend time and money on payment collection. The lack of respect for contractual obligations deters investment, particularly by foreign firms who, it is argued, can find a more disciplined business environment elsewhere, e.g., in East Asia. It also hurts Africa's capacity to export manufactured products to the West, as evidenced by experiences of US importers of African-made garments (Biggs *et al.*, 1994). Beyond the occasional anecdote, however, no rigorous evidence on contract performance is available on Africa: is the lack of discipline real or supposed? If real, is it due to a cultural failure to recognize the need for business predictability, or is it a corollary of the prevailing economic environment?

This paper attempts to answer these questions. It presents the results from a World Bank survey of Ghanaian manufacturing and trading firms of all sizes and is part of an ongoing effort coordinated by the Regional Program for Enterprise Development (RPED) to understand the environment in which manufacturing firms operate in Africa and to propose ways of promoting their development (The World Bank, 1992). The study belongs to a rich and long tradition of enquiry into business realities in sub-Saharan Africa exemplified, for instance, by the works of Nihan (ILO, 1980), the International Labor Organization (1984), Steel and Evans (1981) and many others, and summarized in Lubell (1991) and Fafchamps (1994). But it focuses on an aspect of the business environment that has so far received very little attention. Ghana was chosen as fairly representative of West African economies. Most Ghanaian findings probably also apply to other parts of Africa, e.g., Fafchamps *et al.* (1994), Fafchamps, (1994).

Given the lack of prior information on contract discipline, a descriptive, case study approach was adopted. The small size of the sample (58 firms) is compensated by the richness of the data collected during in-depth discussions with respondents. Interviews were guided by a precise conceptual framework. At the heart of it lies the concept of contract enforcement mechanism, that is, of an institution that deters opportunistic breach of contract. We begin the paper by bringing together various enforcement concepts suggested in the literature, e.g., Eaton and Gersovitz (1981), North (1990), Benson (1990), Greif (1993), Milgrom, North and Weingast (1991), Kandori (1992). We then tie them in with contractual information and incentive issues as they have appeared in the economic literature on contracts.

Survey results show that the enforcement of commercial contracts in Ghana is problematic for essentially two reasons. First, there is no mechanism by which information about bad payers is widely shared

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among firms. As a result, each business must screen every single firm and individual it wants to deal with. This imposes additional costs and reduces firms' economic reach and versatility; patterns of exchange tend to gel into fairly permanent networks. Second, many firms occasionally find it impossible to honor a contract. Late and nonpayment by local consumers are less the consequence of opportunism and carelessness than of poverty and unanticipated income fluctuations. Shortages of critical inputs, delays in payment by their own customers, and difficulties in transport render firms unable to pay on time or to deliver the quantity and quality promised. Poor contractual performance tends to ripple through the system, traveling upstream and downstream along business networks. The plethora of trade intermediaries can be seen as a response to this environment: by building up inventories and holding ample cash, traders often play a critical yet imperfect buffer role between firms and their clients or suppliers. The universal prevalence of exogenous shocks calls for consensual contract flexibility: business partners anticipate that some transactions will not take place as planned, thereby forming what could be called a culture of contract renegotiation. Yet the root cause of it lies not in misconceptions about the needs of business or in an inability to discipline oneself, but rather in the low level of economic development and the magnitude of shocks to which manufacturing firms are subjected. Misunderstandings are nevertheless likely to arise when Ghanaian firms used to making promises they may not fulfill transact with Western firms which count on stricter adherence with contract terms.

2. CONCEPTUAL FRAMEWORK

The conceptual framework that guided the interviews is largely influenced by the works of North (1990), Williamson (1985) and their followers. The emphasis is on contract enforcement as a unifying concept under which are subsumed most incentive and information issues discussed in the economy literature on contracts. Bringing contract enforcement to center stage also offers the advantage of bridging law and economics. This bridge helps couch policy recommendations that emerge from the economic analysis of institutions in terms of legal procedures.

(a) *Contract enforcement mechanisms*

The starting point of our analysis is that contracts are not respected unless economic agents are able and willing to comply with their obligations.[1] Willingness to comply is assured only if an enforcement mechanism exists that penalizes breach of contract. Enforcement mechanisms come in three varieties: those based on guilt, those based on coercion, and those based on repeated interaction. Guilt is internal to each individual. One's ability to feel guilty for failing to respect business promises varies among individuals. Honesty is largely the byproduct of upbringing, what psychologists call "secondary socialization" (Platteau, 1994a, 1994b). It is also influenced by cultural values and religious beliefs.

Enforcement mechanisms that rely on coercion are of two types: legitimate and illegitimate. The legal enforcement of contracts through courts ultimately relies on the state's monopoly over legitimate force. It is the state's backing that allows creditors to seize a debtor's assets and thus grants collateral value to unmovable property. Illegitimate force can also be used to enforce contractual obligations. Parties may resort to insults and violence directly, or hire thugs and bribe policemen to intervene. In the great majority of cases, the actual use of force is not required; implicit or explicit threats are sufficient. Threats, however, are not always credible. Indeed, whether legitimate or illegitimate, the use of coercion to enforce contracts is costly. For small transactions, legal costs are typically too high to justify court action. Whenever the threat of coercion is not believable, it fails to induce compliance unless the offending party can be persuaded the aggrieved party will go to court or resort to violence even at a cost — e.g., because she wishes to preserve a reputation of toughness (Kreps *et al.*, 1992) or because her moral sense compels her to do so.

The third type of enforcement mechanism is based on *quid pro quo*: "I continue to behave if you continue to behave" (Axelrod, 1984; Fudenberg and Maskin, 1986). It is the threat of retaliation that induces compliance with contractual obligations. For such a mechanism to work, parties must interact repeatedly over time. The simplest form of retaliation is the refusal to further transact (Eaton and Gersovitz, 1981; Kletzer, 1984, Grossman and van Huyck, 1988). For this punishment to deter breach, the relationship must be something worth preserving. Retaliation may also be inflicted by a group of people who were not party to the contract. Any group punishment requires a coordination mechanism and the circulation of information about contract compliance within the group (Kandori, 1992; Raub and Weesie, 1990). Reputation is that coordination and information-sharing device. Enforcement mechanisms based on reputation are vulnerable to disinformation: they do not operate well unless a complementary mechanism ensures the accuracy and veracity of the shared information.

These concepts are now illustrated formally. The less theoretically inclined reader may wish to skip the math and focus on the logic of the argument. Consider a contract by which an economic agent — called the debtor — promises to deliver a quantity f at time l to another agent — called the creditor — in exchange for

a quantity k at time 0. This definition includes pure credit (k and f money), trade credit (k good, f money), and advance payment (k money, f good). Placing an order with a supplier also fits in this general form: k then represents the inventory cost saved by the supplier thanks to a better organization of production, and f is the inventory cost saved by the buyer thanks to timely availability of raw materials. Insurance and warranty can be accommodated by letting payment f be contingent on a commonly observable event. Parties value k and f differently so that potential gains from trade exist, i.e. the debtor likes to receive k more than paying or delivering f and vice versa.

The set of subgame perfect contracting equilibria — i.e., of contractual promises backed by credible threats — is derived by backward induction. At time *1*, the debtor decides whether or not to comply with the contract. The cost of complying in general varies with the debtor's type and unanticipated shocks. For instance, a highly competent craftsman (good type) will find it easier to deliver on time than an inexperienced craftsman (bad type). Similarly, a client may not pay because of cash flow problems (bad shock). The cost to the debtor of delivering f can thus be written as $\pi(-f, \tau, \varepsilon)$ where τ denotes the debtor's type and ε denotes the state of nature at time *1*. Type $\tau\varepsilon\Delta$ is any characteristic of the debtor that is relevant to the contracting situation, such as his or her professional experience, technology, preferences, and honesty. The state of nature $\varepsilon\varepsilon\Sigma$ is any condition exogenous to the parties that was unknown at time 0 and makes contract compliance harder or easier. If compliance is totally impossible, we say that $\pi(-f, \tau, \varepsilon) = \infty$. How severely shocks affect debtors' ability to fulfill the contract in general depends on their type: those who are less competent or ill-prepared have a high cost of compliance $\pi(-f, \tau, \varepsilon)$ for many states of nature. The function $\pi(-f, \tau, \varepsilon)$ allows for these effects as well. We assume that the sets of possible types Δ and states of nature Σ are common knowledge, but that only the debtor knows his or her type τ. Some shocks are observable *ex post* by both parties; others are known only to the debtor. As a result, the debtor has better information about ε than the creditor.

In case of breach of contract, the debtor receives a payoff of 0 but incurs punishment. We consider four type of punishments that correspond to the three categories discussed above: guilt, whose utility cost to the debtor is denoted $G(\tau, \varepsilon)$; various forms of coercive action including harassment, threats, and court action, whose cost to the debtor is denoted $P(\tau, \varepsilon, C)$; and two types of punishments based on repeated interaction: the suspension of future trade with the creditor resulting in the loss $EV(\varepsilon, \tau)$; and damage to the debtor's reputation with other potential trading partners leading to a loss $EW(\varepsilon, \tau)$. The $EV(\varepsilon, \tau)$ term represents the value of the relationship, that is, the expected discounted value of future transactions with the creditor; $EW(\varepsilon, \tau)$ is the value of lost reputation, that is, the expected discounted value of future transactions with all those who will refuse to transact with the debtor after a breach has occurred. A rational debtor fulfills the contract if the cost of complying is smaller than all penalties combined, i.e., if:

$$\pi(-f, \tau, \varepsilon) \leq G(\tau, \varepsilon) + P(\tau, \varepsilon, C) + EV(\tau, \varepsilon) + EW(\tau, \varepsilon) \quad (1)$$

Whenever $\pi(-f, \tau, \varepsilon) = \infty$ the debtor is unable to comply and the contract is breached. There are also situations in which the debtor could in theory comply, that is, $\pi(-f, \tau, \varepsilon) < \infty$ but equation (1) is not satisfied. The debtor is then said to be able but unwilling to pay.[2] By definition, a debtor who is unable to pay is also unwilling to pay. Penalties in general depend on the debtor's type τ and on the realized state of nature ε. For instance, some agents are unscrupulous and have a low $G(\tau, \varepsilon)$. Others are hard to harass and coerce into paying their debts through legal (or illegal) means and have a low $P(\tau, \varepsilon, C)$. Others yet, such as fly-by-night operators or firms on the verge of bankruptcy, have a short horizon and little interest in preserving their reputation — low $EW(\tau, \varepsilon)$ — and their relationship with the creditor — low $EV(\tau, \varepsilon)$. All these effects are accounted for in equation (1). The strength of harassment and threats also depends on the form of the contract C, e.g., on whether formal guarantees were provided or whether contractual obligations were put down in writing to ease the burden of proof.

Now consider time 0. The creditor is asked to part with k in exchange for a future promise of f. Let $\prod(-k)$ and $\prod(f)$ be the value of f and k to the creditor. By asumption, there are gains from trade: $\prod(f) > \prod(-k)$. In forming beliefs about the likelihood of receiving f, a rational creditor evaluates the chances of being paid, i.e., the probability that equation (1) will be satisfied. In evaluating this probability, the creditor uses all the information, denoted Ω, available at time 0: prior knowledge about the distribution of potential debtor types, information gathered over time through direct interaction with the debtor, and information conveyed by others about the debtor. Formally, let $F(\tau, \varepsilon | \Omega)$ be the joint cumulative distribution over τ and ε that captures the creditor's beliefs given information Ω. Rank states of the world are such that, for any debtor type τ, $\pi(-f, \tau, \varepsilon)$ is decreasing in ε: it is easier to comply in good states. Further assume that each of the four penalties listed in equation (1) is nondecreasing in ε, i.e., that the debtor has more to lose in good than in bad states. We can then define the function $h(\tau)$ as the level of shock ε at which equation (1) is exactly satisfied and a debtor of type τ is just indifferent between compliance and breach, i.e. $h(\tau) = \varepsilon^*$ such that:

$$\pi(-f, \tau, \varepsilon^*) = G(\tau, \varepsilon^*) + P(\tau, \varepsilon^*, C) + EV(\tau, \varepsilon^*) + EW(\tau, \varepsilon^*)$$

For notional simplicity, let us ignore the possibility of

partial payment. Then, for any shock ε above $h(\tau)$ the debtor pays; for any shock below $h(\tau)$ no payment is made. Let $(\underline{\tau}, \bar{\tau})$ and $(\underline{\varepsilon}, \bar{\varepsilon})$ be the lowest and highest value that τ and ε can take. A rational creditor agrees to a contract (k,f) if and only if what he or she expects to receive is greater than what is given, i.e., if:

$$E(\prod(f)|\Omega) = \prod(f)\ Prob(payment)$$
$$= \prod(f) \int_{\underline{\tau}}^{\bar{\tau}} \int_{h(\tau)}^{\bar{\varepsilon}} dF(\tau, \varepsilon|\ \Omega) \geq \prod(k) \qquad (2)$$

Equation (2) can be understood as follows. If the debtor's type were known to be, say, τ', the probability of being paid would be equal to the probability that the exogenous shock ε is greater than $h(\tau')$, i.e., to $\int_{h(\tau')}^{\bar{\varepsilon}} dF(\varepsilon, \tau'|\ \Omega)$. Since the creditor does not know the debtor's type, the probability of being paid must be computed over all possible types, hence the double integral in equation (2).

The creditor may be able to affect the probability of repayment by affecting the form C of the contract. For instance, the creditor may request that the debtor mortgage real assets to service the debt in case the debtor goes bankrupt. Arranging legal security is costly and time consuming, however. Say there are N possible forms the contract C_n can take, each with its own cost B_n. The creditor then must choose a contractual form C_n such that the value of the transaction net of transaction cost $E(\prod(f)|\Omega) - \prod(k)\text{-}B_n$ is maximized. The solution to this optimization problem may be to bypass formal guarantees if contract enforcement mechanisms other than $P(\tau, \varepsilon, C)$ are sufficient. If commercial transactions can be enforced through repeated interaction alone, i.e., through $EV(\varepsilon, \tau)$ and $EW(\varepsilon, \tau)$, one would expect that little or no use to be made of formal guarantees and of the court system. Similarly, one expects legal institutions providing a lot of security at a high cost B_n to be most relevant for large anonymous transactions. There may also be situations in which, for all possible contractual forms C_n the net value of the transaction is negative. In those cases, the creditor refuses to trade. Imperfect enforcement then results in rationing. Small transactions, for instance, are difficult to enforce through courts and, if they are anonymous, cannot rely much on expected future trade. As a result, one would expect small anonymous transactions to be self-liquidating, with immediate cash payment and no delayed obligations.

The debtor also must agree with the contract *ex ante*. A rational debtor will do so if and only if he or she expects to derive a benefit from the contract. The debtor knows his or her type, say τ'. Let then $\pi(k, \tau')$ denote the value of receiving k for the debtor and, again for notational simplicity, ignore partial payments. In period *1*, either the debtor pays and incurs a cost $\pi(-f, \tau', \varepsilon)$, or does not pay and incurs the punishments listed in equation (1). Given the debtor's type,

payment occurs with probability $\int_{h(\tau')}^{\bar{\varepsilon}} dF(\varepsilon|\ \tau')$. The debtor therefore agrees to the contract if and only if:

$$\pi(k, \tau') \geq \int_{h(\tau')}^{\bar{\varepsilon}} \pi(-f, \tau, \varepsilon)\, dF(\varepsilon|\ \tau') + \int_{\underline{\varepsilon}}^{h(\tau')} [G(\tau', \varepsilon) + P(\tau', \varepsilon, C) + EV(\tau', \varepsilon) + EW(\tau', \varepsilon)]\, dF(\varepsilon|\ \tau') \qquad (3)$$

Equation (3) states that the debtor's gain from the contract (first term) must be greater than the expected cost of complying when compliance occurs (second term) plus the expected cost of punishment when compliance does not occur (third term).

Equations (2) and (3) illustrate the tension inherent to any contract. If enforcement is too lenient, debtors will promise anything knowing that if they breach their promise, they will not be penalized. At the limit, if enforcement is zero, $h(\tau) = \bar{\varepsilon}$: the creditor expects no payment at all and no contract is concluded. Similarly, if enforcement is very harsh, say infinite, and even the best debtors are occasionally unable to comply, then the expected cost of punishment ∞ is larger than the gain from any contract. As a result, the debtor refuses to promise something he or she is not sure to deliver. In both cases, no contract is concluded even though there may be significant gains from trade. For trade to occur, enforcement must be sufficiently strong to deter opportunistic breaches nut not so strong that it scares away all potential debtors (see Zame, 1993) for a similar argument).

(b) *Adverse selection, statistical discrimination, and moral hazard*

Equations (1), (2) and (3) raise a wide range of information and incentive issues, many of which have been analyzed in the economic literature on contracts.[3] We briefly discuss a few results from that literature that are most relevant here, beginning with adverse selection. Potential debtors differ on how likely they are to comply with a particular contract. Whenever their characteristics cannot be readily assessed, the potential for adverse selection arises: debtors of the wrong type may assume contractual obligations knowing that they are unlikely to satisfy them but cannot be forced to comply. As a result, creditors may refuse to contract even at terms (trade credit, delivery date, promised quality) that appear very favorable because they fear attracting bad types. Business-like transactions will then be rationed (Stiglitz and Weiss,

1981). Evidence of rationing is expected to take various forms: certain clients will be turned down for credit, others will not be able to place orders without paying a deposit, certain people will not be allowed to pay by check, and payment will be made to some suppliers only after the goods have been thoroughly inspected. Rationing can occur even in the absence of asymmetric information: firms may refuse to contract not because they do not know the other party's type, but because they know too well that the other party is not reliable.

Rationing is not the only possible response to the dangers of adverse selection: investigating the other party's type is another. Here, our framework comes particularly useful because it makes predictions as to the type of information economic agents will collect on each other. Firms will want to know whether trade partners are competent in their business, an indicator that they will be able to repay. Firms will wish to know whether trade partners are committed to their business and interested in establishing a long-term relationship. This can be achieved, for instance, by observing the other firm's patterns of purchases or sales over a period of time. They may also ask around if the other party has been in business for long and, if yes, whether other firms have encountered problems with that party. They will want to find out if trade partners are honest, for example, by selling small amounts on credit or placing small orders to test them. Firms may wish to know if the other party has a house or a permanent workshop, if it can easily be traced, if their spouse has a steady job, and other ways by which harassment and legal pressure can be brought to bear. They may even socialize with each other to get to know the other party better and keep abreast of how their business is doing.

Collecting information on potential trading partners, however, is costly. To economize on screening costs, firms may simply infer each other's type from easily observable characteristics like sex, race, or ethnicity. Small differences in average type across population with different observable characteristics can then lead to statistical discrimination (Coate and Loury, 1993). To see why, suppose for example, that many members of a particular group are familiar with a certain trade. Now suppose a member of that group is offered the choice to do business with an unknown member of the group or with an outsider. The transaction is small, so it is not worthwhile to spend resources investigating the other party. But because of differences in population averages, chances are the insider knows more about the trade than the outsider. It is then safer to deal with the insider. Statistical discrimination can thus, in the long run, induce the monopoly of a group over a particular sector of activity (Macharia, 1988; Fafchamps *et al.*, 1994; Fafchamps, Pender and Robinson, 1995). In anticipation of statistical discrimination, debtors may even seek to artificially differentiate themselves by acquiring a costly signal that is correlated with their true type τ. For instance, they may join a religious group simply to persuade creditors that they have a heightened moral sense and business probity (Cohen, 1969; Geertz, Geertz, and Rosen, 1979). Although it is perilous to interpret people's religious motives, there is some evidence that Islam indeed penetrated Africa in this manner (Shellington, 1989; Ensminger, 1992).

Moral hazard is another type of incentive problem that is likely to occur in commercial contracts. Success in business is influenced by the diligence and care with which firms conduct their operations. A debtor's ability to pay or deliver f typically depends on what the debtor does after having received k. Moral hazard can arise even if the creditor perfectly observes the actions of the debtor. The fact that a contract is not perfectly and costlessly enforceable is sufficient. Moral hazard can be formally captured by making the realized state of nature ε depend on an action a taken by the debtor between 0 and time 1, and by making the debtor's payoff depend negatively on a. In this situation, the debtor must be given incentives to apply proper care and effort (e.g., Stiglitz, 1974). In commercial contracts, the most common form of incentive is the implicit promise of continued transactions as long as performance is satisfactory and foul play is not suspected (e.g., Laffont and Tirole, 1988). From the point of view of the creditor, it is hard to disentangle (and largely irrelevant) whether breach of contract occurs because the other party is basically incompetent or does not apply enough care. In practice, therefore, the cause of moral hazard becomes mingled with the other party's type.

Whether the creditor should spend resources monitoring the debtor's actions depends on details of the transaction that are not formally captured in equations (1) to (3). Our framework nevertheless provides insights as to when monitoring may be useful. For instance, realizing early on that a debtor is facing difficulties often enables the creditor to take conservative measures that increase expected repayment. This is particularly true for large loans secured by assets that could be dilapidated should the debtor go bankrupt, or when acting early enables one creditor to get ahead of others. Given the costs involved, however, continuous monitoring is probably not profitable for small, repeated commercial transactions; *ex post* monitoring is more likely. To this issue we now turn.

(c) *Excusable breach, risk sharing and implicit contracts*

Because of moral hazard and adverse selection, the boundary between inability and unwillingness to comply with contractual obligations, while somewhat precise *ex post*, is blurred *ex ante*: a debtor may be unable

to comply because she promised something she could not deliver or was careless in executing the contract. Using harsh punishment can deter bad types from making empty promises and provide debtors with incentives to exert proper care and effort. But, as we have argued earlier, punishments that are too harsh also discourage *bona fide* parties who cannot be totally sure they can honor the contract. Extreme sanctions prevent moral hazard and adverse selection altogether; but they also eliminate *bona fide* trade.

To discourage opportunistic behavior while allowing enough flexibility for *bona fide* trade, creditors should assess whether breach of contract was due to unanticipated events or to carelessness and incompetence. If it appears the debtor was at fault (insufficient effort) or incompetent (bad type) the creditor may decide to terminate the relationship and seek reparation. On the other hand, if breach was due to events beyond the control of the parties, the creditor may prefer to excuse the debtor, renegotiate the contract and continue the relationship. Making punishment depend on the cause of breach improves efficiency because it deters opportunistic behavior but allows excusable default.

Businesses around the world, but particularly in Africa, are subject to shocks (Steel and Webster, 1991; Little, Mazumdar and Page, 1987; Cortes, Berry and Ishaq, 1987). Cash flows vary in unpredictable ways. Firms with insufficient access to insurance and credit from other sources often find themselves unable to honor precise deadlines for payment and delivery (Stone, Levy, and Paredes, 1992). Too strict a stance on contract enforcement is particularly counterproductive when all *bone fide* firms have recurrent difficulties fulfilling their contractual obligations. One would therefore expect a lot of contractual flexibility in high risk environments. Allowing excusable default is then a way of sharing risk among firms.

From a theoretical point of view, there are several ways in which risk-sharing can be incorporated in business transactions. One way is to assume parties write explicit state-contingent contracts in which payment varies with the state of the world ε (e.g., Eaton and Gersovitz, 1981; Kletzer, 1984; Grossman and van Huyck, 1988; Udry (1990). In practice, such contracts are too cumbersome to be practical. Furthermore, ε is seldom observed perfectly by the creditor and is rarely observable by judges. Parties are therefore likely to opt for other solutions. One is to leave the contract deliberately "incomplete" in the sense of Hart and Holmstrom (1987), for instance, by stating that the debtor will pay "when he can." Enforcement then relies on the force of the relationship: as long as payment delays are reasonable, parties continue their relationship; when the creditor suspects foul play, the relationship ends. Another way to share risk is to specify fully the respective obligations of the parties, but implicitly agree that these obligations can be renegotiated in good faith should one party find compliance unexpectedly difficult and costly. The advantage of the third approach over the second is that contracts with clearly specified obligations are easier to argue in court. Explicit contractual obligations can then be seen as a way to influence the bargaining power of each party during the renegotiation process, and thus the functioning of the underlying implicit contract.

To distinguish between excusable and nonexcusable default, creditors must in particular be able to infer ε otherwise any recalcitrant debtor could falsely pretend to be unable to pay. Costly monitoring of ε and a is often required for risk-sharing to take place (Townsend, 1979). Relative performance can also be used to assess the likelihood that the debtor is telling the truth and worked hard enough (Radner, 1985). If ε and a are observed indirectly or with a delay, misrepresentation and carelessness can be deterred by increasing the severity of the punishment once cheating is suspected. Finally, false claims and insufficient effort can be discouraged by limiting the number of times the creditor is prepared to be patient. The debtor is like the little shepherd of the story: if he cries "wolf" too many times, when the wolf is really there, nobody will come to help.

(d) *Trust and reputation*

Not only is the promise of future transactions an important incentive for contract compliance, repeated interaction also plays an important role in screening and monitoring. As economic agents learn about each other and revise their prior knowledge Ω, they come to trust each other (Gambetta, 1988). Trust can thus be thought of as a form of social capital: it accumulates through "good" actions and dissipates through "bad" actions (Coleman, 1988). The importance of trust in business leads to personalized transactions. To see why, consider a risk-averse firm that has identified a few reliable business partners. The information Ω the firm has begun accumulating on its partners is more precise than Δ, the information it has on the general population of potential trading partners. Reliable partners are also probably better than the average population Δ because they are the result of a selection process. Therefore Ω stochastically dominates Δ: because the firm is risk averse, it prefers to deal with known partners than with unknown firms (Arrow, 1971). As the firm continues to trade with the same partners, it collects more information about them, which makes it even more likely to deal with them in the future. Trust-based exchange is thus self-reinforcing and favors the establishment of fairly rigid business networks (Meillassoux, 1971). The reluctance to deal with newcomers in the same way (trade credit, checks, orders) as old partners stifles firm entry and competition (Lorenz, 1988).

There are two types of contract enforcement mechanisms that eliminate the need for personalized relationships: legal enforcement, and reputation. Both enable firms to operate within a large group and to rapidly establish business relations with new partners. Thanks to legal institutions, security can be found in unmovable collateral and other formal guarantees without prior acquaintance. Collateral-based enforcement is particularly important for large transactions such as bank loans. Even banks, however, seldom rely exclusively on collateral and often seek to assess the trustworthiness of potential borrowers. Reputation is a form of social collateral that can guarantee contract performance without prior acquaintance. Economic agents who belong to an information-sharing group rely on each other's reputation when initiating business contacts. Reputable firms have a high $EW(\tau, \varepsilon)$ with all the firms in that group, irrespective of whether they have dealt with them in the past or not. Concern for one's reputation may be sufficient to ensure compliance and to enable firms to offer credit or take large orders without knowing each other personally (Greif, 1993; Milgrom, North and Weingast, 1991). Firms within an information-sharing group are at an advantage relative to firms who are outside of it because they can reach further, expand faster, and spread risk more easily (Fafchamps *et al.*, 1994; Fafchamps, Pender and Robinson, 1995). The larger the group among which reputation is shared, the larger the group of potential business partners, and the more access firms have to a safe business environment.

(e) *Summary of model predictions*

In spite of its generality, the conceptual framework we developed in this section generates a number of qualitative predictions that serve as a basis for our empirical work. The model predicts that contract flexibility is required for exchange to take place. To test this proposition, we investigate in sections 3(a) and 3(b) whether contractual obligations in commercial transactions are ever breached and what happens if they are. Breach is expected to be excusable only if compliance is made unexpectedly costly by an external shock. To verify this proposition, we identify the reasons why breaches occur. The conceptual framework predicts that enforcement should be more flexible if the environment is more risky. We therefore examine whether contractual flexibility varies in a systematic fashion according to the types of transactions firms are involved in. Finally, the model suggests that harassment may be resorted to as a form of debt collection and *ex post* monitoring device. To test this proposition, we ask firms how they deal with breach of contract and what procedures they follow to get paid. Responses to these questions are presented in sections 3(a) and 3(b).

In the presence of imperfect information, the conceptual framework stipulates that creditors will screen potential debtors. What they screen for is expected to depend on the type of enforcement mechanism they ultimately intend to rely on. Parties that rely on courts and legal securities should screen for collateral. Parties to commercial transactions primarily should assess whether the debtor is a *bona fide* firm and is committed to maintaining a business relationship. To do so, they may test potential debtors over a period of time and visit their shop or factory. We investigate these issues in section 3(c) by explicitly asking firms how they screen suppliers and clients and what specific information they seek to acquire. The model indicates that groups of firms or individuals that are able to organize the truthful dissemination of contractual information may be at an advantage relative to other firms or individuals. In the absence of reputation mechanism, business transactions are expected to become heavily personalized; mutual trust must be established before contractual obligations are accepted. To investigate these predictions, we look for evidence of reputation mechanisms and information-sharing devices, and examine the extent to which business relations are personalized. The model says that with no enforcement mechanism creditors should ration contracts. Small, anonymous transactions are expected to be self-liquidating, with instantaneous payment and no delayed obligations. To verify these propositions, we examine whether firms are willing to grant credit or place orders from anyone, and whether some assurances must be provided first. Finally, the model predicts that repeated commercial interactions can enforce contracts with little or no recourse to formal guarantees and the court system. Legal institutions are expected to be most useful for large anonymous transactions. To address these issues, we study in sections 3(a), 3(b) and 3(c) whether firms grant credit to regular customers and place orders from regular suppliers only, and devote section 3(d) to the use firms make of formal legal institutions.

3. SURVEY RESULTS

Equipped with a better conceptual grasp of contractual discipline, we are now ready to examine the evidence collected in Ghana. Given the lack of quantitative evidence on contract enforcement in Africa (and elsewhere), our primary objective is to discern dominant patterns of behavior and verify whether our conceptual approach provides a consistent and convincing explanation for what is going on. Even though we do not formally test specific theoretical predictions, we ascertain whether the theory can account for the facts.[4]

Fifty-eight Ghanaian firms were interviewed in January 1993 by a team of Ghanaian and World Bank

researchers. Questions were asked regarding the importance of trade credit in the financing of the firms' working capital requirements and the problems and difficulties firms encounter with suppliers and clients. We focus on the latter set of questions here.[5] Thirty-nine of the surveyed firms were randomly selected from a panel of 200 Ghanaian manufacturing firms participating to an RPED study of enterprise development in Ghana. The RPED panel sample is constructed in such a way that firms of all sizes, except very small ones, are adequately represented. It is made of roughly 50 manufacturing firms randomly selected in each of four sectors of economic activity: wood processing, food processing, textile and garment, and metal works. Our sample comprises around 10 firms in each of these sectors. To get a sense of how breaches of contract may ripple through the system, we also interviewed a number of suppliers and clients of these firms. We complemented the sample with a small number of trading firms randomly selected on local textile and lumber markets. We indeed wanted to investigate whether they play a buffer role between various manufacturers or between manufacturers and consumers, and to check whether their views and experiences regarding contract enforcement differ from those of manufacturers.

All sample firms are urban. A dozen firms are from Kumasi. The others come from the capital city, Accra, and its industrial satellite, Tema. The sample includes firms of all sizes. The average number of employees among sample firms is 82; the median is 14. Trading firms in the sample tend to be smaller than manufacturing firms. One-fourth of the sample firms have five or fewer employees; 20 of them have between six and 25 employees; and 13 between 26 and 100 employees. Only 10 firms — nearly all of them in manufacturing — have more than 100 employees. The largest firm has 1,600 workers. A few sample firms are parastatals or government agencies. Most of the smaller firms would typically be considered part of the higher echelons of the informal sector: they all have a stable place of work and they have at least one or two employees. The smallest and most ephemeral microenterprises are not captured in the sample.[6] The average age of surveyed firms is 15 years; the median is 10 years. Trading firms tend to be older than manufacturing firms. Five sample firms have been in existence for two years or less, 29 firms were created during 1981–90, the rest between independence and 1980. Two trading firms date from the colonial period.

A case study approach was adopted in the survey. The section of the questionnaire dealing with contracts was mostly used as a conversational guide. Respondents were quizzed on their motivations and beliefs regarding suppliers and clients. Past contractual problems were discussed in detail. To avoid biases resulting from firms' reluctance to speak about contractual problems in which they were at fault, questions were limited to non- or late delivery by suppliers, deficient quality of supplied goods, and non- or late payment by customers. Given the nature of the issues raised, body language was an important part of respondents' answers. Several laughed or shrugged, for instance, when asked why some of their clients had not paid them, thereby implying a suspicion of carelessness even if their verbal answer did not mention it. Some of the respondents' answers have been codified and are presented in Tables 1–8. In our discussion of the results, we also built upon the rich body of qualitative information gathered during interviews.

We present survey results in sufficient detail for the reader to realize that the correspondence between our theory and the facts is not superficial but deep-seated. Contractual relations between firms and their clients are reviewed first. Relations with suppliers come next. Strategies used to prevent problems are then discussed. The use of legal institutions is presented at the end. Although the small size and diversity of the sample makes it difficult to draw statistically significant inferences, a detailed even if preliminary picture of contract enforcement in Ghana is obtained. This picture is summarized in section 4.

(a) *Relations with clients*

Firms were asked about nonpayment and late payment problems encountered with clients. Their answers are summarized in Tables 1 and 2 respectively. Firms were also asked to comment on the most recent problem they had experienced with a client; answers are these questions presented in Table 3.

More than half the firms had experienced a case of nonpayment by a client; all were familiar with late payment (Tables 1 and 2). In line with the theory, all credit sales seem to implicitly allow late payment: delays of a few days are so common that they are not mentioned by respondents unless specifically prompted. In one-fifth of all credit sales, no specific term is even set for payment: the contract is incomplete. For those instances when respondents considered clients had paid late, the average delay ranges from six weeks for manufacturing firms up to 20 weeks for traders. This compares to an average payment term of 3–4 weeks for those contracts where a payment term is specified. In three-fourth of the late payment cases, the transaction with the problematic client was not the first: on average, parties had been doing business for over four years (Table 3). This compares to an average of six years of acquaintance with clients who are granted trade credit.

Late payment or nonpayment can only occur when an element of credit has entered the transaction. Credit often is voluntary, but it is occasionally forced upon the respondent. In one case out of five, for instance, late payment is associated with a bounced check. In a

Table 1. *Nonpayment by clients**

	All	Traders	Manuf.
Number of valid answers	52	13	39
Number of respondents citing problems	30	10	20
Average number of cases per year	2.0	4.9	1.0
Time elapsed since last case, in days	426	245	517
Percentage of cases with full delivery	87%	100%	80%
Percentage of cases with partial payment	47%	40%	50%
Percentage of cases in which the following reason was given for nonpayment:			
Client faced technical or financial difficulties	23%	40%	15%
Client was unable to collect payment from own customer	17%	20%	15%
Client had to travel or left the business	14%	0%	20%
Client cheated	27%	40%	20%
Respondent could not tell; other	20%	0%	30%
Percentage of cases in which the following action was taken by the respondent:			
Wait; do very little	23%	0%	35%
Insist on fulfillment of contract (remind, harass, sue)	63%	90%	50%
Negotiate a rescheduling of payment	13%	10%	15%

Source: RPED Case Study.
*Percentages are indicative only given the small number of observations.

Table 2. *Late payment by client**

	All	Traders	Manuf.
Number of valid answers	50	12	38
Number of respondents citing problems	41	12	29
Average number of cases per year	62	235	8
Average length of delay in payment in days	72	139	45
Percentage of cases that occurred after full delivery	90%	100%	87%
Percentage of case involving partial pre-payment	14%	17%	13%
Percentage of cases involving bounced checks	19%	25%	17%
Percentage of cases in which the following reason was given for late payment:			
Client faced technical or financial difficulties; was unable to collect payment	71%	83%	67%
Client had to travel or cheated	9%	8%	10%
Mistake or oversight by client	10%	8%	10%
Respondent could not tell; other	9%	0%	13%
Percentage of cases in which the following action was taken by the respondent:			
Wait; do very little	21%	8%	27%
Insist on fulfillment of contract (remind, harass, sue)	38%	25%	43%
Negotiate a rescheduling of payments	40%	67%	30%

Source: RPED Case Study.
*Percentages are indicative only given the small number of observations.

number of nonpayment cases, respondents said they were "conned" by customers into delivering the goods on the promise of prompt payment. The circumstances of each case vary, but the result is the same: firms were reluctantly, but somewhat knowingly, dragged into a situation of extending credit to a customer. In half of the cases, partial or advance payment was made so that the loss from nonpayment was limited to part of the sale.

Reasons for nonpayment fall into two broad categories: upstream transfer of risk (excusable default), and cheating (Table 1). Half the respondents mention the client's financial difficulties as the major reason for nonpayment. In one case out of five, firms specifically state that clients were unable to sell the goods supplied by or made from goods supplied by the respondent, or that they were unable to collect payment for such goods. Clients thus share commercial risk with their supplier. In a third of the cases, respondents blame dishonesty as the reason for nonpayment. Other spurious reasons, such as "the client had to travel," "the client moved" or "the client left that line of business" are also advanced by respondents, often with suspicion of dishonesty.

Late payment, on the other hand, is mostly a way of sharing commercial risk with the supplier (Table 2).

Table 3. *Most recent problem with clients**

	All	Traders	Manuf.
Total number of observations	58	13	45
Number of respondents citing recent problems	44	12	32
Percentage of cases in which the most recent problem was:			
Nonpayment of delivered item	16%	25%	13%
Late payment of delivered item	77%	75%	78%
Late pickup or nonpickup of custom order	7%	0%	9%
Percentage of cases in which the most recent problem was with a client who was:			
Individual	25%	8%	31%
Small manufacturer (< 100 employees)	23%	42%	16%
Large manufacturer (> 100 employees)	7%	8%	6%
Trading firm	32%	25%	34%
Government agency	7%	8%	6%
Foreign firm	5%	0%	6%
Percentage of cases involving first sale to client	27%	25%	28%
Average number of years of previous business with client	4.1	2.1	4.8
Percentage of cases in which direct bargaining was used	82%	100%	75%
Percentage of cases that were settled	63%	58%	66%
Percentage of cases in which respondent is satisfied	69%	64%	71%
Percentage of cases resuming business with client	67%	50%	74%

Source: RPED Case Study.
*Percentages are indicative only given the small number of observations.

It is overwhelmingly blamed on temporary financial difficulties experienced by clients. In one-fourth to one-fifth of the cases, these financial difficulties are specifically associated with the client's inability to sell goods supplied by, or manufactured with goods supplied by, the respondent. Firms' answers suggest that, in some cases, the seller is implicitly providing a warranty that the good will resell well. Family events are also invoked by clients to excuse late payment. Unlike nonpayment, deliberate cheating is only cited by one firm. The client's travel or leaving the business are seldom mentioned either. Mistakes and oversights are cited in a few cases, particularly in connection with bounced checks. Whether these were genuine mistakes remains questionable, as a few smiles and shrugs reminded us. But respondents readily accept the excuse in exchange for prompt payment.

Contractual flexibility varies with the risk faced by parties. Nonpayment, for instance, is more prevalent among textile and garment manufacturers, a likely reflection of the economic hardship the industry is facing as a result of trade liberalization. Discussions with respondents indicate that late payment by public firms or agencies is the rule; it is blamed on the financial difficulties experienced by the Ghanaian government. Late payment and nonpayment are also more common the closer firms get to the final consumer: downstream firms, traders, and manufacturing firms dealing directly with customers are more affected than firms dealing mostly with other firms or traders. Half of payments problems, for instance, happen with an individual consumer or a small firm and in a third of the cases with a trader — often a small retailer or itinerant peddler (Table 3). Payment problems are thus influenced by what happens at the end of the manufacturing-wholesale-retail chain, probably because flexibility is most needed by poor consumers and microenterprises starved of working capital.

Firms take different attitudes after problems have arisen. Some, mostly manufacturers, insist they must show flexibility and understanding when difficulties arise, an attitude which is consistent with the idea of excusable default and the implicit sharing of risk. Others, mostly traders, suspend credit to bad payers and insist on the settlement of old debt before granting new credit, thereby inflicting penalty $EV(\tau, \varepsilon)$. Only one respondent insisted that he actively maintains a reputation of being strict about payment deadlines. The nature of the dilemma faced by an unpaid supplier is best illustrated by the following example, coming from one of the respondents. A woman trader had sold cloth to a retailer. The cloth, however, did not sell well and the retailer was unable to pay the supplier. Refusing the retailer further credit meant that she would remain stuck with slow-selling textiles, her business would go down and the wholesaler may never recover her money. If, on the other hand, the retailer was given new, hot selling textiles, her business may regain impetus. In the process, the slow-moving textiles may find buyers and the wholesaler may recoup her money. This example is an illustration of the classical creditor's dilemma: throwing good money after bad may be the only way to get both back (Gale and Hellwig, 1985). Sharing business risk may be required to recover a commercial debt.

The most likely course of action taken by respondents when faced with nonpayment is to wait for some time then start harassing the client (Tables 1 and 2). Discussions with respondents indicate that they initially display understanding when clients invoke plausible excuses to delay payment. As the delay lengthens, however, they become more suspicious and increase their pressure: state-contingent monitoring thus appears to be the rule. Direct bargaining is the favored method of conflict resolution (Table 3) with a steady progression in the pressure applied by the creditor: letters are sent, repeated visits are made to the work place or the home, strong words are exchanged between respondent and client, screams are heard, and third parties and messengers are involved and, in a few cases, court action is initiated. As a result of these renegotiations, a large proportion of firms, particularly among traders, agree to reschedule payments and to let the client pay in installments. But the boundary between voluntary rescheduling and coerced delay in collection is hard to draw precisely.

Harassment and repeated visits, respondents argue, serve several purposes. First, they are annoying and make the debtor want to find the money. Second, they increase the likelihood that the respondent is there when the debtor gets money. For that reason, visits are mostly made on pay day or market day, or when the debtor collected from its own customers. Third, they enable the creditor to evaluate whether the client was hit by a shock. This information can be used to infer the client's type and riskiness, and decide whether to continue the relationship. This is akin to state-contingent monitoring. Respondents only give up trying to get their money back either when they have physically lost track of a recalcitrant client and no longer know where to find him or her, or when it has become clear that they are unable to force the client to pay. The ability to impose repayment depends both on the clients' financial ability to repay and on their continued practice of business: respondents appear at a loss trying to recoup from clients who have left their line of business and thus lost interest in the relationship $EV(\tau, \varepsilon)$ and their reputation $EW(\tau, \varepsilon)$, even if they hold other assets, such as a home.

Payment collection appears effective: in two-thirds of the cases the dispute is resolved satisfactorily and business is resumed (Table 3). This implies that the ability to renegotiate the contract in case of excusable default is implicitly present in most credit sales. But it imposes a serious debt-collection burden on firms. Those who deal mostly with public agencies, the worst payer of all according to respondents, even have a full-time staff member entirely devoted to that task. Respondents who either have collected a substantial advance or have not yet delivered a custom-made good constitute an important exception: they simply hang onto their output until the customer comes to pick it up and pay.

Exports are a special case because parties rely much more on legal institutions, the letter of credit in particular. Exporters who receive an irrevocable letter of credit from their foreign buyer are seldom paid late since payment is automatic after presentation of transport documents. Banks, however, are accused of delaying the transfer of international funds so as to benefit from the accruing interest. In the case of standard letters of credit, the situation is different since payment can be delayed if the client challenges the quality of the delivery. The four exporting firms in the sample invariably run into such problems. The absence of SGS-like inspection for goods leaving Ghana makes it easy for foreign clients to reject goods after delivery and to extort discounts from Ghanaian exporters. Exports to neighboring African countries are also a source of difficulty. Respondents indicate that red tape is pervasive in spite of the ECOWAS trade agreements, and that border duties are an opportunity for custom officers and other officials to extract rents. For those who try to follow legal procedures, the extra cost of paying taxes and bribes and of obtaining the required paperwork jeopardizes the profitability of the transaction and makes payment to the Ghanaian exporter less likely. As a result, trade across African borders is mostly informal and bypasses the institutional setup — e.g., letter of credit, bill of lading — that governs international trade with the developed world. This deprives firms of legal protection against bad payers and poor-quality supplies. Most respondents declare avoiding direct import or export with neighboring countries.

(b) *Relations with suppliers*

To contrast how payment issues compare with the placement of orders and the quality of deliveries, firms were asked about late and nondelivery by suppliers and deficient quality of inputs. Their answers are summarized in Tables 4, 5 and 6. Results indicate that delivery and quality problems with suppliers are less of a concern than payment problems with clients. We first look at delivery problems, then at quality deficiencies.

(i) *Late and nondelivery by suppliers*

There are many more cases of late delivery than of nondelivery: only 14 firms out of 58 recall ever experiencing the nonexecution of one of their orders, against half the firms reporting occurrences of late delivery. The frequency of reported late delivery cases is also five times higher than cases of nondelivery. In a third to a half of the cases, partial or total payment has been made before delivery, which indicates that respondents may have incurred a loss beyond the inconvenience of a failed order.

As with trade credit, contractual flexibility varies with the risk faced by parties. Delivery problems are

Table 4. *Nondelivery by suppliers**

	All	Traders	Manuf.
Number of valid answers	55	13	42
Number of respondents citing problems	14	3	11
Average number of cases per year	1.6	3.5	1.0
Time elapsed since last case, in days	74	25	87
Percentage of cases involving imports	29%	33%	27%
Percentage of cases with full or partial payment	43%	67%	36%
Percentage of cases with partial delivery	29%	67%	18%
Percentage of cases in which the following reason was given for nondelivery			
Supplier faced technical or financial difficulties	35%	0%	45%
Supplier could not find inputs or satisfy all demand	36%	33%	36%
Transportation hazard	7%	0%	9%
Mistake or oversight by supplier	7%	33%	0%
Change in price or in supplier's cost	14%	33%	9%
Percentage of cases in which the following action was taken by the respondent:			
Wait or do nothing	14%	0%	18%
Insist on the fulfillment of the contract (complain, remind, etc.)	29%	33%	27%
Renegotiate the contract (new order, carry over, etc.)	29%	67%	18%
Cancel order, ask for refund or compensation	29%	0%	36%

Source: RPED Case Study.
*Percentages are indicative only given the small number of observations.

Table 5. *Late delivery by suppliers**

	All	Traders	Manuf.
Number of valid answers	55	12	43
Number of respondents citing problems	28	6	22
Average number of cases per year	7.3	6.7	7.4
Average length of the delivery delay, in days	19	8	22
Percentage of cases involving imports	29%	33%	27%
Percentage of cases with public firms	18%	33%	14%
Percentage of cases with payment before delivery	30%	50%	24%
Percentage of cases in which the following reason was given for late delivery: (multiple answers allowed)			
Supplier faced technical difficulties	21%	17%	23%
Supplier could not find inputs or satisfy all demand	65%	66%	63%
Transportation hazard; bureaucratic delay	36%	50%	32%
Supplier cheated or delayed on purpose	4%	0%	5%
Percentage of cases in which the following action was taken by the respondent:			
Wait or do nothing	54%	67%	50%
Insist on the fulfillment of the contract (complain, remind, etc.)	50%	33%	55%
Agree to renegotiate the contract (new order, carry over, etc.)	7%	0%	9%
Cancel order, ask for refund or compensation	18%	33%	14%

Source: RPED Case Study.
*Percentages are indicative only given the small number of observations.

most frequent in the wood sector, for instance. Competition with exports for good quality timber, we were told, is a major explanation for these difficulties. Before trade liberalization, lumber was implicitly subsidized as a result of the overvalued exchange rate. The devaluation of the Ghanaian currency has led to an increase in the domestic price for timber. To remain competitive, domestic wood industries now rely on low-quality timber, either rejects from exports or timber harvested by small operators with inferior equipment. The supply of this lumber category is particularly erratic. The food sector is also affected by late delivery problems, but the average delay is comparatively short. In other sectors, the failure of foreign firms to satisfy orders is the major reason for nondelivery. Imports also account for a large proportion of late deliveries with an average delay of 6–15 weeks. Public firms are notable for late delivery but the delays involved are usually very short.

In all cases, delivery problems are blamed on shocks affecting suppliers and are treated by respondents as cases of excusable default. First on the list of

reasons for failed and late delivery are transportation hazards and the inability of suppliers to satisfy all demand. Equipment breakdown and the supplier's inability to secure essential inputs come next and are most frequently blamed in the wood and metal sectors. Given frequent and unpredictable delays in production, suppliers are unable to guarantee delivery on a given date without holding inventories of finished products. Delays in delivery are thus a way of shifting production risk and a part of commercial risk to the buyer. Discussions with respondents indicate that certain suppliers, particularly public firms, sell at a low price with the implicit understanding that late deliveries are frequent and that the burden of production risk and the cost of holding inventories are transferred onto buyers. Sufficiently low prices induce buyers to put up with late delivery.

The action taken by respondent firms depends whether advance payment has been made (Tables 4 and 5). When no advance payment was made, firms initially react by waiting or sending an occasional reminder. If delays get too long, they cancel the order. When payment has already been made, firms typically complain and harass the supplier. In two cases nondelivery was attributed to a drastic change in the supplier's opportunity cost. When only a small portion of the order has not been supplied, firms typically carry over the unfulfilled portion of the contract onto their subsequent order. While traders prefer to wait or cancel their order if the delay is too long, manufacturing firms are more likely to pursue suppliers and insist on timely delivery. The reason is that manufacturing firms require inputs to operate. Traders told us they have alternative ways of using their funds and can afford to wait.

Firms facing frequent delivery problems indicated during interviews that they minimize the impact on their production activities either by overordering, ordering early, building up inventories, or securing supplies from other sources. Although effective, these strategies impose a cost on the firm. Furthermore, they are not available to firms with insufficient working capital, particularly microenterprises. Firms unable to stockpile inputs must stop production when deliveries are delayed. Traders appear to serve as a buffer between manufacturers and suppliers of raw materials: those who operate in industries where nondelivery is frequent face more such cases per year than do manufacturing firms.

(ii) *Deficient quality of inputs*

Judging by the proportion of firms affected, deficient quality is a common occurrence, particularly in the wood and food sectors (Table 6). But it rarely affects more than a small portion of the quantities delivered. Whereas imports are responsible for a large percentage of non- and late deliveries, they account for few deficient-quality cases. Respondents attribute this achievement to the inspection of every shipment to Ghana by SGS, an independent Swiss company, at the port of origin. Yet, in spite of inspection, a number of foreign firms manage to deliver deficient inputs. One can only wonder at what would occur without inspection.

Most cases of deficient quality are treated by respondents as excusable default and are solved through bilateral negotiations. Occurrences are

Table 6. *Deficient quality from suppliers**

	All	Traders	Manuf.
Number of valid answers	54	12	42
Number of firms with input quality problems	31	9	22
Average percentage of deficient inputs in delivery	3.0%	6.7%	1.5%
Average number of cases of deficient delivery per year	3.0	0.3	4.1
Percentage of cases in which buyer assesses quality before paying	42%	33%	45%
Percentage of cases in which the following reason for deficient quality was given:			
Normal factory defect	48%	56%	45%
Supplier was unable to find good quality inputs	32%	22%	36%
Damage in transport or due to bureaucratic delay	6%	22%	0%
Mistake or oversight by supplier	10%	0%	14%
Supplier cheated or misrepresented quality on purpose	16%	11%	18%
Poor judgement by respondent or his/her staff	6%	0%	9%
Percentage of cases in which the following action was taken by respondent:			
Do nothing; take a loss	26%	33%	23%
Return or exchange	55%	33%	64%
Negotiate discount on the next consignment	26%	11%	32%
Compensation for defectives built into contract	6%	22%	0%

Source: RPED Case Study.
*Percentages are indicative only given the small number of observations.

usually blamed on suppliers' inadequate equipment or on their inability to find inputs of good quality. In several cases, inadequate quality resulted from mistakes and oversights, either by suppliers or by respondents themselves. Only one respondent felt cheated by a supplier who had willfully misrepresented the quality of the good delivered. Manufacturing firms benefit from the fact that, unlike the traders interviewed in the sample, they often receive supplier credit and can assess the quality of the goods before finalizing payment. The most frequent action taken in case of deficient quality is to return or exchange the goods. The second most frequent action is to negotiate a discount on the next consignment. A few traders mention that insurance against deficient quality is built into the contract, either through an explicit insurance policy against transportation damages, or by supplying a few extra items to compensate for defectives. To summarize, the risk of deficient quality is mostly borne by the supplier. Buyers, however, assume part of the cost of quality screening.

(iii) *Most recent problem with suppliers*

Respondents were asked about their most recent problem with a supplier (Table 7). Deficient quality is most frequently cited, followed by late delivery; nondelivery comes last. Traders complain most of deficient quality and manufacturers of late delivery. Manufacturing firms have problems mostly with traders, and traders mostly with manufacturers. This is consistent with the role of traders as intermediaries between manufacturing firms, and between domestic firms and foreign suppliers.

The length of acquaintance between firms and their suppliers, 7.9 years on average, is slightly longer than the average length of acquaintance with problematic suppliers, which is 6.1 years. Sample sizes are too small, however, to conclude whether the difference is significant. As respondents emphasized throughout the interview and as is clear from the next section, few problems are recorded with casual suppliers because firms do not take the chance of a problem happening: such transactions often are of the "inspect-then-pay-cash-and-carry" type and do not involve delayed obligations that make breach of contract possible.

In three-fourths of the cases, direct bargaining with suppliers is used to solve the problem. In the remaining cases, the problem essentially resolves itself. The difficulty is nearly always settled to the satisfaction of the respondent and business continues as before, a feature that is consistent with the idea of excusable default. Exceptions involve distant foreign firms who have failed to supply or have delivered grossly inadequate products. Firms dealing with chronically late suppliers constitute a special case. They rarely find it useful to pester the supplier and prefer to wait. Eventually, supplies are delivered and a new order is placed. But the entire situation could hardly be described as satisfactory. Late and erratic deliveries place a strain on the receiving firm, forcing it to build up inventories or wait in line at the factory gate. They may also delay the firm's production and damage its reputation *vis-à-vis* its own customers. As argued earlier, lower prices often are what induce respondents to put up with poor contractual performance. In a few cases, low contractual discipline is attributable to monopolistic firms abusing their position.

Table 7. *Most recent problem with suppliers**

	All	Traders	Manuf.
Total number of observations	58	13	45
Number of respondents citing recent problems	39	10	29
Percentage of cases in which the most recent problem was:			
Nondelivery by supplier	11%	10%	10%
Late delivery by supplier	38%	30%	41%
Deficient quality of goods or services supplied	51%	60%	48%
Percentage of cases in which the most recent problem occurred with a supplier who was:			
Small manufacturer (< 100 employees)	10%	20%	7%
Large manufacturer (> 100 employees)	31%	60%	21%
Trading firm	31%	0%	41%
Government agency	10%	0%	14%
Foreign firm	18%	20%	17%
Percentage of cases involving first purchase from supplier	5%	0%	7%
Average number of years of previous business with supplier	6.1	4.1	6.8
Percentage of cases in which direct bargaining was used	74%	80%	72%
Percentage of cases that were settled	87%	90%	86%
Percentage of cases in which respondent satisfied	83%	90%	81%
Percentage of cases resuming business with supplier	92%	100%	90%

Source: RPED Case Study.

*Percentages are indicative only given the small number of observations.

(c) *Methods firms use to avoid problems*

Respondents were asked what strategies they follow to avoid problems with their clients and suppliers. Multiple answers were encouraged. Discussions often followed. We summarize below the information that was collected. Responses are largely consistent with out theoretical predictions regarding screening. They also emphasize the dominant role of mechanisms based on repeated interactions in the enforcement of commercial contracts.

(i) *With clients*

The most expedient way of avoiding problems with clients is to insist on cash payment upon delivery, respondents say. Credit should be granted only to clients who have demonstrated their ability and willingness to pay. These two fundamental, commonsense principles account for most of the answers given. They also correspond to firms' practices: respondents sell to 34 regular customers on average, but only 6.6 of them receive credit.

Relying on legal sanctions and institutions is not perceived as a practical way of preventing problems. Many firms keep simple records of transactions and ask their clients to sign invoices when they get credit. But these records are used more to minimize discussion on the reality of the debt than to ensure payment through legal recourse. Asking for an advance payment is presented by some manufacturing firms as a way of committing customers and reducing problems. Taking an advance also reduces exposure to default. Some respondents argue that requesting a large advance is a way to make sure that the client can afford the good, thereby implying that some customers would be glad to increase their well-being but let their supplier worry about how to pay for it. One firm out of six mentions keeping customers satisfied as a way of avoiding problems. Respondents note that clients use small defects as an excuse to delay payment or renegotiate prices. Good product quality is way of denying clients such excuses.

Granting credit only to clients who have paid in the past works well on average. But how to identify trustworthy customers? One way is to rely on personal recommendation, an unsophisticated form of reputation mechanism.[7] Clients recommended by trustworthy people are more likely to be trustworthy themselves, respondents argue. An implicit guarantee is often also provided with the recommendation. Although recommending people does not imply the obligation to cover their debts, the guarantor is sure to be pestered by the creditor and asked to intervene should a problem arise. Furthermore the reputation of the recommender is tarnished if the new client proves unreliable. For all these reasons, people hesitate to endanger their reputation by recommending somebody they believe will cause problems. The process of personal recommendation, respondents say, is therefore relatively safe. Nonbusiness relationships — i.e., relatives, neighbors, and church mates — play little role in identifying trustworthy clients. Several respondents declared that selling on credit to relatives and neighbors amounts to signing the death warrant of the firm. Payment problems, they argue, would be frequent as friendship and family ties get in the way of pressurizing clients. No credit sales to relatives and family members were recorded in the survey. People prefer to recommend relatives and friends to their suppliers for credit or preferential treatment.

Reputation *per se*, as distinct from interpersonal relations, plays little role in identifying reliable clients. There seems to be no mechanism whereby information about clients' trustworthiness is shared among firms other than direct recommendation by common acquaintances. When prompted directly, firms declare that they never bother passing information about untrustworthy customers to other firms. Sharing information would provide competitors with an undue advantage, they say. In fact, several respondents appeared to relish the idea that their competitors have to deal with the same deadbeats by whom they had been burnt. The only possible exception concerns Accra's women fishmongers, but their situation is somewhat peculiar. They all belong to a closely knit neighborhood, they share the same ethnic background, their husbands go out to sea together, and they all sell in the same market. These women greet bad payers on the main fish market with screams and shouts, thereby sharing information instantly in a simple but effective fashion. Bad clients find it difficult to remain in the fish business because they are cut from the major source of supply.

Some of the surveyed firms use more elaborate procedures to assess a client's credit worthiness. One-fourth of the traders and one-sixth of the manufacturers actively screen prospective trade credit recipients. The simplest method consists of inspecting the client's work place. It is important, respondents say, to make sure that the client is what he or she claims to be. Simple inspection of the work place also reveals whether goods are currently being produced and whether the client's business is prosperous. Similarly, when clients are final consumers or itinerant traders, checking their residence and spouse's work place provides information about their wealth and ability to pay. More elaborate screening mechanisms are undertaken by a few firms. A couple of respondents boast they could ask friends in the bank to run an informal credit check on their customers, thereby revealing useful information about the existence and magnitude of lines of credit, the frequency of bounced checks, and the regularity of deposits and withdrawals. Whether such a procedure was licit remains unclear, but both respondents insisted that their contacts among bank staff were essential.

Screening can also be done through customer accreditation. In this process, prospective recipients of trade credit (and people allowed to pay by check) provide information about their real and financial assets and possibly put down a deposit as guarantee for payment. A more gradual approach to screening relies on learning progressively about a client's qualities and business performance through repeated sales. Rare are the respondents who are willing to extend trade credit to first-time buyers. Only the couple respondents who are able, thanks to special relations, to run detailed credit checks indicated their willingness to do so if the results of their investigation is satisfactory.

In spite of all their sophistication, these screening methods offer little protection against good payers who, due to unforeseen circumstances or from their own volition, become bad payers. There is the fish lady who goes out with a bang, buying large quantities on credit and then disappearing into thin air. There is the respected textile trader who retires, leaving large bills unpaid. There is the customer who dies, leaving behind debts that are disavowed by his heirs. There is the client who goes bankrupt, the client who moves to another city, and the client who decides to take on another business. In all these cases, a good business relationship suddenly turns sour, leaving behind unpaid bills. Several reported cases of nonpayment loosely belong to this category. They provide *a contrario* evidence of the importance of expected future interaction as enforcement mechanism: when interest in preserving the relationship is lost, so is enforcement. In all of these cases, respondents were caught unaware: whatever screening and monitoring mechanisms they had put in place were fooled by their good-turned-mischievous client. When probed further, respondents declared that in spite of screening and monitoring they still expect some portion of their trade loans to be defaulted as a regular risk of doing business.

(ii) *With suppliers*

Regarding suppliers, more than a third of all the respondents state that the best way to avoid problems is to inspect goods before payment instead of taking them on faith and having to negotiate afterward if quality is deficient. Traders are less likely to inspect goods than manufacturers, possibly because they do not use the goods to produce something and quality is less of a problem. Several firms mention third-party inspection of goods — inspection of imports by SGS in particular — as a useful protection against deficient quality.

Trust again requires repeated interaction. Two-fifths of the firms declare that the best way to avoid problems is to deal with suppliers with whom they have had satisfactory business in the past. Firms indeed deal with as few as 5.2 regular suppliers on average, 2.9 of whom give them credit. They know suppliers who give them credit for 7.9 years on average. Continuing business with reliable suppliers is thus the dominant way of preventing problems. It is not a total insurance against contractual difficulties but it guarantees that, when problems occur, they are more easily resolved. Respondents cite their willingness to show understanding when difficulties arise as a way of avoiding problems. This comment may at first glance appear counterintuitive, but it reflects their desire to maintain a positive business relationship with firms who are their major providers of credit and sources of supply. In the case of traders, this desire is complemented by deliberate efforts to cultivate one's image through personal visits and business lunches.

Firms are most likely to face serious contractual problems when they deal with unknown suppliers. New manufacturing firms and firms reorienting their activities toward new sectors and products — as a result of structural adjustment and changes in relative prices, for instance — are most at risk. Traders run into contractual problems because success in commerce, respondents tell us, is based on the ability to take advantage of ever changing arbitrage opportunities, making it necessary to transact with unknown firms. Firms screen potential suppliers in various ways. The first consists in relying on the reputation of a supplier or on the brand name of the product sold. This method is cited by one respondent out of 10, mostly in the textile and garment industry. The second consists in dealing with suppliers that one knows personally as a result of nonbusiness relations. The third consists in dealing with suppliers who are recommended by people the respondent knows and trusts. Only a couple of respondents, mostly small firms, cite each of the latter two approaches. A few trading firms screen suppliers in a more systematic fashion, using various techniques to directly access their reliability — credit check, inspection of their premises, and formal process of accreditation.

(d) *Legal institutions and procedures*

To help ascertain the role that legal institutions play in the enforcement of contracts, surveyed firms were asked about their use of lawyers and courts. Answers indicate that Ghanaian firms make little use of legal procedures. Only 10 of the surveyed firms ever consulted a lawyer: six in relation with suppliers, five regarding clients (Table 8). Four of the six cases regarding suppliers have to do with imports. Only two firms mention repeated occurrences, both traders. Most respondents find the assistance of a lawyer useful and effective. One, however, emphasized that sending a lawyer's letter to his most important customers had destroyed the relationship and led the firm to bankruptcy. Only four respondents ever went to

court with clients or suppliers, one of them several times. Two of the cases are still pending in court, one of them in a foreign country. For the two firms that got judgement, the outcome was favorable but they chose not to execute the judgement: a textile wholesaler had second thoughts about throwing an elderly couple out of their home, and a large trading firm hesitated to foreclose because it would have meant putting 500 people out of work and raising political turmoil during an election year. Although the sample is too small to be conclusive, the use of lawyers and legal institutions did not appear to be a function of the size of the firm, but rather of the size of the transaction. Informality did not seem to be a problem either, at least among surveyed firms: no respondent stated that they did not use the legal system because they did not have access to it on account of their lack of legal status. A few respondents expressed concerns that, in cases involving the state, courts and tribunals are occasionally subjected to political pressure, but not in commercial disputes.

Three firms made use of informal arbitration. In one case, independent auditors resolved a dispute between supplier and client by checking both firms' accounts. In another, a lumber trader sought the mediation of the Loggers' Association. In the third, the respondent obtained the mediation of local Committees for the Defense of the Revolution (CDR) in resolving disputes with suppliers. He nevertheless expressed regrets for involving politically charged paramilitary groups in business matters. On a couple of occasions, respondents sought the assistance of a Ghanaian Embassy abroad. Only four of the respondents, three of them traders, ever involved the police in one of their disputes with a supplier or client. Two others threatened to do so, but would have refrained if the client had called their bluff. Involving the police in business problems is a tricky process. The police do not investigate contractual matters; evidence has to be provided by the plaintiff. Moreover, the police provide their services in exchange for a bribe. The party who gives the highest bribe may gather the most support for his cause. Most respondents expressed a profound dislike for involving the police in contractual disputes.

4. LESSONS FROM THE SURVEY

In spite of the survey's limited character, the results we have just presented provide evidence that the lack of contractual discipline is real: not only do Ghanaian firms face regular delivery and payment delays, they also take great care identifying reliable suppliers and clients. Imperfect compliance with contractual obligations does not, however, appear to spring from a cultural failure to recognize the need for business predictability: all interviewed firms are quite aware of the economic costs and disruptions caused by delays in payment and delivery. But they recognize that perfect compliance is an ideal out of the reach of their clients and suppliers as well as themselves. Lack of contractual discipline is thus largely a corollary of the prevailing level of economic development. We discuss these issues more in detail in the following pages.

Survey results are also interesting from a methodological point of view. They are largely consistent with the conceptual framework developed in section 2 and, as far as we were able to judge, contract enforcement considerations and information asymmetries can account not just for general patterns of behavior but for virtually all the answers respondents gave us. These encouraging results need to be confirmed by further studies[8] but they provide useful guidance for future work. We now summarize the lessons we have learned and illustrate how they can help design appropriate policy interventions.

Table 8. *Recourse to legal institutions**

	All	Traders	Manuf.
Following a contractual dispute with a supplier:			
Percentage of respondents who ever saw a lawyer	13%	18%	11%
Percentage of respondents who ever went to court	2%	0%	3%
Percentage of respondents who ever used arbitration	4%	9%	3%
Percentage of respondents who threatened to call the police	5%	10%	4%
Percentage of respondents who ever called the police	5%	10%	4%
Following a contractual dispute with a client:			
Percentage of respondents who ever saw a lawyer	8%	15%	5%
Percentage of respondents who ever went to court	6%	15%	3%
Percentage of respondents who ever used arbitration	4%	0%	5%
Percentage of respondents who threatened to call the police	14%	27%	8%
Percentage of respondents who ever called the police	5%	18%	0%

Source: RPED Case Study.
*Percentages are indicative only given the small number of observations.

(a) *Contract enforcement and repeated interaction*

The survey has brought to light the importance of contract enforcement considerations in the way firms deal with each other and with final consumers. When firms feel uncertain about the reliability of a client or supplier, they fall back on a "flea market" mode of transacting: inspect the good on the spot, pay cash and walk away with it. This way of conducting business is unwieldy for all but the smallest of firms. To operate with any degree of predictability, firms must be able to take and place orders, arrange the future delivery of goods and services, dissociate payment from the physical delivery of goods, and seek and provide warranty. In Ghana, this is achieved mainly through the establishment of long-term, personalized relationships. On average, surveyed firms have bought from their credit suppliers for eight years, and sold to their credit clients for six years. Firms express an overwhelming preference to do business with people they already know, even if it means dealing only with a few people.

The main motivation behind contract performance is the desire to preserve profitable, long-term relationships and to maintain sources of supply and demand: firms pay their suppliers because they need more goods in the future; they deliver on time to keep their customers. The business relation itself $EV(\tau, \varepsilon)$ is the creditor's best collateral. Other forms of contract enforcement are secondary. Harassment is the major form of debt collection strategy, raising $P(\tau, \varepsilon, C)$ somewhat, but it is costly to pursue and some debtors appear able to hide from their creditors or to discourage them through delaying tactics. With the exception of a few Muslim traders, respondents place no emphasis on ethics and religion. Little effort is made to assess the honesty $G(\tau, \varepsilon,)$ of potential clients or suppliers independently from their interest in establishing a business relationship. The threat of court action is seldom credible because of the costs and long delays involved. Even if court action is successful, respondents hesitate to implement judgements. Reputation mechanisms are weak in Ghana and $EW(\tau, \varepsilon)$ is low. Information about bad payers or unreliable suppliers is not shared among firms. Business transactions are seldom initiated on the sole basis of reputation. Several respondents, when asked whether they pay any attention to their clients' reputation in the business community, indicated that gossip seldom is reliable. Only a couple of firms cited credit checks as a way of assessing potential customers. Personal recommendation is the only way by which economic agents can capitalize on their good behavior with others. Few firms, however, offer credit to clients solely on this basis.

The value of the relationship $EV(\tau, \varepsilon)$ to the other party is also what firms focus on when they screen customers and suppliers. One of their main concerns is to establish the other party's business horizon. They know that if the debtor is a fly-by-night concern, $EV(\tau, \varepsilon) = 0$, and the likelihood of breach of contract is high. Ghanaian firms therefore focus on establishing that a prospective business partner is a *bona fide* enterprise. They visit their customer's workshop or ask questions of other firms. A few respondents even extend credit solely on this basis. The horizon and degree of commitment of other parties are also assessed indirectly by observing their pattern of cash purchases over time.

Losses due to nonpayment by customers or nondelivery by suppliers are part of a constant learning process. Discussions with respondents suggest that inexperienced firms are more prone to credit-recovery problems. Even experienced firms must endure painful experiences whenever they explore new markets and sources of supply. One of the costs of firm expansion and reorganization of activities is the identification of new reliable business partners through careful screening and trial and error. In the absence of mechanisms to circulate information about firms' contract performance record, experimentation is necessarily slow and perilous. We suspect that it constitutes a hindrance to the restructuring of the Ghanaian economy.

(b) *Flexible contracts, risk sharing and opportunistic behavior*

The need for contractual flexibility is shared by businesses across the world. But it is probably accentuated in Ghana by the low level of economic development. All respondents indicate that the respect of contractual terms regarding consistent quality, rapid delivery and timely payment is difficult. Final consumers are mostly poor, vulnerable to economic shocks, and consequently bad payers. Markets for raw materials, intermediate goods, specialized services, and capital equipment are thin or nonexistent. Alternative sources of supply often do not exist. Whenever technical difficulties or shortages of imported goods arise, they cannot easily be circumvented and tend to ripple through downstream economic activities. These factors combine to create delivery, payment, and quality problems. Ghanaian businesses adapt to the situation by displaying a high degree of contractual flexibility. Indeed, most of the reasons invoked for contract noncompliance involve the sharing of risk. The fact that parties agree to reschedule deliveries and payments and to continue business suggests that risk-sharing is implicitly built into most commercial transactions.

The genuine need for contract flexibility nevertheless opens avenues for opportunistic behavior. Debtors can delay payment by claiming they were hit by a large negative shock. Firms can delay delivery by claiming they could not find suitable inputs. Because such claims are hard to verify, respondents express the concern that contractual flexibility may be abused.

They are suspicious of excuses given and attempt to verify them whenever possible and convenient. The most widely used strategy to discourage opportunistic claims is to harass recalcitrant debtors and suppliers. Harassment is a way of penalizing false claims; it also enables creditors to observe the business activities and consumption pattern of their debtors for evidence on their ability to pay.

Several reported cases of nonpayment involve clients who left the business. These cases can be interpreted as situations in which the debtor initially had an interest in the business relationship and behaved accordingly for some time. But eventually that interest was lost: business conditions changed, other opportunities arose and $EV(\tau, \varepsilon)$ was reduced. Although these experiences could also be construed as risk-sharing, they were typically not perceived as such by respondents. The following anecdote is a good illustration. A fish trader purchased a quantity of fish on credit with the intent of selling it in villages. Later, she discovered that the fish was not selling well because farmers were having a bad year. She therefore decided to leave the fish business altogether and to reorient her trading activities to textiles. To start a textile operation she needed funds. She was currently unknown to textile suppliers and could only purchase goods on a cash-and-carry basis. All her working capital was tied up in fish, which she did not sell well. So the only way for her to get started in textiles was to not pay for the fish she had bought on credit. The sum she owed was not large enough to justify court action. Since she was not intending to reenter the fish business, she did not mind angering fishmongers. She thus carried on with her plan, hoping never to be found. Cases like these are hard to prevent when the main incentive for contract compliance is the preservation of personal relationships and when information about contractual performance does not circulate. The only protection respondent firms have is to make sure they know where to find debtors in case they need to harass them.

(c) *Institutional solutions*

The institutional response Ghanaian firms have found to enforcement problems is to deal with a handful of suppliers and clients that they have known for years. This response, although effective in enabling business to develop and firms to gain access to trade credit, leads to the fragmentation of the economy into networks. It limits the range of commercial partners a firm may possibly deal with in a businesslike fashion. Because the economic reach of Ghanaian firms is reduced, one expects specialization and firm growth to be restricted.

Local and foreign institutions have emerged that partly redress the loss of efficiency due to fragmentation. Trade intermediation appears to be one of them. The function of traders, it seems, is essentially to transcend barriers to exchange and to build links between firms that would not otherwise be able to do business with each other. An Accra carpenter who needs wood, for instance, cannot, like his US counterpart, send a fax to a distant lumber company and reasonably expect the wood to show up. He must rely on a trader who has developed a personal relationship with that lumber company. The plethora of commercial intermediaries that characterizes Ghana as well as many developing countries can thus be interpreted as a consequence of the high level of contract enforcement difficulties in an undeveloped economy. The replacement of telephones, telexes and faxes by the ubiquitous trader may, however, represent an additional cost of doing business in Africa because the time and capital traders spend cajoling and policing suppliers and clients must be compensated (Geertz, Geertz, and Rosen, 1979). Efforts to reduce the cost of trade intermediation could therefore be directed at improving the enforcement of commercial contracts.

When trading with the developed world, Ghanaian importers and exporters rely on a different set of institutions (letter of credit, bill or lading, transport insurance) and intermediaries (banks, insurance companies, SGS), all of foreign origin or inspiration. The main function of these institutions and intermediaries is to ensure the respect of contractual obligations. International banks, in particular, are relied on to ensure that payment is made upon delivery. These institutions and intermediaries owe their existence to the high cost of inspecting goods at the port of departure and of collecting payment in an alien country. The fact that disputes occur in spite of their presence is the best illustration of the universal prevalence of contract enforcement problems. They nevertheless indicate that putting in place institutions for the enforcement of contracts can make a difference: thanks to these institutions, Ghanaian firms can deal with foreign firms they know little about and with whom the enforcement mechanisms on which they rely locally would fail because of the cost of monitoring each other.

(d) *Policy implications*

The example of SGS and the letter of credit suggest that appropriate institutions for the enforcement of international commercial contracts were able to expand the economic reach of Ghanaian firms. This section examines other possible institutional innovations that may be relevant for Ghana and similar countries. Its purpose is to illustrate how the approach developed here can assist policy design. Given the exploratory nature of our findings, the recommendations we make are of course purely tentative.

Before we begin, three caveats must be kept in mind. First, even if contract enforcement institutions are dramatically reformed, firms in Ghana like elsewhere will continue to conduct most of their business

on the basis of interpersonal relations and trust (Williamson, 1985; Stone, Levy and Paredes, 1992). The objective of policy intervention should not be to undermine existing institutions but to add new options to existing ones. Second, contractual flexibility is necessary in Ghana as in many other places and will continue to be. New institutions should not aim at the rigid enforcement of all contracts, thereby closing the door to risk-sharing and excusable default. Third, collecting payment from insolvent firms and individuals is always problematic, irrespective of contract enforcement institutions. Since many Ghanaians are poor and many firms are small and undercapitalized, insolvency is likely to continue creating payment problems. No new institution can — or should try to — eliminate noncompliance altogether.

In our view, the focus of policy intervention should be to enable firms to conduct at least a portion of their business with other reliable firms and individuals with whom they have no or little prior acquaintance. By extending the economic reach of firms, policy intervention should improve economic efficiency and foster the development of a dynamic business community. Success in this endeavor requires that opportunistic behavior be discouraged in contractual matters, either by attaching a higher penalty to opportunistic breach of contract, or by helping firms assess the reliability of potential clients and suppliers. To this we now turn.

The fact that a couple of respondents are ready to extend credit solely on the basis of a bank credit report suggests that establishing a system of credit rating for Ghanaian enterprises could open access to trade credit for reliable firms.[9] Disseminating information about credit repayment performance should assist firms in screening out unreliable business partners and enable good payers to obtain access credit by differentiating themselves from bad payers. Once credit rating is commonly used, trustworthy firms would probably find it in their interest to signal their reliability by establishing an excellent track record. Firms with a good record, therefore, would be good credit risks not only because they have demonstrated their ability to comply with strict payment schedules, but also because they want to preserve their reputation.[10] Credit rating could similarly be used by banks and financial institutions to assess the creditworthiness of their clients. Thanks to credit rating, firms that cannot offer sufficient real security as collateral may still qualify for bank credit through the discounting of bills and postdated checks.

The current court system in Ghana, although not particularly expensive nor inefficient, remains too costly for most commercial cases. The value of commercial transactions rarely justifies the cost and time involved in a legal suit in Ghana's regular court system. Setting up small claims courts tailored, for instance, on the US example may reduce the cost of legal proceedings and help bring the court system closer to small Ghanaian businesses. An alternative and perhaps complementary option would be to favor private arbitration in general, particularly for small cases. One could also envisage specialized commercial courts with simplified judicial and asset recovery procedures.

When faced with the breakdown of a relationship, a few firms in the sample sought help by bribing members of the police or paramilitary groups. The police, however, have no authority to seize property. All they can do is to threaten to detain or, perhaps, mistreat bad payers. Alternative options should be made available that put state coercion at the service of expeditious debt recovery without infringing on the debtor's human rights. A more liberal use by judges of the impounding of accounts and moveable assets at the outset of court proceedings, for instance, would discourage delaying tactics by recalcitrant debtors. Ghanaian judges' concern for a certain conception of fairness seems to stand currently in the way, but this issue deserves more investigation. The same idea could be taken one step further by instituting a rapid, nonadversarial procedure to assist commercial creditors. A special judge or legal officer could be instituted whose duty would be to impound assets and accounts to serve clearly identifiable commercial debt instruments — e.g., postdated checks, bills of exchange, and signed invoices. The ultimate objective of these measures, however, should neither be the replacement of face to face negotiations nor the reduction of contractual flexibility, but rather deterrence of opportunistic behavior and the prevention of unnecessary delays. Since all these measures ultimately remain at the discretion of the creditor and since it is not in the interest of a creditor to jeopardize a valuable relationship, they are unlikely to be used in cases of excusable default. We therefore expect most contractual disputes to continue being handled through direct negotiations.

The system of international payments generally works well but it could be improved in a few areas. Without third-party inspection of their exports, Ghanaian exporters face the risk of foreign firms disputing shipment on arrival, thereby delaying payment and forcing them into granting discounts. To reduce this problem, third-party inspection could be extended to Ghanaian exports.[11] Another area of possible improvement concerns trade between Ghana and its neighbors. Discussions with respondents suggest that it is much safer for a Ghanaian firm to trade with Europe than with a neighboring country. Efforts by the Ghanaian government and the international community to ease inter-African border procedures, reduce rent-seeking, and assist the enforcement of regional import and export contracts could only boost trade between African neighbors. Increased trade in turn should help manufacturing firms gain access to a large market and capture returns to scale.

NOTES

1. What McKinnon (1973) calls "strategic default" and lawyers refer to as "opportunistic breach of contract."

2. The distinction between inability and unwillingness to repay is blurred in practice. For equity reasons, debtors often are regarded as unable to repay when compliance would be unduly costly, i.e., when $\pi(-f, \tau, \varepsilon)$ falls below a socially unacceptable level $B < \infty$.

3. Readers unfamiliar with the literature on contracts may refer to Hart and Holmstrom (1987) and Kreps (1990) for a survey. Moral hazard refers to a situation in which one party to a contract, called the principal, cannot observe the action of the other party, called the agent. As a result, the agent is tempted to cheat the principal and must be given incentives to exert proper care. Adverse selection refers to a different situation in which it is the type of the agent that is not observable by the principal. An undifferentiated contract may then attract the wrong types of agents. A possible solution is for the principal to offer a menu of contracts and hope that agents of different types select themselves into different contracts. Alternatively, the principal may elect to ration supply and refuse to transact at certain terms. Singh (1989) presents two simple models of sharecropping, one with moral hazard, the other with adverse selection. These concepts have been extended in a variety of directions, generating an enormous literature that it would be too fastidious to list here.

4. This is only a first step. Follow-up surveys in Kenya (Fafchamps *et al.*, 1994) and Zimbabwe (Fafchamps, Pender and Robinson, 1995) have probed further into contractual issues and strongly confirmed Ghanaian findings. They will be the object of separate publications.

5. See Cuevas *et al.* (1993) for a discussion of survey results on enterprise finance and trade credit.

6. See Hart (1988) for a discussion of contractual issues among very small firms.

7. As opposed to a sophisticated form such as the computerized files of Dun and Bradstreet.

8. See note 4.

9. Stone, Levy, and Paredes (1992) come to a similar conclusion regarding Brazil and Chile.

10. Kreps, Milgrom, Roberts and Wilson (1982) apply the same principle to a very different situation, that of a chain store facing potential entrants.

11. As a referee pointed out, however, Ghanaian firms may object to SGS inspection on exports because it reduces opportunities for underinvoicing.

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