Insider Lending: The Good, the Bad, and the Ugly

Jason R. Davis, University of Wisconsin – Stevens Point Tracy Hofer, University of Wisconsin – Stevens Point H. Scott Wallace, University of Wisconsin – Stevens Point

ABSTRACT

There is a debate in the economic literature over the effectiveness of insider lending as a method of finance in developing and transitional economies. One perspective argues that insider lending facilitates financial transactions by overcoming extreme informational asymmetries that often plague less developed economies. Another perspective counters that the conflicts of interest under insider lending encourage insiders to loot depositors. This paper represents a first step in attempting to reconcile these two views. It introduces a simple model that bases the decision to loot on the rate insiders discount expected future returns from "cooperating" with depositors. The model, as it stands, is incomplete because it fails to include the factors that determine insiders' rate of time preference. The paper examines the possibility of incorporating measures that capture the degree of security for property rights into the model. Challenges for future research are discussed.

INTRODUCTION

By facilitating investment, sound financial systems foster economic growth and development. Many less-developed and transition economies, however, lack sophisticated forms of financial intermediation that can effectively link independent savers with independent borrowers. Weak legal environments and poor enforcement often account for the absence of modern financial institutions. Insufficient property rights systems, for example, have impeded the use of collateral to support credit transactions (de Soto, 2000; Hainz, 2003). Private order frequently substitutes for public order under these conditions (McMillan and Woodruff, 2000). As manifestations of private order, insider lending practices dominate the financial sectors of less developed economies. Insider (or related) lending

occurs when "banks are controlled by persons or entities with substantial interest in non-financial firms. Quite often, a significant fraction of bank lending is directed towards these related parties, which include shareholders of the bank, their associates and family, and the firms they control" (La Porta, et al., 2003, 231).

The efficacy of insider lending has been a subject of debate among economists. La Porta, Lopez-de-Silanes, and Zamarripa identified two competing views of these practices: the information view and the looting view. The information view contends that insider lending addresses the severe information asymmetries that confound arm's length intermediation in less-developed nations. "Bankers know more about related borrowers than unrelated ones because they are represented on the borrower's board of directors and share the day-today management of the borrower" (La Porta, et al., 2003, 231). Providing credit to insiders helps to mitigate both adverse selection and moral hazard problems that occur when information costs are high. The looting view argues "that close ties between banks and borrowers allow insiders to divert resources from depositors and/or minority shareholders to themselves" (La Porta, et al., 2003, 231). In general, looting occurs when insiders "have an incentive to go broke for profit at society's expense (to loot) instead of to go for broke (to gamble on success). Bankruptcy for profit will occur if poor accounting, lax regulation, or low penalties for abuse give owners an incentive to pay themselves more than their firms are worth and then default on their debt obligations" (Akerlof, et. al., 1993, 2).

Which interpretation is correct? This paper argues that insider lending can be a credible method of finance for developing economies if relationships between depositors and insiders are self-enforcing. "Contracting becomes self-enforcing through the threat of retaliation and consequent loss of business. In other words, the shadow of the future can induce the trading partners to cooperate" (McMillan and Woodruff, 2000, 2424). If the present value of expected future profits from cooperation exceeds the gains from looting, then it is in the best interest of owners to sustain the relationships. On the other hand, "controllers of a bank have a strong incentive to divert funds to companies they control, as long as their share of profits in their own companies is greater than their share of profits in the bank" (La Porta, et. al. 2003). Under these circumstances, insider lending practices encourage owners to loot depositors.

This paper presents a model that bases insider decisions to loot (or not to loot) on the rate expected future returns from cooperation are discounted. By influencing the rate of discounting, institutional, organizational, and other economic factors are important determinants of the viability of insider lending practices as a relatively efficient method of raising capital. More research, however, is required to isolate and incorporate these factors. The first section reviews literature that supports the information and looting views and examines the use of discounting to model economic behavior. The second section presents a simple, incentive-based model of insider decision-making. Third, the paper discusses the effects of the security of property rights on individuals' time horizons. Last, challenges for future research are examined.

LITERATURE REVEW

Information View

Economic historian Naomi Lamoreaux contends that kinship groups played a central role in the economic development of Antebellum New England. Kinship groups dominated business activity "for they enabled merchants to raise capital in large amounts, while reducing the risks of doing business. Rather than gamble a major portion of his wealth on a single investment, a merchant would parcel out his funds among a number of different ventures, calling upon various other members of his circle to put up the additional capital required for each enterprise" (Lamoreaux, 1986, 653). These groups represented the earliest efforts in commercial banking, acquiring bank charters from individual states during the late eighteenth and early nineteenth century. As "the financial arms of kinship groups, they raised capital for their members' diverse investments. At the same time they provided these groups (commonly regarded as

premodern institutions) with a corporate base, permitting them to survive and prosper into the industrial era" (Lamoreaux, 1986, 648-9).

These banks drew from the savings of the local community with depositors providing funds to banks primarily by purchasing bank stock which "earned a variable rate of return that was determined twice yearly by the directors on the basis on the bank's current earnings" (Lamoreaux, 1996, 66). The inside nature of lending practices did not appear to deter customers from purchasing bank stock as the amount of capital raised by these banks increased dramatically over the course of the 19th century. The high level of transparency associated with insider lending institutions reduced information asymmetries between banks and prospective stockholders. Investors "knew that when they bought stock in a bank they were actually investing in the diversified enterprises of the institution's directors. Investment in bank stock, consequently was a way ordinary savers could participate in the activities of the region's most prominent entrepreneurs - and could do so without exposing themselves to serious risk" (Lamoreaux, 1994, 4-5).

The economic environment of the time precluded arm's length relationships in financial markets. It "is important to realize that loans to outsiders might also lead to heavy losses because it was difficult during this period to obtain accurate information about the creditworthiness of strangers. Indeed, given the poor quality of information, the monitoring of insiders by insiders actually may have been less risky than extending credit to outsiders" (Lamoreaux, 1996, 79). In an information scarce environment, banks needed to cultivate and maintain their reputation to induce outsiders to buy shares of bank stock. "If one director overextended himself and endangered the institution by borrowing excessive amounts of money, all others stood to suffer. Not only would a bank failure cost them access to credit, but it threatened their reputation as well. As a result, bank insiders might be expected to monitor closely each other's borrowing habits" (Lamoreaux, 1992, 172-3). The inside monitoring of directors by other directors addressed potential moral hazard problems. By mitigating information asymmetries in a high transaction cost setting, insider lending practices encouraged capital formation and economic development. In addition, liberal bank chartering policies kept barriers of entry into commercial

banking low thus reducing problems of excluding outsiders from financing. Firms unable to gain financing from existing banks often created their own banks during this period.

Despite the absence of a modern financial system, China has enjoyed considerable economic growth since liberalization. Lisa Keister (1997; 2000) attributes much of the financing of economic growth to the creation of specialized financial companies by Chinese business groups. "In the mid-1980s, the Chinese state began to encourage the formation of such groups by permitting firms to acquire ownership rights in each other and by reducing its own role to that of a shareholder with limited liability and authority" (Keister, 1997, 2). These business groups created finance companies that "collected and redistributed funds within the group and that obtained funds through state banks on behalf of member firms" (Keister, 1997, 3).

Keister compared the performance of business groups with finance companies in regions with developed financial markets with those in lessdeveloped areas. "The results demonstrate that the impact of access to a finance company on firm profits was more than ten times as great in nonmarketized regions as in marketized regions. This supports the idea that the finance company substitutes for more well-developed formal financial system. Indeed, where markets, including financial markets, are more developed, firms turned to the market, but where markets were not well-developed, firms sought alternatives to commercial (or state) credit" (Keister, 1997, 23). Keister's analysis emphasizes the importance of insider lending in contributing to capital formation in the absence of credible market sources of finance. Looting View

Economists La Porta, Lopez-de-Silanes, and Zamarripa (2003) provide a different view of insider lending practices. In contrasting insider lending (related lending) with arm's length lending practices in Mexico during the 1990s, the authors find evidence that supports the looting interpretation.

> Related parties borrow at lower rates and are less likely to post collateral. However, after controlling for borrower and loan characteristics, related borrowers are 33-35 percent more likely to default than unrelated ones. We also find that the default rates on

loans made to related persons and to privately-held companies related to the bank is 77.4 percent. The equivalent rate for unrelated parties is 32.1 percent. Moreover, recovery rates are \$0.30 per dollar lower for related borrowers than for unrelated ones. Finally, to the extent that we can measure it, related borrowers emerge from the crisis relatively unscathed – bank owners lose control over their banks but not their industrial assets (La Porta, et. al., 2003).

The authors argued that these results ultimately stemmed from conflicts of interest and inadequate regulatory oversight that plagued the Mexican banking system. "Many of the ownership and control features of the banks in our sample can be traced back to privatization that returned commercial banks to the private sector by 1992, ten years after all commercial banks had been nationalized" (La Porta, et. al., 2003). The Mexican government achieved privatization by auctioning the control of banks to the highest bidders. Despite rules that required dispersed ownership, "banks were acquired by local families that already controlled industrial groups and had the financial resources required to bid in the privatization auction. Furthermore during the sample period, related lending was largely unregulated and poorly supervised while banks operated under a generous deposit insurance system" (La Porta, et. al., 2003, 14).

The authors argue that, by exacerbating moral hazard problems, the prevalence of insider lending in Mexico's banking system significantly undermined financial stability in the 1990s. "Looting makes banks inherently fragile since related parties default on their loans to the bank when the economy fails and the continuation value of their equity in the bank is low. The case of Mexico in the 1990s suggests that the risk that related lending may lead to looting is great when banks are controlled by industrial firms, outside lending has relatively low rates of return, and corporate governance is weak" (La Porta, et. al., 2003, 21).

Luc Laeven (2001) argues that the structure of banking in Post-Soviet Russia has had the effect of making looting a dominant strategy for private banks. The fall of communism precipitated a transition towards a more private banking system in the absence of strong regulatory oversight. The shares of large former state banks were held by state institutions, state enterprises, private enterprises and individuals with each group accounting for about 25 percent of share ownership. Newly established private banks were primarily owned by new private companies (Laeven, 2001, 4-5). As Luc Laeven discusses, these arrangements facilitated the expansion of insider lending practices throughout the Russian commercial banking system. Banks "that are owned by enterprises prefer to extend loans to these companies in over 80 percent of the cases. (There is) a strong preference of banks to finance enterprises that are holding their shares. In some cases, these enterprises accounted for 90 percent of all credits. Insider lending in Russia has saddled the banks with large amounts of overdue debt and observers have argued that such preferential loans need to be drastically reduced" (Laeven, 2001, 5). Russia failed to implement banking regulations limiting insider lending, with the current system allowing "large shareholders to sit on the management board of banks" (Laeven, 2001, 31).

By shaping incentives, the economic, political, and historical factors that characterize societies greatly affect wealth-maximizing choices of decision-makers. This paper models the decision to loot as a function of how heavily expected future net earnings from commercial banking are discounted. These societal factors can influence the degree of discounting by decision-makers and ultimately determine which strategy is optimal (looting or cooperation). *Discounting*

The modern industrial organization literature has used game theoretic models to analyze collusive behavior within oligopoly settings. Under single period games, these models often view interactions as a "prisoner's dilemma" with all firms having a dominant strategy to cheat, leading to the breakdown of the collusive agreement as the Nash equilibrium outcome. Repeated interaction among firms, however, often changes incentives because cheating in period one can invite retaliation by rivals in all future periods. The prospect of foregoing future profits can make cooperation a dominant strategy in each period. In an infinitely repeated game, the choice to cooperate or cheat is a function of the discount factor which "measures how much \$1 one period into the future is worth compared with \$1 now" (Cabral, 2000, 129). If the expected discounted payoff for cooperation (maintaining collusive price) for all future periods exceeds the gains from cheating, then collusive pricing by firms is a Nash equilibrium. The per period interest rate, frequency of interaction, industry growth rate, and probability of continuation represent important variables that affect the discount factor in these models (Cabral, 2000, 129-30).

Discounting, repeated interaction, and reputation also represent important elements in a number of models that explain the structure of institutional arrangements. Avner Greif analyzed the development of coalitions among Maghribi traders as institutions that governed agency relations between merchants and their agents in the pre-Modern era. The absence of third-party enforcement of contracts forced merchants to find "private order" solutions to address agency problems.

> Agency relations among the Maghribis were characterized by a commitment problem. Efficiency was enhanced by letting an overseas agent transact business with capital he did not own. When the capital was in his possession, however, he could embezzle it. Without a supporting institution, merchants anticipating opportunistic behavior would not operate through agents; thus mutually beneficial exchanges would not be carried out. To gain from cooperation, there was a need for an institution capable of surmounting this commitment problem, an institution through which an agent could commit himself ex ante, before receiving the merchant's capital, to be honest ex post (Greif, 1993, 528).

By effectively reducing information asymmetries between merchants and their agents, the Maghribi coalitions allowed merchants to monitor the behavior of agents and thereby create self-enforcing contracts. By "paying an agent a wage 'high' enough during each period he is known to be honest, and by making future employment conditional on past conduct, a merchant can insure that the present value of the lifetime expected utility of an honest agent is larger than what the agent can obtain by cheating and facing the prospect of being unemployed" (Greif, 1993, 530).

The Grameen Bank is an example of a financial institution that has improved loan performance and ensured high quality loans by lending only to women. The Grameen Bank was established in 1976 to lend to the poorest of the poor in rural Bangladesh. Five prospective borrowers are grouped together, with two receiving a small, uncollateralized loan. Once these two loans have been repaid for six weeks, the other members of the group become eligible for loans. The Bank counts on the fact that women heavily weigh expected future earnings. Rural men tend to spend funds on consumption items while the women focus on long-term investments. The funds are used for small-scale capital projects that will increase current and future income, and hence increase the survival rate of their children. Even though borrowers of Grameen Bank own 90 per cent of its shares, the repayment record on loans is 95 per cent (Grameen Bank, 2004). The increase in information from peer lending combined with higher preference for future returns account for the excellent performance of these banks (Grameen Bank, 2004).

The following section presents a model that shows that when the future is heavily discounted, insider lending will result in looting in an infinitely repeated game setting. In a one period game, looting is always the dominant strategy. When future expected earning are heavily weighted, insider lending will not result in looting but in the continuation of commercial banking relationships.

THE MODEL

Variables D= value of deposits at any time a = percent of deposits used to make loans or acquire other financial assets (1-a)= percent of deposits held as reserves i= interest rate paid to depositors r = interest rate charged to borrowers r_n = interest rate received from safe financial assets d = default rate on loans (1-d)= percent of loans repaid δ = discount factor, valued between 0 and 1 $\delta = 1$ implies no discounting; future values equally preferred to present values $\delta = 0$ implies complete discounting; no preference for future values

One Period Model

At any time, the bank has D deposits, aD to be used for loans or other financial assets. If the bank chooses to make aD worth of loans at the beginning of the period, they can expect to collect (1+r)aD in payments if all payments are made. Since there is some likelihood,, that loans will not be repaid, the expected collections are (1-d)(1+r)aD. In addition, the bank's liability will grow to (1+i)Dafter interest payments are distributed to the depositors. The bank's expected profits, discounted back to the beginning of the period, are thus:

$$E(\Pi) = \delta(1-d)(1+r)aD - \delta(1+i)D$$
(1)

Positive profits will be expected as long as:

$$(1-d)(1+r)a \ge (1+i)$$
 (2)

In other words, profits are positive if the marginal expected gross return per dollar of deposits exceeds the marginal gross interest payment to depositors per dollar of deposits.

If there is a safe financial asset paying interest r_n , the bank will only be willing to issue loans if the expected profits from loans exceed the expected returns from the safe financial asset. This will be achieved as long as the gross expected marginal return on loans, (1-d)(1+r) exceeds the gross marginal return on the safe asset, $(1+r_n)$. If this condition is met, then it is worthwhile for the bank to issue loans rather an simply investing in safe financial assets.

However, the bank owners could choose to loot, making bad loans to themselves and/or their friends with no intention of repayment. The maximum gain to the owners is the value of the deposits themselves. Thus, a bank owner would rationally choose to make 'good' loans rather than looting if it is more profitable to do so, implying:

$$E(\Pi) = \delta(1-d)(1+r)aD - \delta(1+i)D \ge D \qquad (3)$$

This will be true only if:

$$(1-d)(1+r)a - (1+i) \ge 1/\delta$$
 (4)

If $\delta = 0$, implying complete discounting of future returns, the right side of equation (4) would be infinite; under such time preference, looting is always the dominant strategy. However, if δ =1, so that future returns are equally-preferred to current returns, looting is still likely the dominant strategy. In this case, the right hand of equation (3) is equal to 1where the left hand side is describing the expected marginal gross return net of payments to depositors per dollar of deposits. In other words, looting would be the dominant strategy unless equation (4) holds true, which would require an interest rate on loans in excess of 100%

Infinite Game

The previous results indicate that looting is always the dominant strategy if the bank is only interested in one-period's returns. If the game is repeated indefinitely, a bank choosing to make 'good' loans and stay in business over the long-run would earn profits equal to that in equation (1) at the end of each period. The discounted future stream of profits would be equal to:

$$\sum E(\prod) = \sum \{ \delta^{i}[(1-d)(1+r)aD - (1+i)D] \} = \delta/_{1-\delta}[(1-d)(1+r)aD - (1+i)D]$$
(5)

The expected stream of profits will be positive as long as expected profits in each period are positive, the same criteria as in equation (2). Similarly, the expected gross returns would have to exceed that of a safe financial asset in order for the bank to choose to make loans rather than simply investing in the safe alternative. The bank will now choose to make 'good' loans rather than loot if is more profitable:

$$\sum E(\prod) = \frac{\delta}{1-\delta} [(1-d)(1+r)aD - (1+i)D] > D \quad (6)$$

This will only be true if:

$$(1-d)(1+r)a - (1+i) \ge 1-\delta/\delta$$
 (7)

Again, under complete discounting of future returns, or δ =0, the right hand side of equation (7) will be infinite, suggesting that looting would be the dominant strategy. At the other extreme, if future returns are equally well-liked to present returns, or δ =1,right hand side of equation (7) will be equal to zero. The left hand side of equation (7) will be positive if equation (2) holds true for each period. Thus, if there is no discounting of future returns, the dominant strategy is to make 'good' loans rather than loot as long as making loans is profitable in each period.

The key determinant in whether or not to loot, then, depends on how heavily banks discount future profits. The lower the discounting of future returns, the greater probability that the bank will rationally choose to make 'good' loans rather than loot. Conversely, the greater the discounting of future returns, the greater probability that the bank will rationally choose to loot.

If bank owners are forward-looking enough, with sufficient preferences for future profits, looting will not be the dominant strategy. Following the information view of insider lending, loans are made to insiders if the information gained can effectively lower the expected probability of default, relative to that of outsiders. By loaning to groups that have a lower expectation of default, the bank will increase their expected profits.

RELATIONSHIP BETWEEN THE TIME RATE OF PREFERENCE AND SECURITY OF PROPERTY RIGHTS

Background

According to our model, the likelihood of looting depends on the degree to which future returns are discounted. Yet, political, economic, and social factors are important determinants of the discount rate. The "rate of time preference" presented in our model, however, doesn't incorporate these factors. Adjustments to the "rate of time preference" variable that would take these factors into account are necessary to make the paper relevant.

Actors who operate in a highly uncertain economic environment are likely to act differently from those who make decisions within stable settings. In their article, "Property Rights and Finance," authors Simon, McMillan, and Woodruff surveyed firms from Poland, Romania, Slovakia, Ukraine, and Russia in 1997. From their survey, the authors determined that the absence of secure property rights represented the primary constraint on investment. "At the low level of institutional development, secure property rights are both necessary and sufficient to induce investment by entrepreneurs. The availability of bank loans surely matters for growth, but perhaps only once property rights are perceived to be secure" (Johnson, et al., 2002, 1336). As Douglass North and Weingast explain, "(e)conomic development requires reasonably secure private and communal property rights. The expectation of arbitrary confiscation, either by the state or by fellow citizens, shortens the individual actor's time horizon, increases the subjective discount rate, and creates disincentives for investment, specialization, and exchange" (North and Weingast, 1996, 130).

By shortening time horizons, highly insecure property rights are likely to lead greater looting. The effects on incentives can be captured by using the degree of security of private property as a proxy for the "time rate of preference". We contend that secure property rights will lead to long time horizons and to the adoption of insider lending practices that improve capital formation in less developed economies. By linking the discount factor to the degree of security for property rights we can test our model's hypothesis. Whereas the discount factor is not directly observable, the degree of security for property rights can be measured.

There are a number of measures designed to capture the degree of security for property rights. Most of these measures, however, are subjective indicators. These include Gastil's index of political freedom and civil liberties (Scully, 1998). Indices like the popular International Country Risk Guide (ICRG) and the BERI ratings are based on information gathered by private risk-assessment firms (Knack and Keefer, 1995; Mauro, 1995)1. Although many researchers tend to use them as cardinal measures, these measures are ordinal in nature. The subjective nature of these indices means that the measures "may be influenced by outcomes: when economic performance is good, the evaluators may be subtly induced to report that governance is also good" (Clague et. al1999, 197).

CIM as a Measure of the Security of Property Rights

One example of an objective measure is "contract-intensive money" (Clague et. al., 1999). Contract-intensive money (CIM) is calculated as the ratio of non-currency money to the total money supply $(M_2 - C / M_2)$. CIM holds a number of important advantages over other measures. In addition to being objective, CIM can be easily calculated from data that has been readily available for many countries over many years.

Clague, Keefer, and Olson (1999) formulated this measure to accurately reflect the performance of a nation in enforcing contracts and securing property rights. The authors argue that the characteristics of market transactions within a nation reflect the level of protection provided for property rights. In nations with weak property rights, market "exchange is simultaneous and selfenforcing", indicating that a high percentage of transactions are handled on a cash basis. Nonsimultaneous transactions, such as borrowing and lending, will tend to require strong third-party enforcement. In these cases, "gains from trade cannot be realized unless the parties expect that the contract will be carried out" (Clague, et. al., 1999, 186).

> "If contracts are generally unreliable, there can be no assurance that the money lent to financial institutions is safe. Moreover, when financial institutions cannot rely on third-party-enforcement of loan contracts – and when property rights are not clear, so that lenders do not have secure rights to mortgaged assets in the event of borrowers' defaults – then they cannot earn as much with the depositors' money. ...[and] there will be less financial intermediation." (p. 188)

Without strong third-party enforcement, businesses are generally forced to raise funds by using savings or through family connections. Therefore, in countries where non-simultaneous transactions are more difficult to enforce, indicating government's weak protection of property rights, large money transactions will be evident and the CIM will be low (Clague et. al., 186-187).

While financial sector development is, in and of itself, very sensitive to the security of property and contract rights (Levine 1998), Clague et. al., argue that "CIM is properly regarded as a broad measure of the general security of contracts and property rights in all sectors of a country and not primarily those in the financial sector" (p. 203). Their paper provided evidence showing a significant correlation of CIM with other subjective measures of institutional quality. They also performed a factor analysis showing that CIM and other institutional variables measuring degree of institutional strength stress the quality of governance and institutions more than the level of financial development while variables related to measures of the finance sector emphasize the level of financial development. These findings support their claim that CIM is an indicator of security of property rights rather than of financial development (p. 204).

CHALLENGES FOR FUTURE RESEARCH

In order to test our model we need to construct the CIM ratios for those nations for which insider lending is prevalent. In addition, we will need data that measures the performance of insider lending institutions to establish whether, on balance, insider lending was beneficial (informative) or harmful (looting). We can then try to determine if there is a critical value of CIM for which looting will be the prevalent outcome of insider lending practices. While insider lending tends to be common in economies with a low level of institutional development (absence of credit reports, inadequate bankruptcy laws, etc.), it is the degree to which the property and contract rights are enforced that determine the effects of insider lending. As mentioned earlier, Johnson et al. (2002) contend that "(i)f property rights are insecure it is immaterial whether or not finance is available" (1336). In this paper, we take this argument one step further: in the absence of secure property rights, credible sources of finance are unlikely to be available.

It is important to emphasize that a low level of institutional development does not imply that the property rights are insecure. The absence of looting by nascent commercial banks in Antebellum New England suggests that property rights were secure and that insider lending represented a response to the high transaction costs of an information poor environment (Lamoreaux, 1991). To make this distinction between the level of institutional development and the security of property rights, we will need to find measures that will capture the level of institutional development. Relying solely on the CIM index may be problematic because economies characterized by low levels of institutional development also are likely to rely heavily on currency to support transactions, even if property rights are reasonably secure. Given the potential ambiguity of the CIM index, an independent measure of institutional development will help sort out the effects of these two variables. We can then hypothesize that looting will tend to prevail in

economies characterized by both underdeveloped institutions and insecure property rights. For those economies with underdeveloped institutions but relatively secure property rights, insider lending can be an important method of finance.

CONCLUSION

This paper reconciles the information and looting views of insider lending practices by modeling the decision to loot as a function of how heavily future returns are discounted. Exogenous political, social, and economic factors affect incentives under insider lending by influencing the discount rate. We will use the measure CIM (contract-intensive money) developed by Clague et al. (1999) as a proxy for the discount rate in our model. We argue that low security of property rights (as measured by a low value of CIM) leads to a low discount rate, and higher probability that insider lending will result in looting. Future research hopes to empirically test our model's hypothesis.

REFERENCES

- Akerlof, George; Romer, Paul; Hall, Robert; and Mankiw, N. Gregory. 1993. Looting: The Economic Underworld of Bankruptcy for Profit. *Brookings Papers on Economic Activity*, 1993(2): 1-73.
- Bebczuk, Ricardo. 2003. Asymmetric Information in Financial Markets: Introduction and Applications. Cambridge: Cambridge University Press.
- Berglof, Erik and Bolton, Patrick. 2002. The Great Divide and Beyond: Financial Architecture in Transition. *Journal of Economic Perspectives*, 16(1): 77-100.
- Cabral, Luis. 2000. Introduction to Industrial Organization. Cambridge, MA: The MIT Press.
- Clague, Christopher; Keefer, Stephen; and Olson, Mancur. 1999. Contract-Intensive Money: Contract Enforcement, Property Rights and Economic Performance. *Journal of Economic Growth*, 4(2): 185-211.
- De Soto, Hernando. 2000. The Mystery of Capital: Why Capitalism Triumphs in the West and Fails Everywhere Else. New York: Basic Books.

Grameen Bank. 2004. Grameen Bank. Website <u>http://www.grameen-info.org</u>. Retrieved 9/24/2004.

Greif, Avner. 1993. Contract Enforceability and Economic Institutions in Early Trade: The Maghribi Traders' Coalition. *American Economic Review*, 83(3): 525-548.

Hainz, Christa. 2003. Bank Competition and Credit Markets in Transition Economies. *Journal of Comparative Economics*, 31(3): 223-245.

Johnson, Simon; McMillan, John; and Woodruff, Christopher. 2002. Property Rights and Finance. *American Economic Review*, 92(5): 1335-56

Keister, Lisa. 1997. Insider Lending and Economic Transition: The Structure, Function, Performance Impact of Finance Companies in Chinese Business Groups. *William Davidson Institute Working Paper # 195.* ______. 2000. Chinese Business Groups: The Structure and Impact of Interfirm Relations during Economic Development, New York: Oxford

University Press. Knack, Stephen and Keefer, Philip. 1995. Institutions and Economic Performance: Cross-Country Tests Using Alternative

Institutional Measures. *Economics and Politics*, 7(3): 207-227.

Leaven, Luc. 2001. Insider Lending and Bank Ownership: The Case of Russia. *Journal of Comparative Economics*, 29(2): 207-29.

Lamoreaux, Naomi. 1986. Banks, Kinship, and Economic Development: The New England Case. *Journal of Economic History*, 46(3): 647-667.

. 1991. Information Problems and Banks' Specialization in Short-Term Commercial Lending: New England in the Nineteenth Century. In Temin P. (Ed.), *Inside the Business Enterprise: Historical Perspectives of the Use of Information*. Chicago: University of Chicago Press.

_____. 1996. Insider Lending: Banks, Personal Connections, and Economic Development in Industrial New England. New York: Cambridge University Press.

La Porta, Rafael; Lopez-de-Silanes, Florencio; and Zamarripa, Guillermo. 2003. Related Lending, *Quarterly Journal of Economics*, 118(1): 231-68.

Levine, Ross. 1997. Financial Development and Economic Growth: Views and Agenda. Journal of Economic Literature, Vol. 35 (June 1997), pp. 688-726.

_____. 1998. The Legal Environment, Banks, and Long-Run Economic Growth. *Journal of Money, Credit, and Banking*, 30(3): 596-613.

Mauro, Paolo. 1995. Corruption and Growth. *Quarterly Journal of Economics*, 110(3): 681-712.

North, Douglass and Weingast, Barry. 1996. Constitutions and Commitment: the Evolution of Institutions Governing Public Choice in Seventeenth-century England. In Alston, L., Eggerston, T., and North, D. (eds.), *Empirical Studies in Institutional Change*. USA: Cambridge University Press.

Rajan, Raghuram and Zingales, Luigi. 2003. Saving Capitalism from the Capitalists: Unleashing the Power of Financial Markets to Create Wealth and Spread Opportunity. New York: Crown Business Press.

Scully, Gerald W. 1988. The Institutional Framework and Economic Development Journal of Political Economy, 96(3): 652-662.

ENDNOTE

¹ Gastil Index is a sum of political freedoms and civil liberties indexes. ICRG Index is the sum of 5 subjective variables, rule of law, quality of bureaucracy, corruption, risk of expropriation and government repudiation of contracts constructed from International Country Risk Guide. BERI Index is the sum of 4 subjective measures, bureaucratic delays, contract enforceability, nationalization potential, and infrastructure quality constructed from Business Environmental Risk Intelligence. (Clague et al. p. 208).