

WHICH CAPITALISM? LESSONS FROM THE EAST ASIAN CRISIS

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ABSTRACT

As a result of the Asian crisis, relationship-based systems are now under attack for being inefficient and corrupt. Yet, till recently, they were proposed as an alternative form of capitalism to the arm's length Anglo-Saxon system. What went wrong? This paper suggests that relationship-based systems work well when contracts are poorly enforced and capital scarce. Power relationships substitute for contracts, and can achieve better outcomes than a primitive contractual system. But a relationship-based system suppresses the price system and the signals it provides. As a result, relationship-based systems can misallocate capital when presented with large external capital inflows. Since the external capital comes from arm's length investors who typically have little contractual rights or power in a relationship system, and since these investors are rationally aware of the potential for misallocation, they keep their powder dry by keeping their claims short term. Thus, the contact between the two systems creates a fragile hybrid, which while mutually beneficial to relationship borrowers and arm's length investors in normal times, is excessively prone to shocks. The paper suggests that while there may be some short term benefits for these economies to revert to the pure relationship-based system, in the long run they will be held back unless they have the greater disclosure, contract enforcement, and competition of the arm's length system. The current Asian crisis may be the most opportune moment for these economies to effect the transition between systems.

Just a few years ago, it was fashionable to decry the short-sightedness of the American financial system, the tendency of U.S. financial markets to ignore longer-term corporate prospects while focusing on quarterly earnings reports. There were repeated calls for the U.S. to adopt new laws that would permit financiers to take a longer view of their investments, and to move toward the more relationship-based investing model that prevails in Japan.¹ It is amazing what a banking crisis or two will do to popular fashion. Now the talk is all about the virtues of "the market," the importance of competition and disclosure, and the horrors of crony capitalism.

Why did these relationship-based financial systems, which have been credited with fueling the miraculous growth of East Asia, suddenly implode? Is the current crisis a temporary setback to an otherwise successful system or does it herald its demise? Does the slow but steady ascendance of the public markets, even in Germany, suggest the eventual supremacy of the arm's-length, market-based, Anglo-Saxon system?

RELATIONSHIP VERSUS ARM'S-LENGTH SYSTEMS

To answer these questions, let's begin with a sketch of the salient features of these two kinds of systems. Like all sketches, this one has elements of caricature, but this is the price we have to pay to avoid being distracted by the details.

A financial system has two primary goals: to channel resources to their most productive uses and to ensure that an adequate portion of the return flows to the financier. The latter is, of course, crucial to the former. Without the prospect of an adequate return, funds will not be made available for investment.

Relationship-based systems ensure a return to the financier by granting her some form of power over the firm being financed. The simplest form of power is when the financier has (implicit or explicit) ownership of the firm. The financier can also serve as the sole or main lender, supplier, or customer. In all of these forms, the financier attempts to secure her return on investment by retaining some kind of monopoly over the firm she finances. As with every monopoly, this requires some barriers to entry. These barriers may be due to regulation, or to

lack of transparency--or "opacity"--of the system, which substantially raises the costs of entry to potential competitors.

Contrast this with the arm's-length, Anglo-Saxon system, where the financier is protected by explicit contracts. In such systems, contracts and associated prices determine the transactions that are undertaken. As a result, institutional relationships matter less and the market becomes a more important medium for directing/governing the terms of transactions.

An important distinction between these two systems is their different degree of reliance on legal enforcement. Relationship-based systems can survive in environments where laws are poorly drafted and contracts not enforced. The relationship is largely self-governing; parties intent on maintaining their "reputations" honor the spirit of agreements (often in the absence of any written contract) in order to ensure a steady flow of future business within the same network of firms. By contrast, the prompt and unbiased enforcement of contracts by courts is a pre-condition for the viability of a market-based system. Moreover, since contracts are typically hard to write with the wealth of detail necessary to fully govern transactions, it is important that the law offer a helping hand. Under common law, the court tries to follow the spirit rather than the letter of a contract, thus enabling contracts to offer greater protection. For this reason, it is perhaps no surprise that market-based systems are found largely in countries with a common-law tradition (hence the "Anglo-Saxon" model).²

Another distinction between the two systems is the relative importance of transparency. Market-based systems require transparency as a guarantee of protection. In the words of Franklin Roosevelt, "Sunlight is said to be the best of disinfectants; electric light the most efficient policemen."³ By contrast, relationship-based systems are designed to preserve opacity, which has the effect of protecting the relationships from the threat of competition.

An Example: Credit

Before going further, let us consider the example of a transaction--the extension of credit--in each of the two systems. In a relationship-based system, a bank will have close ties with a potential borrowing firm, perhaps because of frequent past contacts or because of ownership

links. In assessing the borrowing needs of the firm and its ability to pay interest and principal, the bank will consider not only the firm's current debt-servicing capability, but also its long-term ability to repay, and the various non-contractual levers the bank can push to extract repayment.⁴ The interest rate charged will be repeatedly negotiated over time, and may not have a direct relationship to the intrinsic risk of the project.

In an arm's-length system, by contrast, the firm will be able to tap a wider circle of potential lenders because there will be more widespread financial information about it. The loan will be contracted for a specific period, and the interest rate will be a competitive one that will compensate the lender for time and the risk of that particular loan.

Limitations on competition in a relationship system do not just give the financier power, but also strengthen his incentive to co-operate with the borrower. Studies of Japanese keiretsus show that the main banks went out of their way to help financially distressed borrowers. For example, Sumitomo Bank not only effectively guaranteed Mazda's debts when it got into trouble after the first oil shock, but also orchestrated a rescue, in part by exhorting employees within its keiretsu to buy Mazda cars.⁵ Sumitomo's incentive to help would have been considerably weaker if Mazda had had the option of giving the lion's share of its business, once it emerged from distress, to some other bank. As this example suggests, the effective limitations on outside competition imposed by the keiretsu system enable lenders to "internalize" a greater share of the benefits accruing to the borrowers than is possible in an arm's-length, competitive banking environment.

The absence of competition and disclosure in a relationship-based system imply that there are really no price signals to guide decisions. Unlike an arm's-length system, where a number of competitive lenders can give a borrowing firm independent assessments of the costs of undertaking a project, the cost a borrower faces in the relationship-based system is simply what the relationship lender and the borrower negotiate. Since there can be substantial value created in the relationship, and the negotiation and allocation of this surplus is a function of each party's power, the effective cost of financing can deviate substantially from the true risk-adjusted cost.

DO RELATIONSHIP-BASED SYSTEMS ALWAYS LEAD TO WORSE INVESTMENT DECISIONS?

But is this necessarily a bad thing? Are lending and investment decisions always inefficient if the cost of funds differs from their true cost? Are there no redeeming features of a relationship-based system? The answer to all these questions is no. In the real world with all its "imperfections," an imperfect cost of funds can sometimes produce the right investment decisions.

For instance, consider our previous example of a firm in distress. Taking into consideration all the value that the firm adds to society--to workers, customers, and local governments as well as shareholders--the company may be worth saving. But, *in the short run*, the true cost of funding may far exceed what the firm can pay without creating further investment distortions.⁶ And in the competitive arm's-length system, a lender may not be able to recoup or "internalize" enough of the firm's value in the long run to be able to offer it subsidized financing in the short run. So the firm is much less likely to be bailed out in the competitive, arm's-length system. By contrast, a lender in a relationship-based system, confident in the strength of the relationship (and the protection it affords from competition), can offer a below-market rate in the short run and then recoup its losses with an above-market rate over the long run when the firm is healthy and can afford high payouts. In sum, relationship banks can be viewed as using their monopoly power to charge above-market rates in normal circumstances in return for an implicit agreement to provide below-market financing when their borrowers get into trouble.

A recent study, involving one of the present writers, provides evidence of the existence of such relationship lending practices even in the U.S.⁷ In examining bank loans to small businesses in different banking "markets" throughout the U.S.,⁸ the study finds that in "concentrated" markets (those where most of the lending is done by a handful of banks) --which are likely to be more relationship-oriented for the reasons discussed earlier--more credit is available to young firms than in more competitive banking markets. To the extent young firms are more credit rationed, as many observers have suggested, the evidence suggests that the relationship-based

system does a better job of ensuring that value-adding projects get funded.

The study also finds that the interest rates charged to younger firms are, on average, lower in concentrated markets than in competitive markets, with the effect reversing for older firms. This suggests that banks in concentrated markets can offer more credit on economic terms because their relationships allow "intertemporal cross-subsidies"--that is, below-market rates for younger firms that are compensated for by above-market rates for more mature firms that have a higher ability to pay. Such subsidies, as suggested earlier, would not be possible in more competitive markets.

Clearly, it is this kind of ability to "internalize joint surplus"-- that is, to trade off short-run losses for longer-run gains--that led so many observers, including many economists, to defend the efficiency of relationship-based systems. But it is easy to see the problems that can arise in such systems. Perhaps most important, the relationship-based system does not pay much attention to market or price signals. And this indifference to price signals becomes self-fulfilling. If investment decisions are not driven by prices, then prices become less effective in providing economic directions because they reflect less information.

This is not to say that the arm's length system is perfect in the allocation of resources. Because outsiders have little power, management can indulge itself far more in empire-building without triggering an intervention by outsiders. This problem has been labeled the "agency costs of free cash flows" by Michael Jensen. The arm's length system, however, can use takeovers to rectify this problem when it gets excessive.⁹ By contrast, the problem of mis-allocation of resources due to the lack of price signals in the relationship system is more severe, because lacks a self-activating mechanism to correct it. In fact, even if price signals were accurate, the power structures in the relationship-based system may not allow movement in a direction indicated by the prices.

Evidence of this unwillingness to respond to market signals was provided by a 1991 study by Hoshi, Kashyap, and Scharfstein.¹⁰ The study looked at a sample of Japanese firms in the late 1970s to mid 1980s that had close ties to banks and compared their investment behavior with a

sample that had no such ties. The investments of firms that had no bank tie were very sensitive to the cash flow the firms generated from operations; when operating cash flows decreased sharply, so did investment spending--and vice versa. By contrast, the investments of firms with strong ties to the banks were significantly less sensitive to the firms' operating cash flow.

As suggested earlier, one possible interpretation of these findings is that banking relationships make it easier for firms to obtain external funding for value-adding investments, thus making them less dependent on their own cash flows. But recent events in Japan suggest a different explanation. More often than not, the companies' continuous access to bank funding on favorable terms allowed them to ignore the signal sent by their poor cash flows, and to continue investing. By continuing to invest in these circumstances, such firms may well have been destroying long-term value rather than increasing or preserving it. Even if the banks were failing to provide the managers of these firms with the right signals, it appears that the stock market was attempting to do so. For, as the study also reported, the firms with banking relationships in their sample had lower "Tobin's q" (or market-to-replacement cost) ratios than firms without bank ties. And, to the extent Tobin's q is a reliable proxy for a firm's investment opportunities, the stock market was expressing skepticism about the likely payoff from such investments.

Moreover, another study of Japanese firms published in the past year suggests that such market skepticism was warranted. For while Japanese firms with close bank ties may have had greater access to funds when their operating cash flows declined, such access did not enable them to achieve higher profits or growth rates than their peers.¹¹

Yet another recent study provides additional evidence that relationships can distort the allocation of funds.¹² In the early 1990s, Japanese banks increased their lending to the U.S. commercial real estate market. At their peak in 1992, the U.S. subsidiaries of Japanese banks accounted for one fifth of all commercial real estate loans held in the U.S. banking sector. Then, in response to a severe decline in real estate prices in Japan, the Japanese banks cut back their lending in the U.S. even as U.S. prices were rising (and lending by non-Japanese banks increasing) while at the same time expanding their lending in the domestic Japanese market where prices were

plummeting. Thus, rather than cutting their losses in Japan--or at least not abandoning their profitable opportunities in the U.S.--Japanese banks poured more money into their unprofitable Japanese relationships.

In sum, the message from the existing research is that although relationships may increase or preserve value in some cases--particularly when contracts are hard to write or enforce --they also have a downside that they do not rely on price signals. The consequence has been a widespread and costly misallocation of resources.

By contrast, market-based economies like the U.S. and U.K. sustained high levels of corporate investment throughout most of the '90s while still producing enough profit to reward shareholders. The relative prosperity of these economies can be attributed in no small part to their reliance on market prices to allocate resources. And indeed there appears to be a virtuous cycle at work here: In the process of relying on prices for guidance, the arm's-length transactions that predominate in these economies also have the beneficial effect of making prices more informative. Thus, the more transactions that come into the market, the more likely decisions made on the basis of price are likely to be the right ones. As we will argue below, in economies with a sufficient degree of contractual "infrastructure" to support them, arm's-length transactions are likely to lead to better decisions.

THE COST AND BENEFITS OF CONGLOMERATES: SOME EVIDENCE OF WHEN RELATIONSHIPS ADD VALUE

But, if relationship-based systems generally allocate resources less efficiently than market-based economies, how do we account for their popularity? After all, almost all economies, including the U.S., have at some point in their history relied heavily on relationships, particularly in earlier stages of development.¹³ Thus, one promising hypothesis for the durability of the relationship-based system is that it works better than an arm's-length system in relatively less developed economies--those where contracts are ineffective and price signals from the market relatively uninformative.

Some support for this argument comes from recent research on the performance of conglomerate organizations. Conglomerates can be thought of as the ultimate relationship-based financial system in the sense that the different business units that make up the organization receive financing from an internal capital market.

Several studies of conglomerates in the U.S. have shown that they trade at substantial discounts relative to stand-alone firms.¹⁴ Moreover, these studies--including one that we recently completed (with Henri Servaes)--show that the size of the discount, which is about 14% of market value on average, is related to the extent of the conglomerate's investments in relatively unprofitable segments. Furthermore, our study shows that both the extent of the discount and the over-investment increase as the diversity of investment opportunities within the conglomerate increases. If conglomerates were optimizing on capital allocation, we would expect the opposite since they could starve the divisions with poor opportunities and give the funds to those with good ones. That they do not do so suggests that conglomerates make decisions according to considerations other than risk and return, and this hurts their market value.

Taken together, then, the evidence on U.S. conglomerates suggests that they trade at a significant discount relative to stand-alone firms, and such discounts appear to be a direct function of the extent of resource misallocation. But do conglomerates perform better in less-developed market economies?

There is some evidence for this, most of it fairly recent. In 1995, this journal published a study of the South African "groups" (collections of publicly traded companies with a pyramid ownership structure) showing that the groups have traded at consistent premiums to their net asset values (NAVs).¹⁵ A more recent study finds that large diversified groups in India outperformed smaller unaffiliated firms between 1989 and 1995.¹⁶ And a 1998 study of conglomerates in 35 countries reports that the relative value of diversification in a country is related to the country's income level.¹⁷ Specifically, in low-income countries the study finds either a diversification premium or no discount, while in high-income countries the study finds a significant diversification discount.¹⁸ Perhaps the most telling evidence for conglomerates,

however, is the continuing dominance of this organizational form in Asia, Latin America, and much of Western Europe--indeed, almost everywhere outside the Anglo-Saxon world.¹⁹ Of course, such dominance does not necessarily imply that they will continue to prevail, only that they have proved efficient in certain (possibly now past) circumstances.

A FRAMEWORK FOR THINKING ABOUT THE VALUE OF RELATIONSHIPS

From our discussion above, two factors seem important in determining whether relationships work well in an environment relative to arm's-length transactions. The first is the extent of adequacy of the contractual "infrastructure" ("contractability" for short) in that environment. If much of the value in a transaction can be contractually allocated, there is little role for a controlling financier to add value by reallocating surplus and facilitating transactions. For this reason, the development of property rights, laws, and institutions (such as auditors and regulators) that facilitate transactions will reduce the relative value of relationships.

The second factor is the importance of price signals. In a situation of extreme capital scarcity, when it is relatively easy to determine that certain investments have positive net present values, decisions based on relationships are not likely to go very wrong. But in situations where the clearly profitable investments have been made and there is abundant capital chasing relatively few opportunities, price signals are very useful in helping to guide investment. In such cases, obscuring price signals can lead to investment that ends up destroying substantial value.

Figure 1 may be a useful way to summarize our framework. On the x axis is the ratio of available capital to investment opportunities, on the y axis is the degree to which institutional development facilitates contracting. As shown in the lower left corner of the figure, a relationship-based system is better than an arm's length system when there is little available capital relative to opportunities *and* contractability is low. As shown in the upper right, an arm's-length system dominates when both are high. When the ratio of capital to opportunities is low but contractability is high, both systems work reasonably well--though, in most developed economies, the arm's-length system tends to supplant the relationship system over time. This is because a well-

functioning contractual system both creates very good opportunities outside the relationship, and narrows the amount of give and take that is possible inside. Finally, neither system works well when capital is relatively abundant and contractibility is low. The relationship system cannot allocate the capital well (easily leading to overinvestment) while the arm's-length system has limited ability to recover funds once they are invested.

High Contractability	BOTH	ARM'S LENGTH
Low Contractability	RELATIONSHIP	NEITHER
	Low Capital/Opp	High Capital/Opp

Figure 1 begs the question: What brings about a change in the environment? The main force for such change appears to be major changes in investment opportunities or capital flows; institutional infrastructure changes tends to follow them, though often with a considerable lag behind. Moreover, there is no guarantee that institutional changes will keep pace with the changes in capital flows, or that the system itself will change to be consistent with the

environment.

For example, consider a relationship system in a situation with low contractability and tremendous capital inflow relative to available opportunities (in short, the condition of East Asia and most emerging economies a few years ago). An improvement in institutions facilitating contractual infrastructure and the move towards an arm's-length system has the potential to improve matters. But there is no reason to believe that institutional change will be rapid or that the vested interests in the relationship system will permit such a move. The resulting inconsistency of the system with the environment can lead to distortions.

Let us now try and make some sense of the recent events in East Asia in the light of this framework.

MAKING SENSE OF THE ASIAN CRISIS

Until the end of the 1980s, the East Asian economies were overwhelmingly relationship-based systems.²⁰ At the outset of liberalization, the volume of profitable investment opportunities greatly exceeded the available capital. This capital shortage in turn prompted a momentous change in the environment: namely, the opening up of these economies to capital flows --a development that coincided with the increased desire of Western banks and fund managers for international diversification.

But, as Figure 1 would suggest, there was a potential problem: A flood of foreign capital poured into these countries at a time when the institutional infrastructure was not adequately developed to permit direct contracting between these sources of capital and borrowers. Essentially, the arm's-length capital was lent to a relationship-based system that did not have adequate price signals to deploy the massive inflow of capital properly.²¹ The economies moved from the lower left-hand box in Figure 1 to the lower right hand box, an environment where neither system can be expected to work very well.

Not only did foreign lenders not always know whether their funds were being deployed appropriately, they also did not have the institutional safeguards to protect their investment.²²

Therefore, they took the next best route--they kept their loans and investments short term so that they could pull out at any indication of trouble.²³ So long as the countries could not offer adequate institutional safeguards, short-term financing was the cheapest way for the countries to obtain the large amounts of capital that were on offer. Both sides were happy provided the economies continued to hum along.

But then prospects changed. It is hard to say whether the trigger was the depreciating yen (driven down because of loose Japanese monetary policy), poor macro-economic policies, or the realization that capital was being poorly invested by the relationship system. At any rate, once some foreign arm's-length capital started to pull out, it did not make sense for any to stay in. Since the relationship system would ensure that the pain would be spread through invisible cross-subsidies and the like, and not contained within a few specific "bad" institutions, it made sense for every outsider, who could, to pull out. This was not necessarily a panic, but a "rational" move to the exits by arm's-length capital providers who knew they had inadequate protection for the long run, and were not sufficiently part of the relationship system to get any of the benefits of staying. Of course, it is easy to see how the subsequent development of the crisis took place.

We do not rule out the possibility that moral hazard may have been behind some of the investment that flowed in, or that there was some panic in the search for exits. Yet it seems to us that much of what happened can be explained as the consequence of two financial systems that are essentially incompatible coming into contact with each other. Not having either power that is the currency in relationship systems or contractual safeguards that are essential to an arm's-length system, foreign investors protected themselves by keeping the exits clear. An unexpected bad shock led them to head for the exits. The mistake, if any, may have been on the part of the East Asian countries in underestimating the risk involved in accepting such flows, without a clear plan to reform and in not reforming their institutions once the flows had been accepted.

One clear policy implication of this analysis is that a country faced with the prospect of substantial financial inflows has to either accept the risk of financial fragility or improve its financial infrastructure before it accepts the flows. Institutions such as exchanges and custodial

services have to be set up, monitors such as rating agencies, auditors, and supervisory authorities have to be established or strengthened, accounting standards and disclosure laws improved, and bankruptcy and contract law made more effective. Not only does such institutional development improve the way foreign inflows are invested, it also makes the system more resilient to adverse shocks by "localizing" them or allowing them to be contained within a few institutions. In short, unfettered flows should be allowed only after the financial infrastructure is in. The notion that investors will create their own institutions after they come in is a version of Say's Law that should be laid to rest.

WHERE DO WE GO FROM HERE?

Given the flight of foreign capital and the ensuing capital shortage now confronting them, East Asian economies might appear to be justified in returning to their traditional relationship-based systems. But is a return to the old system likely to restore these economies to their former strength? And is a relationship-based system really a viable, long-run solution for these economies?

Our analysis thus far would suggest that a return to relationships is the best way to go in the short run. That is, until foreign capital shows signs of renewed interest in these economies, staying in the lower left-hand corner of Figure 1 would appear to be the best course of action. Yet there is a fundamental problem with relationship systems, one that we have largely glossed over until now, namely, their resistance to change. The opacity and collusive practices that sustain a relationship-based system entrench incumbents at the expense of potential new entrants. Moreover, the very lack of transparency also makes it hard for democratic forces to detect all the abuses in the system. This strengthens the hand of incumbents in resisting any reform.

One of the effects of a crisis is to create such immense problems that even the relationship system cannot hide them. The evidence of gross abuse can be a powerful weapon for democratic and liberal forces in pressing for reform. An example is the financial legislation that was rushed through Congress soon after the onset of the Great Depression, in 1933 and 1934. Of course,

much of that legislation--including the Glass Steagall Act and the Securities Act of 1934--has been attacked by economists as politically motivated²⁴ and a source of inefficiency in the U.S. economy.²⁵ What is rarely pointed out, however, is that such legislation laid the framework for the modern-U.S. financial sector. The crisis of the Great Depression provided an opportunity for democratic forces to combat the concentration of power on Wall Street; and the legislation that resulted from the crisis essentially ended relationship-based finance in the United States. In so doing, Glass Steagall and the Securities Acts can be seen as providing the initial impetus for the present variety and competitiveness of U.S. financial institutions.

In the near term, then, East Asia's crisis and capital shortage provides a rare opportunity for institutional reform. Over the longer run, however, such economies can be expected to move from its current condition of capital shortage to situations that once again tests the systems' ability to allocate capital. When that day comes, the arm's-length system is likely to be more efficient. If the current crisis can be weathered, the long run need not be that long for the East Asian economies. Rather than reconstituting the old monopolies and inside deals, these economies would be well advised to follow the U.S. example in the 1930s, and take advantage of the financial crisis to improve transparency and accountability in their financial system.

But how do these economies weather the short-run crisis? The problem is that while a large portion of foreign capital has fled, some is still in the system, along with domestically supplied capital. As the financial mess is untangled and the underlying problems revealed, more capital will disappear, either outside the country or under the mattress. Furthermore, there is likely to be a ratchet effect in the disclosure process. Because the markets suspect insiders of dissembling as in the past, any disclosures will be discounted as understating the true extent of the mess. But this makes it hard for reforming insiders to confess everything since the market continues to discount their disclosures.²⁶ For example, if the market's past experience with the system causes it to multiply the size of disclosed loan losses by two, an admission of the true size of loan losses may cause tremendous capital flight since, at least in the short run, the market might believe the true losses are twice the actual ones. Since confidence is so critical to markets, it may

paradoxically be impossible to clean up the system and restore long run credibility without risking further short-run flight.

This would suggest that if there is a serious intention to clean up the system, a temporary government guarantee--with clearly defined time limits--of the financial institutions, together with a temporary restriction on capital flows, may be necessary to give the system the latitude to come clean.²⁷

The danger in this course, however, is that such restrictions would make it easier to continue with the status quo because the market would no longer reflect the state of the system. Therefore, it is crucial that there be genuine political will to reform the system before such drastic measures are contemplated. Other institutional reforms should follow in the longer run, and these reforms will provide Asian economies not only with the capacity to absorb arm's-length foreign capital when fashion and sentiment turn, as surely they must, but also with the much-needed information to allocate this capital to the highest-value use. Therein lies the best hope for restoring long-term growth.

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¹ Michael Porter, "Capital Choices: Changing the Way America Invests in Industry," *Journal of Applied Corporate Finance*, Vol. 5 No. 2 (Summer 1992), pp. 4-16

² See Rafael la Porta, Florencio Lopez de Silanes, Andrei Shleifer, and Robert Vishny, "The Legal Determinants of External Finance," *Journal of Finance*, 52 (1997).

³ In Joel Seligman, *The Transformation of Wall Street*, Northeastern University Press, Boston 1995, p.42.

⁴ For example, the bank may refuse to extend a blanket guarantee to the firm's other creditors, refuse to provide new financing or even take a piece of it, etc.

⁵ See Takeo Hoshi, Anil Kashyap, and David Scharfstein, "The Role of Banks in Reducing the Costs of Financial Distress in Japan", *Journal of Financial Economics*, 27, 67-88 (1990).

⁶ For example, too high an interest rate could lead the firm to take riskier, negative NPV, projects. See Michael Jensen and William Meckling, "Theory of the Firm: Managerial Behavior, Agency Costs and Capital Structure." *Journal of Financial Economics* 3: 305-360 (1976).

⁷ See Mitchell Petersen and Raghuram Rajan, "The Effect of Credit Market Competition on Lending Relationships," *Quarterly Journal of Economics*, 110, 407-443 (1995).

⁸ The idea of distinct banking markets makes sense in this case because small firms rarely do business with a bank outside their local banking market; the median borrower in the above cited study is only two miles from its bank .

⁹ If anything, managerial empire-building is less severe in a relationship-based system, precisely because financiers have the power to intervene extensively and absorb free cash flows from successful firms.

¹⁰ Takeo Hoshi, Anil Kashyap, and David Scharfstein, "Corporate Structure, Liquidity, and Investment: Evidence from Japanese Panel Data," *Quarterly Journal of Economics*, 27: (1991), 33-60.

¹¹ See David Weinstein and Yishay Yafeh, "On the Costs of a Bank Centered Financial System: Evidence from the Changing Main Bank Relations in Japan," *Journal of Finance*, 53, 635-672 (1998).

¹² See Joe Peek and Eric Rosengren, "The International Transmission of Financial Shocks: The Case of Japan," *American Economic Review*, 87, 495-505 (1998).

¹³ See Charles Calomiris and Carlos Rammirez, "The Role of Financial Relationships in the History of American Corporate Finance," *Journal of Applied Corporate Finance*, Vol. 9 No. 2 (Summer 1996), pp. 52-74.

¹⁴ See, for example, Larry Lang and Rene Stulz, "Tobin's q, Corporate Diversification, and Firm Performance", *Journal of Political Economy*, 102, 1248-1291 (1994); and Philip Berger and Eli Ofek, "Diversification's Effect on Firm Value," *Journal of Financial Economics*, 37, 39-65.

¹⁵ Graham Barr, Jos Gerson, and Brian Kantor, "Shareholders As Agents And Principals: The Case for South Africa's Corporate Ownership Structure," *Journal of Applied Corporate Finance*, Vol. 8 No. 1 (Spring 1995). Part of the group's superior performance is attributed to the opportunities for diversification they provide for large South African investors--opportunities that are likely to be valuable in regimes, like South Africa, with relatively binding capital controls.

¹⁶ See Arun Khanna and Krishna Palepu, "Corporate Scope and Institutional Context: An Empirical Analysis of Diversified Indian Groups," *Harvard Business School Working Paper* (1997).

¹⁷ See Larry Fauver, Joel Houston and Andy Naranjo, "Capital Market Development, Legal Systems, and the Value of Corporate Diversification: A Cross Country Analysis," *University of Florida Working Paper* (1998).

¹⁸ This evidence should be viewed as preliminary, because Lins and Servaes find a conglomerate discount in six of the seven emerging markets they examine (see Karl Lins and Henri Servaes, "Is Corporate Diversification Beneficial in Emerging Markets?", *London Business School Working Paper* (1998).

¹⁹ See Khanna and Palepu, *op. cit.*

²⁰ For an excellent overview of the East Asian Crisis, see the articles on Nouriel Roubini's web

page at <http://www.stern.nyu.edu/~nroubini/asia/AsiaHomepage.html>. In particular, see Nouriel Roubini, Giancarlo Corsetti and Paolo Pesenti, "What Caused the Asian Currency and Financial Crisis?," New York University Working paper, 1998; and Steve Radelet and Jeffrey Sachs, "The Onset of the East Asian Financial Crisis," Harvard University Working Paper (1998).

²¹ These countries certainly did have stock markets which could have been a source of price signals. But disclosure rules were often inadequate and the monitoring institutions that exist in more developed economies – such as auditors, analysts, and rating agencies – developing slowly.

²² For example, even if creditors could learn enough to know the firm was defunct, bankruptcy laws existed largely on the books.

²³ This is very similar to the way depositors keep bank management in check by threatening to run in case of trouble (see Charles Calomiris and Charles Kahn, "The Role of Demandable Debt in Structuring Optimal Banking Arrangements", *American Economic Review*, 81 (1991), pp. 497-513 and Douglas Diamond and Raghuram Rajan, "Liquidity risk, liquidity creation and financial fragility: A theory of banking", working paper, University of Chicago).

²⁴ See George Benston, *The Separation of Commercial and Investment Banking*, Oxford: Oxford University Press (1990) and Randall Kroszner and Raghuram G. Rajan, "Is the Glass Steagall Act Justified?: Evidence from the U.S. Experience with Universal Banking 1921-1933," *American Economic Review*, vol 84, pp 810-832 (1994).

²⁵ See Mark Roe, *Strong Managers and Weak Owners*, Princeton University Press, Princeton, N.J (1994).

²⁶ See Raghuram Rajan, "Why Bank Credit Policies Fluctuate: A Theory and Some Evidence," *Quarterly Journal of Economics*, 109 (1994), 399-442.

²⁷ For another view on the necessity of capital controls, see Paul Krugman, "Saving Asia: It's Time to Get Radical," **FORTUNE**, <http://www.pathfinder.com/fortune/investor/1998/980907/sol.html>.