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The Benefits and Costs of Relation-based Governance: An Explanation of the East Asian Miracle and Crisis

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Abstract This paper aims to establish a theory of relation-based governance to explain both the “East Asian miracle” and the East Asian crisis, and draw policy implications for China and other catching-up economies. Relation-based governance is defined as a set of enforcement mechanisms of mostly personal, informal, implicit agreements, which depend largely on second-party retaliations and local information. Given two transaction partners, relation-based governance can potentially enforce all mutually observable agreements; whereas rule-based governance, which largely relies on court enforcement, can enforce only a subset of mutually observable agreements which are also observable by third parties. Thus relation-based governance may facilitate economic catching-up at the early stage of legal development.

But as market expands and labor division deepens, the number of transaction partners increases, and marginal cost of information in relation-based governance may increase significantly. “Diseconomies of span of relations” eventually call for transition from relation-based governance to rule-based governance. However, such transition is intrinsically discontinuous and vulnerable to panic since (1) replacement of management teams may make existing relations (local information) invalid, and entry of new comers weakens incumbents’ commitment to their relations, thus possibly resulting in “decentralized corruption”; (2) outside investors may be unable to observe relation change until a crisis and then panic erupts (indeed insiders may have incentives to cover up); (3) it is very costly to establish cross-county governance due to the nature of relation-specificity and local information in relation-based governance (e.g., bankruptcy procedures and orderly renegotiations involving multinational creditors), thus possibly aggregating the panic of outside investors in case of a bad shock.

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1. Introduction

This paper aims to propose a theory to shed light on perhaps the two greatest economic events in the world since the Great Depression --- the East Asian miracle and the East Asian crisis --- and the most puzzling inconsistency between them, and to draw policy implication for China and other catching-up economies. The highest economic growth in the last several decades has occurred in East Asia where (a) agreements are largely enforced outside courtrooms, and (b) government, banks, and firms are closely related in largely personal and implicit ways. Financial liberalization took place in Japan, Korea, Thailand, Malaysia, Indonesia, etc. over the last decade or so. Problems in the financial sector began to appear in the Japanese economy in the early 1990s after its per capita income caught up with that of the Western advanced economies (e.g., the U.S). Subsequently, a financial crisis began in Thailand in mid 1997 and quickly spread to Indonesia, Korea, and other economies in East Asia, resulting in economic contraction or slowdown in the entire region; the crisis occurred despite the general absence of macroeconomic instability, and it was almost totally unanticipated by all investors, bureaucrats, and scholars. What can account for both the East Asian miracle and the East Asian crisis?

In China, the transition from a planning system to a market system has brought double-digit annual growth on average over the last two decades. Yet, as in other catching-up economies in East Asia, agreements are largely enforced outside courtrooms, and government, banks, and firms are closely related in personal and implicit ways. Currently, some half of the state firms suffer losses, and most state banks are perhaps technically bankrupt due to huge nonperforming loans. In 1996 China began to adopt a variant of the Japanese main bank system on a trial-basis for 300 large and important firms and some others in 7 cities. This experiment is now suspended (at least partially). Can China catch the “Asian flu”?

We shall carry out the study from the perspective of governance and investment for the following reasons. First, we concentrate to look for the factors common to the economies that experienced both the “miracle” and the crisis, such as macroeconomic

stability, investment in human capital, export drive, currency peg, slowing down growth rate in the process of catching-up, "crony capitalism," and financial liberalization. Second, we exclude the factors, which remained the same during the "miracle" and right before the crisis, such as macroeconomic stability, investment in human capital, export drive, since they cannot account for the crisis by themselves per se. We also exclude the factors, which changed, but were expected, or publicly observable, such as slowing down growth rate in the process of catching-up, and standard macroeconomic indicators, since they cannot account for the crisis by themselves either. Thus we shall focus on the common unexpected changing factors to account for the crisis, such as the unexpected dynamics of "crony capitalism" and financial liberalization.

We will first conduct a brief literature review on the East Asian miracle and the East Asian crisis in Section 2. Next, we will develop a theory of relation-based governance to analyze their impacts on capital investment in Section 3. In Section 4 we will apply this framework to examine a particular relation-based governance system---the Japanese model where government, banks, and firms are closely related in personal and implicit ways. The Japanese model was first developed in Japan and was subsequently adopted by other East Asian countries in various forms and to different extents. In section 5, we will use our theoretical framework and country studies to draw policy implications for China and other catching-up economies. Section 6 concludes.

2. A brief literature review

The East Asian miracle

Much has been written on the East Asian miracle (e.g., Lucas 1993, Krugman 1994). But the World Bank Report "The East Asian Miracle" in 1993 was a turning point in shaping public perception. Since then the general view has been that there were three successful government policies behind the economic miracle: macroeconomic stability, investment in human resources, and export drive. We now know that these policies are

not sufficient for catching-up. A detailed version of the World Bank Report, *Lessons from East Asia* (Leipziger 1997), coves eight country studies. The World Bank and Stanford University have conducted a joint project for further study of the role of government in East Asian economic development from the perspective of comparative institutional analysis (Aoki et al. 1997). Aoki and others have introduced a "market-enhancing" view, maintaining that the successful role of the state in East Asia is that instead of direct intervention or no action, the government corrects most market failures by fostering intermediary organizations, such as main banks and business associations. More generally, in the same project Okuno-Fujiwara proposed a framework to study the government-business relationship, and compared the benefits and costs of authoritarian, relation-based, and rule-based governments. Aoki and Okuno-Fujiwara (and Krugman) pointed out some potential problems of the Japanese model at the late stage of economic catching-up. But they and others failed to predict a widespread regional crisis.[1]

The East Asian crisis

The relevant literature of the East Asian crisis thus far can be classified into three categories: theoretical, empirical, and policy analysis.

Theoretical analysis A notable explanation for the East Asian crisis is Krugman's note "What Happened to Asia?" (January 1998). He argues that government guarantees induced financial intermediaries to take too much risk, which was further aggravated by competition between the intermediaries. A related argument is found on "Looting: The Economic Underworld of Bankruptcy for Profit" by Akerlof and Romer (1993), which attempts to explain the financial crisis in Chile in the early 1980s and the Savings and Loans crisis in the U.S. in the late 1980s. A common feature of these two models is that government protection can induce a moral hazard crisis. Another theoretical explanation is that of financial panic, based on the pioneering work by Diamond and Dybvig (1983). In their model, bank runs occur as one (sunspot-type equilibrium) of multiple equilibria in financial markets.

[1] An economic crisis (not caused by natural disasters), by "definition", cannot be perfectly predicted, since

Both explanations seem to be relevant to the East Asian crisis. However, these models do not explicitly address how the Asian financial crisis is different from other crises, and, more importantly, they do not explain the consistency of the decisions and responses by international lenders before and after the crisis started. Rajan and Zingales (1998) use “relationship-based systems” to describe East Asian financial institutions and compare them with the arm’s-length systems in the West. However, they have mot explicitly defined “relationship-based systems” (and “investment opportunities”), and hence have not been able to fully explore the nature and dynamics of relationship-based systems.

Empirical studies There are many country studies, mostly on Indonesia, Korea, and Thailand (for references, see Roubini [1998] and Wong [1998].) Perhaps the most comprehensive empirical studies thus far are the two papers by Radelet and Sachs (March and April 1998). They provide a diagnosis of the East Asian crisis by focusing on the empirical record in the lead-up to the crisis, and they estimate a probit model to search for the causes of the financial crisis during 1994-97 in twenty-two emerging markets. They find that the ratio of short-term foreign debt to foreign exchange reserve seems to be the most significant factor (among the factors that they consider), and the ratio of the financial system claims on the private sector relative to GDP seems to be the second most significant factor. These two factors are supposed to be closely related to the likelihood of panic by foreign creditors and all private creditors (and perhaps to a financial liberalization-induced moral hazard problem) respectively. The question then is: If the Asian financial crisis was due to financial panic, what triggered the panic?

Policy studies Many policy studies have addressed the question of whether and which policies of national governments in the crisis countries and of the International Monetary Fund (IMF) might have triggered, aggravated, or avoided the crisis. Much criticism has pointed to the non-transparency (e.g., the data regarding foreign debt and reserves, and bad loans) and inconsistency (e.g., guaranteeing credits or closing banks) of government policies right before or after the crisis in Thailand and Indonesia. The most noticeable criticisms of the IMF are made by Feldstein (1998) and by Radelet and Sachs

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otherwise it can be prevented.

(March and April 1998). They argue that the double contractionary monetary and fiscal policies might have aggravated, if not triggered, the crisis. In particular, the closure of too many banks in such a short period might have triggered bank runs, such as those in Indonesia. In contrast, Fischer (April and June 1998) defends the position of the IMF. In its "World Economic Outlook" of May 1998, the IMF reviews the financial crisis in general and the Asian crisis in particular (in Chapters IV and I respectively), and justifies its own role. Which side is more convincing? What are the policy implications for catching-up economies that are not yet in a crisis, such as China?

Much attention of the policy implications for China has been devoted to the possibility that the *renminbi* will be devalued, and to the consequent competitive devaluation in the region including Hong Kong. Attention has also been paid to the huge bad (domestic) debt problem in China (e.g., Lardy 1998). Stiglitz (1998) proposes a set of "second-generation strategies" to reform banks, state enterprises, and the government in China after the East Asian crisis. More academic studies have yet to appear.

3. A theory of relation-based governance

We aim to develop a theory of relation-based governance, and apply it to account for both the "East Asian miracle" and the crisis. Following Okuno-Fujiwara (in Aoki et al., 1997, p. 375), we consider a five-stage game form: in the first stage, the legislative branch makes "rules"; in the second stage, firms (e.g., industrial firms and banks) make investments; in the third stage, uncertainties are realized; in the fourth stage, the executive branch moves to tax and to provide public goods, and to bargain with the firms; in the fifth stage, the judiciary branch settles disputes. The decisive players in different stages may or may not be the same people.[2] The payoff matrix may resemble a prisoner's dilemma in which cooperative strategies result in value-maximization outcome, while deviation is unilaterally beneficial. The game may be played repeatedly. However, the length of repeated plays is endogenous in the sense that it is the equilibrium outcome

from investing in relations and deciding whether and when to enter, continue or quit a relation.

A firm may invest in productive activities to increase the size of the "pie", or invest in rent-seeking activities to enhance its ex post bargaining power so as to get a bigger share of the pie. The scale and forms of ex ante productive investments by a firm depend on its expected ex post bargaining power. Expected ex post bargaining power in turn depends on the ex ante rules, and, more importantly, on the expected ex post actions of the government, such as predatory behavior, credit guarantees, cross-subsidies, and expected ways of dispute settlement including bankruptcy procedures. However, when all contingencies can be specified in enforceable contracts costlessly, bargaining can always result in efficient allocations. Indeed, in a world of complete contracts, there is no role for property rights, nor for corporate governance, nor for government intervention (up to the enforcement of voluntary private contracts).

When some important control rights (also the associated benefits) cannot be specified in enforceable contracts, allocation of residual rights, i.e., ownership and corporate governance, matters for efficiency. In a world of incomplete contracts, there may be room for government intervention and different legal systems may have different effects on efficiency. We can refer the enforcement mechanisms of specified rights as *contractual governance*, and the enforcement mechanisms of residual rights as *corporate governance*. The modes of governance mechanisms depend on the nature of activities in terms of observation and verification. In general, economic activities can be classified into three categories: (1) activities observable only by the acting party himself (the first party), (2) activities observable by and only by the two contracting parties (the first and second party), and (3) activities observable by the first, the second and a third party. Category (1) activities can be governed only by the first party, or incentive-compatible, enforcement mechanisms. Category (2) activities can be governed by the first, and second party enforcement mechanisms, such as retaliations in repeated plays. Category (3) activities can also be governed by third party enforcement mechanisms, such as state enforcement and community sanctions.

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[2] Other things being equal, when the different decisive players are different persons, power tends be more

It is evident that second party enforcement must be self-enforcing by the two transaction parties, including their incentive-compatibility of investment in relations. It is less clear but is important to note that third party enforcement also must be self-enforcing when we include the enforcers as players. In other words, third party enforcement requires the agreements between the third party enforcers and their clients, which must be self-enforcing. Other things being equal, a third party enforcer with a larger jurisdiction may have lower average costs due to economies of scale, i.e., natural monopoly in enforcement of standardized contracts (based on unified contract law). In a (national) economy, the third party enforcer with the largest jurisdiction is the state, which is the monopoly in third party enforcement with coercion. When most transactions are based on impersonal, explicit agreements and the state can impartially enforce contracts, we say there is a *rule-based governance* system. Rule-based governance can be made possible by establishing a circular check and balance chain in a polity through collective action mechanisms. For instance, suppose there are three players: A, B and C. It is well known that a circular check and balance chain can be structured as follows: A is checked and balanced by B and C, B is checked and balanced by C and A, and C is checked and balanced by A and B. In our context, A, B and C can be (say) the legislative branch, the executive branch, and the judiciary branch.

The establishment of rule-based governance in a country is a long evolution process since rules can be implemented only if all decisive players have consistent believes and this becomes common knowledge. (E.g., a contractor believes that the judge will punish him if he breaches, and the judge believes that the legislature will punish him if he does not enforce the law, and so on.) However, mutual believes can become common knowledge only if noise is sufficiently reduced by "informational infrastructures" (e.g., accounting, auditing, notary and rating agencies) and informal constraints, which develop or change slowly. Only then "universal information-sharing" is possible, and "rules" on the paper are not just ink!.

Before informational infrastructure and hence rule-based governance are established, firms largely reply on *relation-based governance* where most transactions are

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separate.

based on personal, implicit agreements, and the state generally is not able to impartially enforce contracts. This is the case when the three branches of the government are not sufficiently separate, checked and balanced.[3] Personal agreements between two parties are based on their mutual relations. Two parties have a *relation* if they share each other's certain relevant private information *locally*. The relevant information about a partner may include credit-history and reputation (ex ante monitoring information), financial status and profit prospects (interim monitoring information), and identity and assets (ex post monitoring information) of the partner. Ex ante monitoring information of a partner tells whether he is willing to honor a contract, interim monitoring information tells whether he is able to honor a contract, and ex post monitoring information enables a party to trace a defaulter and his assets for punishment and compensation.

When agreements are enforced by second-party mechanisms, they are usually implicit ("implicit contracts"). Indeed, there is no need to make them explicit as long as the two parties have shared expectations. Sometimes agreements are enforced through third parties in relation-based governance. In this case, agreements may be made partially explicit for third-party verification. There are two forms of relation-based third-party enforcement. One form is by community sanctions. This is possible when the community members are able to share the relevant information (hence the relation) and have incentives to refuse to trade with a defaulter. It is incentive-compatible for community members to refuse to trade with a defaulter if he will default forever if he ever defaulted. This can be a Nash equilibrium (Greif, 1994). Another form of relation-based third-party enforcement is by the state. Since the judiciary branch is not independent (or separate) and neutral in relation-based governance, political influence (often through the powerful executive branch) often dictates the verdicts. In other words, ultimately it is relations that determine the enforcement outcome or ex post bargaining power.

While rule-based governance largely depends on *public information*, i.e., publicly verifiable information, relation-based governance largely depends on *local information*, or mutually observable information by the two transaction parties. A rule-based

[3] In fact, before separation of power was established, European business people during the premodern period made agreements, to a large degree, outside the legal system (Greif, 1994b). Transition away from

governance system involves a large total fixed cost, including the costs of drafting, interpreting and implementing contract law and corporate law by the legislative, the judiciary and the executive branches. The marginal cost of enforcing an additional contract between an additional transaction pair in rule-based governance is negligible given the fact that the contract is explicit, impersonal and standardized and that the police standby. In contrast, a relation-based governance system involves little fixed cost, but significant marginal cost. In relation-based governance, one needs to screen, test and monitor a new transaction partner. The acquired relational information is implicit, personal-specific, and hence non-verifiable, non-transferable. Thus delegation of relation-based enforcement is impossible, and the manager of a firm has to take care all relations by himself. Given his limited capability and time, there must be diminishing returns to the span of relation. That is, as the number of business partners increases, marginal cost of relation will eventually increase significantly.

Screening and test costs of a new partner serve as barriers for exit from an existing relation since switching to a new partner is costly and risky. A new partner may be financially insolvent or purposely cheating. In (rational expectations) equilibrium, unmatched traders tend to be insolvent or cheaters, and matched traders trade with matched partners only. Besides screening and test costs of new partners, the nature of "co-specificity" or "bilateral-monopoly" of a relation can strengthens the existing relation. A person's local knowledge of his partner's private information is hardly transferable to others because such knowledge is hardly verifiable. Furthermore, each party may have incentives to hide his partner's private information in order to avoid potential competitors to steel the relation. However, when screening cost is sufficiently small, and when new and potentially better horizontal competitors (or substitutes) to the existing partners are available, either existing relations will break down, or expected relation-breaking will reduce relation-specific investments.

Note that agreements can be enforced only by either *rule* or *relation*, and nothing else. When there is neither rule nor relation, one can only pray or run (exit and panic) or resort violence and riots. In comparison with rule-based governance, relation-based

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personal reputation (triggered by a high rate of human mobility) in the United States occurred only between

governance has its comparative benefits and costs. When relation-based governance works, given two transaction partners, it can enforce all mutually observable agreements (by the two parties). When one party deviates from a mutual observable agreement, the other party can punish by playing (say) tit-for-tat strategies. In contrast, given two transaction partners, rule-based governance can only enforce a subset of the mutually observable agreements that can also be observed by third parties. Thus, perhaps a large part of monitored-activities, which are mutually observable by the monitor and the monitee, but are not verifiable by a third party, can be enforced by relation-based governance, but not by rule-based governance. However, there exist diseconomies of span of relation, thus a firm can resort relations to enforce agreements with only a small number of partners. In contrast, there exist economies of scale in rule-based governance, thus a firm can resort rule-based governance to enforce contracts with unlimited number of partners including strangers (impersonal agreements). Due to the small number of players, bilateral monopoly of local information, and the active role of government (as will be seen below) in relation-based governance, it is relatively centralized, and has less diversity and variety, and noisier price signals in comparison with rule-based governance.

Existence of relation-based governance In catching-up economies, there is generally no rule-based governance; hence relation-based governance is the only alternative mechanism to enforce agreements. Thus investing in relations can be profitable and rational, especially in developing countries. To induce efficient ex ante investment, the relations among transaction partners need to be *stable* and *balanced*; they must be long-term among a small number of players and the bargaining power of all decisive players is somewhat symmetrically distributed, or decentralized. This is possible in a long-lasting authoritarian regime which restricts entries to key industries and grants firm-level control rights to the businessmen. Under entry restrictions, there are a small number of players, and each can commit to its relations with the existing partners. It is in the interests of the regime to limit its ex post bargaining power by granting sufficient control rights to firms. Note that the power of the state is necessary but not sufficient to enforce agreements among its citizens. "…No one will seek enforcement services for

1840 and 1920 (Zucker, 1986).

their agreements from an enforcer who does not commit not to confiscate. Therefore, (even) a dictator who does not commit is deprived of the potential income that third-party enforcement services may generate. Making such a commitment requires him to give up some of his dictatorial power… A dictator must form long-term relations with at least some of his subjects to secure their cooperation." (Barzel 1998, p. 8) However, by the folk theorem, there are multiple equilibria of the repeated play; thus, depending on the structure of mutual beliefs, the equilibrium relation may be good or bad. A strong political leader or party often serves as a coordination device in selecting equilibrium.

Dynamics of relation-based governance A stable and balanced relation-based governance system, given its capacity to enforce a larger set of agreements between two transaction partners than rule-based governance, can expand market and deepen labor division, which in turn call for more decentralized governance structure and eventually rule-based governance.[4] As the market expands and labor division deepens, the number of transaction partners increases, and hence the average cost of relation will be increasingly higher due to rising marginal cost. In the same process, an increasing number of available competitors to existing partners will weaken a firm's commitment to its existing relations (as will be seen below). As a result, a given relation-based governance structure can perhaps expand the extent of market and deepen the division of labor only to a certain degree. When labor division becomes finer, information becomes more decentralized, and rule-based governance will be increasingly more cost-effective than relation-based governance. Competitive forces will drive relation-based governance to evolve into rule-based governance to capture the gains from deepened labor division.

Discontinuity of relation-based governance Decentralization of relation-based governance or change of management teams can disrupt governance at least in the short run because relations among old players can be weakened, while relations with/among new players or rules are yet to be established. In particular, when new management teams replace old ones and new players enter the market (e.g., due to financial liberalization), existing relations (local person-specific information) become useless or weakened, and relations with and between new players are yet to be established by repeated plays. That

[4] This is a form of self-"creative distruction."

is, either existing relation-specific information becomes invalid, or bilateral monopoly of private information breaks down. The arrival of new comers makes it harder to commit to existing relations. As a byproduct, decentralization of relation-based governance can result in "decentralized corruption." Different branches of the government may jointly maximize the value of a project or of the total bribe before decentralization (e.g., political liberalization). In the process of decentralization, the relations between different branches of the government may be cut off. Then different branches become independent monopolists which provide public goods. This may result in severe inefficiencies if these public goods are complementary (see Shleifer and Vishny 1993).

To illustrate how competition can jeopardize relationship and thus result in inefficient investment, consider marriage for a green-card. Suppose an ugly American man got to know a pretty French girl. They agreed to get married. He paid expenses including her air ticket for their marriage. After marriage she got a green-card. Later she met a hansom American man and married him after divorcing the ugly man. If the ugly man anticipated this result, he would not marry the girl in the first place provided that he only enjoys long-term marriage and that financial compensation is infeasible or unenforceable. In (rational expectations) equilibrium there is no "transaction" if the hansom American man does not know the French girl himself and the ugly American man's private information is not verifiable hence is not tradable. Similarly, when there is no rule-based governance to enforce contracts, potential lateral competition can reduce relation-specific investments.[5]

Intransparency of relation-based governance The discontinuous path of relation-based governance can hardly be observed by outsiders in the process of decentralization and transition. This is because relation-based governance largely depends on non-verifiable private information, and each party may have incentives to hide his partner's private information in order to avoid potential competitors to steel the relation, and to cover up bad outcomes. A higher degree of intransparency may trigger larger information cascades among uninformed outside investors, resulting more severe bubbles and bursts

[5] For the same reason, when future benefits cannot be specified in enforceable contracts, the existence of potential competitors may reduce incentives of technology transfer and job training through jeopardizing partnership or labor-management relationship.

in asset markets. In particular, outside investors may not be able to observe relation changes until a crisis and panic then erupts. When good relations turn into bad, only the relevant parties are aware of the change in the process, and they may have incentives to cover up, and to use invisible cross-subsidies (from other firms) to rescue a troubled firm. Thus when one firm's losses are looming, outside creditors may withdraw their capital not only from this firm but also from other firms which have close relations with the firm.[6]

Incompatibility of relation-based governance The nature of intransparency, non-verifiable local information and person-specificity make it very costly to establish cross-country coordination mechanisms (e.g., bankruptcy procedures and orderly renegotiations involving multinational creditors) among economies with relation-based governance and between economies with relation-based governance and economies with rule-based governance. Thus, in order to be integrated into the community of rule-based economies, a relation-based economy needs to transform itself into a rule-based economy through economic and political opening-up (including financial liberalization). But in the opening-up process, the nature of incompatibility can aggregate the panic of outside investors in case of a bad shock.

In the following, I shall analyze a particular relation-based governance system---the Japanese model, and argue in the context of East Asia: (1) rapid growth under relation-based governance at the initial stage of development is possible; (2) financial liberalization as necessitated by a further division of labor is inevitable; (3) the economy is vulnerable to financial crisis as a result of financial liberalization, because of the difficulty of transforming from relation-based governance to rule-based governance.

The Japanese model

A particular relation-based governance structure is the Japanese model where (1) the government monitors banks, which in turn monitor (non-financial) firms, (2) due to

[6] For this reason, relation-based governance is called "crony capitalism" in the media.

entry restrictions, one political party is dominant in the state sector, some dozens of banks are dominant in the financial sector, and some dozens of industrial groups are dominant in the non-financial sector, and (3) agreements are largely implicit, informal, personal, and are enforced outside courtrooms.

The Japanese model first developed from the 1950s to the 1980s in Japan. The triangular relationship among government agencies, main banks, and industrial firms (keiretsu) is well known. The government through the Ministry of Finance and the Bank of Japan monitors banks, which in turn monitor (their client) firms. Bank monitoring integrates *ex ante-, interim-* and *ex post-monitoring* of a firm in the main bank system (Aoki and Patrick 1994).[7] From the early 1950s to the late 1980s, there were restrictions of entry in the political, financial and industrial sectors. Consequently, during this period there had been one dominant political party (the LDP) in the government, some ten main banks, and some ten keiretsus, which had stable and long-tem relations.[8]

The main bank system is not legal-based, but relation-based. More generally, Kester (1992) reports that "hand-shake" agreements (informal, personal and implicit contracting) are an important part of business the world over, and they are used with much more frequently within groups. "In Japan, supply contracts are established by a 'basic agreement,' which is a short (often only three or four pages), written document that is little more than a legal 'boilerplate' stipulating that the supplier and assembler are entering into a commercial relationship, will operate on a basis of mutual respect for each other's autonomy, and will endeavour in good faith to maintain an atmosphere of mutual trust in their business dealings. …Japanese contracts often do not even state definitely the transactions at stake so as not to restrict the flexibility considered necessary to modify the supply agreement over time." (p.28) "In America, you have many rules [to govern business transactions]. Here in Japan, everything is very fluid. There may be rules, but they are constantly changing to suit the environment … *The overall benefits of an ongoing relationship is what really matters* [in Japan; emphasis added]. " (p.30)

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[7] This reflects limited labor division in the financial sector.

[8] The supplier-buyer relations within keiretsu also seem to be very stable. Asanuma (1989, p. 5) reported that in 1973 there were some 156 member firms of Kyohokai, an association formed by Toyota parts suppliers. During 1973 to 1984, only three member firms exited, and some 21 new firms entered.

Long-term relations are fostered by a variety of institutional arrangements. Cross-shareholding and cross-guarantees, including mutual shareholding, among financial and industrial firms are ways to reinforce relations among group members. Life-long employment is a way to facilitate labor-management and other relations. Systematic job rotation and transfers help to establish relationship networks. "It's especially important in Japan for both sides [in a business relationship] to be forthcoming. The reason is that we have lifetime employment. If you treat someone badly either inside or outside the company by taking advantage of them to profit for the moment, it will not soon be forgotten. This is because people remain with the same company throughout their entire careers."(Kester 1992, p.30)

On the other hand, security markets and legal system were less developed in Japan. Security markets started to develop at significant scale only from the 1980s. Only after 1994 corporations legally had to have at least one outside statutory auditor (Bostock and Stoney 1997, p. 75). This is consistent with the findings of recent cross-country studies which have found that economies with poorer legal systems have narrower capital markets (e.g., La Porta, et al, 1997, pp. 1131-50). Wang (1998) vividly described cases of impartial judiciary procedures in Japan.

The Japanese model was subsequently adopted by other East Asian countries in various forms and to various extents. Korea, Taiwan and Singapore followed the Japanese development path from the 1960s, and become catching-up economies of the "second generation Japanese model." Malaysia, Indonesia, and, to a less degree, Thailand followed the Japanese model from the 1970s and become the "third generation." China and Vietnam started to follow the Japanese model from the 1980s and are becoming catching-up economies of the "fourth generation." (See Tables in the Appendix for Supporting evidences.)

The Benefits of the Japanese model: the East Asian miracle

The Japanese model can be effective in facilitating catching-up because all mutually observable agreements by two transaction parties can be potentially enforced based on their long-term relations, and because catching-up economies have the benefits

of hindsight. More specifically, the East Asian miracle can be explained by four broad reasons: First, in catching-up economies, more markets are incomplete and the legal system is less developed; thus government agencies, intermediary organizations, and business groups may play more important roles to coordinate activities and enforce agreements. That is, since there is no effective rule-based governance, relation-based governance must play a more important role. Kester (1992) noticed the role of industrial groups as systems of contractual governance. Based on a cross-country analysis, Fauver, Houston, and Naranjo (1998) found that the value of conglomerate or corporate diversification is higher when the legal system is less developed. Second, as pointed out earlier, when relation-based governance works, it can enforce all mutually observable agreements by two transaction parties. In contrast, rule-based governance can only enforce a subset of the mutually observable agreements that can also be observed by third parties. Thus, perhaps a large part of activities under monitoring, which are mutually observable by the monitor and the monitee, but are not verifiable by a third party, can be enforced by relation-based governance (but not by rule-based governance).

Third, to correct for market failures and to avoid government failures, governments in the Japanese model need not intervene in markets and allocate rents directly; rather, they can indirectly create and foster market institutions or intermediary organizations such as the main bank system and business associations, and they can create rent opportunities by directed credit and entry restrictions. By so doing, stable and balanced relations can be established. Fourth, catching-up economies can learn from the past experiences of the more developed countries, and thus governments in catching-up economies have more information about how to conduct industrial policies to "internalize" externalities across sectors and across time through joint value maximization. Similarly, firms in catching-up economies have more information about how to conduct business strategies to "internalize" rents between partners through long-term relations.

<u>The Costs of the Japanese model: the Asian financial crisis</u>

The dynamics of relation-based governance implies that for a given relation-based governance structure, when the division of labor becomes finer and the extent of market becomes larger, marginal cost of monitoring may increase significantly. Consequently, till a point in the process of catching-up the government can no longer effectively monitor the banks, which can no longer effectively monitor the firms, who also can no longer effectively monitor their partners. In particular, the three stages (ex ante, interim, and ex post) of monitoring of a firm by a bank need to be separate to certain degree to capture the gains from specialization or deepened labor division. In addition, after the late comer gets close to or catches up with the leaders, there are fewer or no previous examples to follow, and hence trial and error become the main approach of development at later stages of catching-up. Thus, private experiments, given their great diversities to enhance chances of success, will increasingly have an edge over state experiments associated with less diversity due to restrictions on private entries. These forces together will eventually result in inevitable political and economic decentralization, including financial liberalization, in the process of catching-up.

As predicted in the "discontinuity hypothesis," financial liberalization, especially the drastic opening up of capital accounts, in Indonesia, Korea, Thailand, and other economies in East Asia from the early 1990s or so, and the political liberalization in Korea and Thailand during the same period, foreshadowed the current economic crises in these countries. Financial liberalization, along with (explicit or implicit) government guarantees and currency peg, triggered the buildup of a large foreign debt in many economies in East Asia in the 1990s. However, due to the disruption of the existing relation-based governance structure resulting from financial and political liberalization, foreign capitalists may have invested in excessively risky projects, and sometimes their assets were simply looted. Given the fact that a national government cannot be the lender of last resort for foreign currency, foreign debt problem is very vulnerable to financial panic.[9]

[9] The discontinuity nature of relation-based governance can shed light on the general historic fact that financial liberalization is often followed by financial crisis (currency crisis or banking crisis). This was also the case in Latin America in the early 1980s, such as in Argentina and Chile (see King & Levine 1993, pp. 535-6).

But if all these facts had been common knowledge ex ante, foreign creditors would have hesitated to lend in the first place. We need to search for unexpected changing factors. Publicly observable factors, such as traditional macroeconomic indicators (e.g., trade deficits), can explain little in this regard. *The thesis of this paper is that it was the ignorance of investors, especially foreign investors* [10] *about the nature of dynamics, discontinuity, intransparency, and incompatibility, especially, discontinuity of relation-based governance, that accounted for the current crisis.* Yet the severity of the crisis cannot be fully accounted for by such ignorance. Perhaps "competitive looting" and "information cascades" might have enlarged the "bubbles" and "bursts." Discontinuity of relation-based governance resulting from financial liberalization provided opportunities for local financial intermediaries and other agents to loot money from both domestic and international lenders. Limited liability and government guarantees imply "heads the fund users win, and tails tax payers lose." Consequently, competition among looters would lead to asset inflation (Krugman, January 1998). Uninformed investors, such as many international lenders, make their decisions based on observed asset prices, thus possibly creating information cascades which could further enlarge asset bubbles and bursts. Intransparency of relation-based governance implies that information cascades under relation-based governance tend to be larger than that under rule-based governance. In addition, as Feldstein (1998) and Radelet and Saches (March and April 1998) note, the policy mistakes of national governments, such as those of Indonesia, Korea and Thailand, and of the IMF, probably aggravated the crisis.

Historical events and facts are largely consistent with the hypothesis that decentralization of relation-based governance, including financial and political liberalization, is the fundamental cause of the Asian crisis. The trigger for the Asian financial crisis was the currency shock in Thailand. Behind the Thai currency crisis, however, was the Thai political democratization and crisis since 1992, and financial liberalization since 1989. The Thai governance structure is not a full Japanese model; it does not have a strong and stable polity. Since 1992 competitive election has been adopted, which was followed by political instability: a new government in less than a year

[10] Many of the foreign investors in East Asia, such as those from the West, are used to rule-based

on average. Financial liberalization began in 1989, capital account was opened up in 1992, and the Bangkok International Banking Facility was established in 1993 to channel foreign capital with favorable tax treatment. Before the middle of 1997, the Thai government had pledged for months that Finance One (a major finance company) was not insolvent, there was plenty of foreign reserves, and the baht would not be devalued. In late June, however, the Thai government removed support from Finance One. In July 2nd, the Thai government devalued the baht. Then under the IMF program, 58 of 91 finance companies were immediately suspended, and 56 of these were later liquidated.

Subsequently, shocks in foreign exchange markets have affected all economies in the region due to high economic interdependence through investment and trade. But thus far the effects varied markedly in different economies with Indonesia, Korea and Thailand mostly affected, and China, Singapore and Taiwan affected the least. One of the main reasons behind the observed differences seems to have been the political and financial opening up in Thailand and Korea.[11] Take Korea for example. In Korea, a large part of finance was from foreign loans, which were explicitly guaranteed by the Korean Development Bank, and the Bank of Korea (David Cole, Y. C. Park, 1983, pp. 45-78.), and by the Korea Credit Guarantee Fund (set up in 1976), and the Korea Technology Credit Guarantee Fund (set up in 1987) (Bank of Korea 1995, pp. 74-75). However, Korea was able to avoid a debt crisis in the early 1980s. There was no political or financial liberalization back then. In 1997, a debt crisis occurred and Korea asked the IMF for help. Political opening up started from 1988 and financial opening up began to accelerate after 1993 (partly due to the requirements of joining the OECD). Yet by 1997 rule-based governance had not been established. In particular, after July 1996 merchant banks were allowed to enter the land market, and some of them financed 20-year assets with short-term deposits on 90 to 180 day basis (Euromoney, September 1997, p.348).

There was financial but not political opening up in Indonesia in the early and mid 1990s. The catastrophic crisis in Indonesia had perhaps been aggregated greatly by the early policy mistakes of the IMF. Sixteen commercial banks were closed immediately

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governance, but not to relation-based governance.

after the currency crisis began. Such massive closure of banks at currency crisis triggered bank runs. More generally, the required reform speed by the IMF on these countries was like that imposed in Russia some years ago. The conditions imposed on these countries by the IMF may be criticized to be too drastic (both economic and political) and too contractionary (both monetary and fiscal).[12] First, too drastic opening up may severely weaken the existing relation-based governance structure before new and more rule-based governance structure can function as experienced in many transition and developing economies. In fact, after financial liberalization and reform in the first half of the 1990s, according to the "rules" on paper, most East Asian countries, including the crisis countries, established depositor protection scheme, capital adequacy based on Basle Accord, global consolidated reporting, and external audits (Barth, et al. 1998, Table 4, Figure 9a). Yet many of these rules remain largely ink even today.

Second, it appears that the Japanese model, if properly adopted, can be effective in facilitating catching-up, at least in the early stage of catching-up. Dismantling too many existing mechanisms, which had worked well for several decades, may damage the future potential capability to catch up. Barro (1996, p. 24) reported that there is an inverse U-curve relation between growth and democracy. Third, compared with Mexico and other Latin American countries, economies in East Asia rely more on banks and less on security markets (e.g., bond market. See Javad K. Shirazi 1998, p.5), closing too many banks in a short time along with contractionary fiscal policies can result in a more deep and lasting recession.

The China factor and implications for China and other catching-up economies

A common misperception is that the devaluation of RMB since 1994 had eroded the competitiveness of the crisis economies, which might have foreshadowed the crisis.

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[11] In contrast, there was no political or financial opening up in China. There was no political opening up in Singapore, and the political liberalization in Taiwan is mild with the continued dominance of KMT. Thus it appears that the governance mechanisms in Taiwan, and especially in Singapore, have not been disrupted.
[12] When the IMF goes beyond its traditional functions of technical and liquidity assistance too far, it may create more economic, political and social problems than solutions as witnessed in the turmoil in Indonesia.

The fact is that the shares of exports among China, Indonesia, Korea, Malaysia, the Philippines, Thailand and Mexico remained basically unchanged during 1994 to 1996 (Radelet and Sachs April 1998, Table 7.B). This fact is not puzzling if one notes that in 1994 the devaluation of the *renminbi* (RMB) was not 30% to 50% as commonly perceived. Rather the effective nominal devaluation was some 10% since some 80% of foreign exchanges were already carried out around the devalued rate. Given the double-digit inflation rate in the mid-1990s in China, there was no effective devaluation of the RMB in real terms. On the other hand, it was widely perceived that the drastic devaluation of currencies in the crisis countries could badly erode China's competitiveness in exports and force the RMB to be devalued. This perception ignored the fact that China's exports contain a large import component and that capital account is not yet open (for more information, see Chang 1998).

In the long run, our analysis suggests that the Chinese government should *consistently* but *gradually* reduce state control and open up markets to deepen the division of labor and to expand the extent of market. Further decentralization is needed to complete the transition from "planning governance" to relation-based governance, and eventually to rule-based governance. But *decentralizing* must be accompanied by *coordinating*, i.e., maintaining necessary existing relations and improving the regulatory and legal framework. As in its East Asian predecessors, China will experience disruptions of relations in the process of decentralization. However, China has two advantages. First, as a late follower, China has the advantage of learning from both the East Asian miracle and the East Asian crisis to minimize the economic costs of financial liberalization and political transition.

Second, China can resort to domestic inter-regional competition to mitigate the costs of the Japanese model. Although politically China remains to be very centralized, economically it is much more decentralized than many outside observers have perceived. There are about 30 provincial-level jurisdictions[13], some 2,000 counties and 50,000 townships. Local governments have significant incentives and autonomy to develop their economies due to the fiscal revenue-sharing system introduced in 1980, the 1982 revised

[13] Most of them are as large as mid-sized countries in the world.

constitution, and other decentralization policies, such as shifting the control rights of most state-owned enterprises to local governments from the first half of the 1980s.

The more decentralized governance structure based on domestic inter-regional competition can mitigate the costs of the Japanese model in the following ways. First, decentralized regional governance means richer diversity, which can offset the lack of diversity in the Japanese model. Second, corruption and cover-ups will be limited since regions with more corruption and less efficient governance will lose investments to other regions, thus increasing transparency. Third, inter-regional competition can speed up the development of rule-based governance, thus reducing the costs of discontinuity of relation-based governance resulting from financial liberalization.

Economic crises provide opportunities and lessons for governance reform. Historically, the Great Depression triggered major financial reform in the United States. The Glass Steagall Act, the Securities Act, and other regulations since 1934 essentially ended relationship-based finance in the U.S. (Jacobs 1991, pp. 143-145; Rajan and Zingales 1998, p. 14). Similarly, the financial crisis in Chile in the early 1980s induced financial reform to better use foreign capital. Subsequently the new tax structure in Chile provides incentives for long-term foreign investment and discourages short-term capital flows. The current Asian crisis can pay the way to build more effective governance in the region, and provide lessons for catching-up economies in general.

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