

**Through the Eyes of East Asian Financial Executives:  
An 'Inside' Look at the Crisis**

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### Abstract

*The research described here investigates the extent to which relationship-based lending may have been a significant factor contributing to the East Asian economic crisis. Since 1997, efforts to explain the crisis have proliferated, with most analyses of the crisis focusing on government profligacy, weak monetary policy, inadequate regulation of the region's financial services industry, too much speculative borrowing, unsustainable trade imbalances financed with easily withdrawn short-term financing, and both private sector and government corruption. Unfortunately, what is proving especially difficult for analysts and government officials, even with all of the research that has taken place, is reaching some consensus on which features of the crisis are symptoms and which are causes (Economist, 1998). One reason for this is that the explanations offered to date have been almost entirely western in perspective and, predictably, based strictly on application of the kind of traditional economic models Krugman (1998) describes in his analysis of the crisis.*

### Introduction

This study is based on the premise that the East Asian crisis was at least a partial function of a time honored practice that has remained largely hidden from the Occidental eye and unmeasured by conventional economic modeling, the practice of Asian style relationship-based lending. The following unedited comment made by one of the financial executives who participated in this research provides a glimpse into the world of Asian style relationship-based lending. It reflects a pattern of behavior that has been repeated myriad times over the course of many years, a pattern of behavior that helped give rise to the East Asian economic crisis.

Hi Good Day Prof.!

I would like to highlight to you my assessment on "relationship based lending" at my level of authority i.e. as an executive officer. My assessment is a collective of comments that I gather from my close friends working in different organization throughout Malaysia.

At our level, we do proper due diligence in assessing a project or an undertaking. Our proposal to the management or higher authority normally conform with our findings in our assessment. However, in many occasions where that "relationship" exist, the decision will be based on that ground rather than the facts. Sometimes, we will be ordered to adjust data, such as projection on the income etc. Some of my friends even left the organization he words with out of frustration.

I myself had some experience in this kind of practice. Based on my professional judgement plus common business sense of a particular issue, I should reject the application. However, I received a letter from \*\*\*\*\* bla! bla! to accept that application. After a few months later, that projects kaput.

Anyhow, all my comments are confidential to you only. I would like to remain anonymity please

All the best and hope to be informed of your findings in this issue. (Anonymous, 10/11/2000)

As Redding (1993) points out in his study of Chinese capitalism, “explaining how particular patterns of economic growth develop is fraught with difficulties both practical and theoretical. Significant among the practical difficulties is the tendency among theorists doing the explaining to operate from one discipline, such as economics, or sociology or history, and to have the greatest difficulty coordinating an explanation across disciplines.” Such difficulties are especially pronounced where relationship-based lending is concerned because the anatomy of a relationship-based transaction is so unlike the anatomy of “arm’s-length” based transactions characteristic of the way business is done in the West. It is an approach that western bankers find incomprehensible and one that western financial institutions simply do not recognize as legitimate. And it is the legitimacy that tends to attach to Asian style relationship-based lending that makes it a unique and enduring practice.

Failure to recognize the legitimacy, dynamics, and pervasiveness of relationship-based lending as an accepted business practice within the region makes a full understanding the East Asian economic crisis difficult, if not impossible. The behavioral patterns and expectations that characterize the interaction between borrower and lender in a relationship-based transaction are dramatically different from those in an arm’s-length based transaction. Lending on an arm’s-length basis requires due diligence (i.e., the careful analysis of a borrower’s operating strength, credit worthiness, business plan, and pro-forma financial statements) and depends on sound economic rationale. Correspondingly, relationship-based transactions are neither arm’s-length in nature, nor do they rely on due diligence. Loans are made based largely on the word of the borrower and the trust and good faith of the lender. In an environment where every dimension of life is influenced by Confucian philosophy, reliance on due diligence and sound economic rationale is simply not the way many lending decisions are made. And one of the reasons that analyses of what is really a still unfolding crisis in East Asia have been less than complete lies in their failure to adequately investigate the role of relationship-based lending in both precipitating and prolonging the crisis.

As Lin Yutang (1977) suggests, there is great value in being able to think about problems as deeply embedded in a context. To be able to assess an entire situation and to learn how to accommodate the nuances of influence of many forces is often far superior to the naive extraction of supposedly key variables and the attempt to link them causally in what is fundamentally social work. This is especially true within the context of relationship-based lending because we are talking about a cultural artifact that most westerners simply do not understand. Under such circumstances, for a lender to insist on due diligence, to ask for and then scrutinize a borrower’s financial statements as a condition for lending, or, ultimately, to say “no”, are breaches of faith that can result in a “loss-of-face” for both lender and borrower. East Asia is a lending environment where the formal and informal financial sectors overlap and where mutual trust, “reasonableness” rather than economic reason, and implicit guarantees are often viewed as adequate collateral (Ghate, 1992; Waldron, 1995; Weidenbaum and Hughes, 1996; Hill, 1998). Under such circumstances one might ask, and this perhaps is the conundrum with which western analysts studying the East Asian economic crisis must contend, when and how do relationship-based transactions go awry? The focus of this

study is on answering this question, on achieving a more complete understanding of the face-to-face exchanges between borrowers and lenders in a relationship-based setting, and on the role such exchanges may have played in contributing to the East Asian economic crisis.

### **A Review of the Literature**

Scholarly research on the East Asian economic crisis is rapidly evolving and a growing number of books, journal articles, and papers dealing with the crisis have appeared over the past three years. Krugman (1998) deserves credit for being one of the first to look closely at the macroeconomic causes and effects of the crisis. Radelet and Sachs (1998) compare the East Asian financial crisis to earlier crises in Mexico and Argentina, arguing that each crisis was characterized by capital withdrawals by creditors that cascaded into financial panic and, subsequently, unnecessarily deep contractions. Hill (1998) and Dean (1998) have effectively chronicled significant events attendant to the crisis and the forces responsible for shaping policies and strategies within the region. McLeod and Garnaut (1998) examined the crisis through a series of case studies that looked at the impact and role of subtle macroeconomic differences among the region's economies in causing the crisis. Jomo (1998) combines a number of macroeconomic country reports with broader essays in an effort to fix the blame for the crisis and to draw universal lessons from it. Lee (1998) introduces a group of country studies that explore the crisis through the eyes of government officials from Thailand, Indonesia, Malaysia, and Singapore. These separate analyses focus on the macroeconomic and political causes of the crisis and posit remedies that are both country specific and regional in nature. Lee (1998) was one of the first to look closely at the dynamics of firm related behavior, crony capitalism, and moral hazard in the face of "financial liberalization and fragility" and "domestic policy failures."

More recent scholarly examinations of the East Asian economic crisis include the work of Eichengreen and Rose (1999), Eichengreen (1999), Rodrik (1999), Mallet (1999), and Garran (1999). While retaining a macroeconomic flavor, these studies also explore issues dealing with restructuring, government policy and deregulation, reorganization of the region's financial institutions, and the role of the International Monetary Fund in "managing" the crisis. Corsetti, Pesenti and Roubini (1999) argue that to understand the Asian crisis one must focus on the interrelated dimensions of the moral hazard problem at the corporate, financial market, and international levels. The authors derive what they call a "crisis index" which links a country's currency value to various macroeconomic variables that are, in turn, strongly influenced by moral hazard. In this model the value of a country's currency becomes a conduit through which all disruptive forces must pass. Winters (1999) attributes the cause of the East Asian financial crisis to "systematic changes in international capitalism—specifically, in who controlled capital flows to developing countries and in the growing prominence of highly mobile and volatile forms of capital and transactions. But, equally important, the vulnerability of particular countries varied with the nature of their linkages and with their exposure to external capital flows that could change course more rapidly than ever before and on a scale that could easily overwhelm all but a few countries economically." Put otherwise,

Winters would appear to be arguing that in the case of the East Asian economic crisis the culprit was an over abundance of impatient “hot money.”

In a sweeping assessment, Galimberti (2000) talks in terms of the Asian “crises” and the exposure of “a complex mosaic of causes and effects, harkening back to many unresolved issues of Asian development.” He contends that “Asian economies were brought down by a systemic crisis: by the realization—slowly building up at first, flaring up thereafter—that the ‘Asian model’ had some fundamental flaws and was unable to cope with a world economy which prized individual entrepreneurship and required freely circulating capital, but demanded at the same time that the unfettered mobility of capital be tempered by rebruts national financial structures.” Correspondingly, Dollar and Hallward-Driemeier (2000) have used data on Thailand’s industrial firms to shed light on the origins of the East Asian financial crisis. They contend that many Thai firms had weak financial structures leading up to the crisis that left them vulnerable to an economic downturn and/or external shocks. The authors found that even though a majority of Thai firms were experiencing declining profitability they continued to maintain inordinately high levels of investment. This investment was financed through short-term borrowing from financial institutions, which in turn borrowed short-term in foreign markets. At the same time, the financial sector had poor information on the riskiness of these investments and lacked the expertise to effectively assess the credit worthiness of borrowers. Claessens, Djankov, and Xu (2000) also looked at the crisis in conjunction with firm based performance. They contend that while weaknesses in the corporate sector were unlikely to have caused the crisis, such weaknesses did contribute to its depth and severity. In their assessment of how such crises might be avoided in the future, the authors argue “the international financial community need to pay more attention to the status of the corporate sector and its links with the financial sector and the rest of the economy.” This seems to be an argument for greater transparency, better financial reporting, and stricter control of financial institutions.

The popular press is, of course, replete with coverage of the Asian financial crisis and its lingering aftermath. There is deep concern on the part of some that the region has largely dodged the really tough calls on necessary political, legal, financial, and economic reforms. East Asian currencies, after strengthening during 1998-1999, are weakening again, reflecting disappointment among international investors with the pace of essential structural changes and political uncertainty (The Economist, October, 2000). A banking sector that appeared committed to cleaning up bad debts, instituting strict controls, and practicing due diligence is now looking more and more like it is returning to some of the practices that brought on the crisis (Shari, 2000; Schuman, 2000). Prior to the crisis, East Asia’s export driven economic development was viewed by most as a strength and as a natural consequence of the growth strategy the region was pursuing. With the crisis, however, many observers began to view the region’s export dependency as a weakness and as one of the reasons, if not for the crisis, than for the severity of the crisis. This dependency has become a reason for doubt in many quarters about the sustainability of any recovery (Lopez, 2000; The Economist, December, 2000; The Economist, January, 2001.

Perhaps Clifford and Engardio (2000) offer the most comprehensive assessment of the East Asian crisis. They first provide a careful examination of significant political, financial, legal, and macroeconomic forces at work within the region leading up to 1997 that made so many countries vulnerable to the economic meltdown that was to come. They describe a region awash in debt, riding a wave of prosperity and unprecedented economic growth stretching back in some instances over 30 years, driven by politicians and entrepreneurs with absolutely no sense that the future would bring anything but a continuation of good times. The Clifford and Engardio study really describes the coming together of financial hubris, greed, cronyism, a lack of transparency, naiveté, political corruption, and unbridled optimism. In addition, they offer a close look at the cast of characters that not only made the Asian crisis possible but also made it a certainty. What is interesting is that so many failed to see the crisis coming and, among those that did, no one was able to do anything about it.

Finally, a recent study by The Economist explored the progress towards and prospects for achieving transparency, good corporate governance and sound regulation of financial institutions and markets among the countries of East Asia (The Economist, April 2001). Any hope that the crisis would lead to swift and meaningful progress in addressing the root causes of the meltdown now seem in doubt. The study concludes that the kind of transition the region must undertake will require political leadership and vision, and chief executives who can set examples and lead at the corporate level. Such a transition will also require a “wholesale philosophical change” and the courage to penalize bad business practices and incompetent or fraudulent managers. So far, any changes resulting from the crisis have been largely cosmetic in nature.

To summarize, themes that dominate the literature on the East Asian economic crisis tend to be macroeconomic and political in nature. Most of the early work (1997-1998) reflects a clear macroeconomic focus. Significant macroeconomic and policy variables are identified that advocates posit as the primary “causes” of the crisis. Later efforts (1998-1999) reflect an emphasis on the politics of the crisis, cronyism, corruption, and the role of outside organizations such as the World Bank and International Monetary Fund in arranging country-by-country “fixes.” More recently one sees a broadening emphasis on firm and industry based studies of the crisis and its aftermath. No doubt, research pertaining to the East Asian crisis will continue to evolve, opening up new opportunities for scholars. Of interest here is that unlike this study, none of the existing research looks at the crisis through the eyes of those most directly involved in its germination and progression, financial executives from across the region. Furthermore, while relationship-based lending and the process of due diligence are alluded to in other studies, neither has been the focus of earlier research.

### **Sample/Research Design**

The objective of the sample design was to target executives of leading financial service companies (i.e., commercial banks, investment banks, brokerage firms, and finance companies) touched most directly by the East Asian crisis. A random sample of 375 managers was drawn from a broad cross-section of leading financial institutions doing

business in Hong Kong, Indonesia, Malaysia, the Philippines, Singapore, South Korea, and Thailand. These countries were selected because of their direct involvement in events leading up to the crisis and because they were the countries hardest hit by the ensuing “meltdown.” A list of companies included in the study is provided in Appendix 1.

Data were gathered using an e-mail questionnaire consisting of 10 questions pertaining either directly or indirectly to various aspects of relationship-based lending and the East Asian crisis. In addition, respondents were asked to broadly specify their organizational rank. The sample was developed from the *Euromoney Capital Markets Directory*, which is the most extensive worldwide listing of financial service industry managers available today. *The Directory* provides a comprehensive list of companies, managerial staff arrayed by title, phone and facsimile numbers, and e-mail addresses. This information is organized by region, country, and city. A total of 119 completed questionnaires were returned after the initial mailing and one follow-up, yielding a response rate of approximately 32 percent. The transmittal letter and questionnaire appear in Appendix 2. The follow-up letter appears in Appendix 3. The follow-up was conducted 10 days after the questionnaire was initially e-mailed.

The questionnaire incorporated a five-point Likert scale for the first 10 questions, ranging from a score of “5” for strongly agree to a score of “1” for strongly disagree. A concluding item, which inquired about organizational rank, was scored “1” for a “senior executive officer,” “2” for an “executive officer,” “3” for a member of “senior management,” and “4” for a member of “middle management.” Finally, a separate measure was created in the form of a categorical variable (“1” or “2”) to delineate between respondents from (1) Asean (Indonesia, Malaysia, the Philippines, and Singapore) and (2) non-Asean (Hong Kong and South Korea) countries. These last two items were used as dummy variables in testing for perceptual differences attributable to rank and origin of employment. Although symptoms of the crisis first appeared in Thailand, then rippled across Southeast Asia, eventually both Hong Kong and South Korea were struck. Of interest with respect to origin of employment was whether the perceptions of financial executives in Hong Kong and South Korea regarding the role of relationship-based lending in precipitating the crisis might differ significantly from the perceptions of their counterparts in Southeast Asia.

Respondents were asked to make a series of judgments about relationship-based lending, the practice of due diligence, regulation of Asian financial markets, corruption, and frequently mentioned causes of the Asian financial crisis. The questions were designed to broadly address the extent to which relationship-based lending contributed to the crisis and is indeed fundamental to doing business within the region, and whether more strict government regulation of financial services, combined with the opening of Asian financial markets, might eliminate the practice and lead to a greater reliance on due diligence. Participants were also asked whether relationship-based lending is a cultural artifact that is unlikely to disappear and about the extent to which relationship-based lending might be viewed as a euphemism for “crony capitalism.” Finally, participants were asked to assess whether the region is really making progress in

changing the way business is done and in remedying fundamental structural weaknesses.

### Data Analysis and Results

A two dimensional statistical analysis was conducted incorporating multiple discriminant analysis and factor (image) analysis. One objective was to determine whether statistically significant perceptual differences existed among respondents based on managerial rank and employment location and, if so, to account for and explain that variance. A second objective was to determine whether latent (not easily observed) factors were present that might help one better understand and interpret the perceptions of respondents. Again, responses to the first ten questions were evaluated on a five-point scale as follows: 5=strongly agree, 4=agree, 3=hard to say, 2=disagree, and 1=strongly disagree. The descriptive statistics for each question appear in Exhibit 1. As these results suggest, a majority of the respondents agree with all but statement eight. And the low standard error measures suggest that the sample means are reliable indicators of the population (i.e., all financial executives within the geographical area from which the sample was drawn) means.

#### Exhibit 1 Descriptive Statistics

Statistical Measures					
Statement (Variable)	Mean	Standard Deviation	Median	Mode	Standard Error of Mean
1	3.64	.944	4.000	4.000	.087
2	3.30	1.00	4.000	4.000	.092
3	3.41	.934	4.000	4.000	.086
4	3.65	.988	4.000	4.000	.091
5	3.24	1.142	4.000	4.000	.105
6	3.22	1.018	3.000	4.000	.093
7	3.84	.802	4.000	4.000	.074
8	2.46	.928	2.000	2.000	.085
9	3.31	.963	4.000	4.000	.083
10	3.45	1.048	4.000	4.000	.096
11	2.66	1.189	3.000	4.000	.109

Two discriminant analyses were conducted. The first was a four-group analysis to test for statistically significant differences in among-group response patterns based on managerial rank. This research objective may be expressed in terms of a null hypothesis as follows:

H<sub>1</sub>: There is not a statistically significant difference in the perceptions of financial executives based on managerial rank when judged in terms of their responses to common statements dealing with the Asian crisis.

The results of the four-group analysis appear in Exhibit 2. Multiple discriminant analysis produces  $n-1$  discriminant functions where “ $n$ ” is the number of groups. Where there are statistically significant differences in among-group response patterns, the standardized discriminant coefficients that make up each discriminant function can be used to judge which variables (statements) account for most of the among-group variance and they may be used to explain or describe the nature of that variance. A variety of statistical measures are available to evaluate the discriminant power of each function.

This analysis relied on Wilks’ Lambda, which is derived as a ratio of within-group variance to total variance. As linear functions are extracted that account for the variance in response patterns, the Wilks’ Lambda statistic should decline if the within-group variance accounted for grows relatively more slowly than the total variance accounted for. As the results from Exhibit 2 suggest, a test of all three discriminant functions produced a Wilks’ Lambda statistic of .732, which with 30 degrees of freedom was only significant at the .256 level. A test of just the second and third functions produced a Wilks’ Lambda statistic of .858, which with 18 degrees of freedom was only significant at the .562 level. Finally, a test of the third function resulted in a Wilks’ Lambda statistic of .944, which with 8 degrees of freedom was only significant at the .604 level.

**Exhibit 2**  
**Wilks’ Lambda and Standardized Discriminant Coefficients: Managerial Rank**

Wilks’ Lambda			
Test of Functions	Wilks’ Lambda	Degrees of Freedom	Level of Significance
One through three	.732	30	.225
Two through three	.858	18	.526
Three	.944	8	.604
Standardized Discriminant Coefficients			
Statements (Variables)	Functions		
	1	2	3
Statement (Variable) 1	.016	-1.069	-.222
Statement (Variable) 2	.077	.141	-.221
Statement (Variable) 3	-.006	.340	-.047
Statement (Variable) 4	-.394	.418	.497
Statement (Variable) 5	.439	.393	-.030
Statement (Variable) 6	-.014	-.116	.220
Statement (variable) 7	.777	-.009	-.446
Statement (Variable) 8	.025	.468	.069
Statement (Variable) 9	.345	-.287	.741
Statement (Variable)10	-.245	.292	.299

Subsequently, discriminant classification functions (not shown) were computed and used to actually classify respondents *a priori* by managerial rank based on their responses to the ten statements dealing with the Asian crisis. The results of the cross-validated classification process are presented in Exhibit 3.

A cross-validated classification requires that each case (financial executive participating in the study) be classified by the classification functions derived from all cases other than that case. The consequence is that one is left with an unbiased classification result. Referring to Exhibit 3, the values appearing in the diagonal are those cases correctly classified and off-diagonal values are misclassifications.

Reading from the diagonal, 13 senior executive officers were correctly classified while 18 were misclassified. Five executive officers were correctly classified while 13 were misclassified. Among senior management, 12 were correctly classified while 19 were misclassified. Finally, 27 middle managers were correctly classified while 12 were misclassified. Overall, the “hit-ratio” or percentage of financial executives correctly classified *a priori* was only 47.8 percent [i.e., number of respondents correctly classified (57) ÷ total number of respondents (119)]. Put another way, knowing *a priori* how a financial executive from East Asia responded to the 10 test statements would be of little use in identifying that executive’s rank.

**Exhibit 3**  
**Cross-validated Classification Matrix: Managerial Rank**

Actual Group	Predicted Group				Total
Rank	1	2	3	4	
1	13	4	4	10	31
2	3	5	3	7	18
3	5	2	12	12	31
4	5	3	4	27	39

Measured statistically or in terms of classification efficiency, the results of the four-group discriminant analysis clearly suggest that managerial rank did not account for a significant difference in the response patterns of financial executives participating in this study and, therefore, the null hypothesis ( $H_1$ ) cannot be rejected.

A two-group discriminant analysis was subsequently conducted to determine whether there were statistically significant between-group differences in the perceptions of financial executives from Asean countries (Indonesia, Malaysia, the Philippines, Singapore, and Thailand) and those from Hong Kong and South Korea. The results of the two-group analysis appear in Exhibit 4. The null hypothesis being tested may be expressed as follows:

$H_2$ : There is not a statistically significant difference in the perceptions of financial executives located in Asean countries (Indonesia, Malaysia, the Philippines, Singapore, and Thailand) and those of financial executives located in non-Asean countries (Hong Kong and South Korea) when judged in terms of their responses to common statements dealing with the Asian crisis.

Once again n-1 discriminant functions were produced along with a statistical measure of group separation based on the way financial executives from the selected Asean and non-Asean countries responded to the ten test statements dealing with the Asian crisis. The very high Wilks' Lambda statistic of .956 with 10 degrees of freedom was only significant at the .899 level. This result suggests that the discriminant function that appears in Exhibit 4 accounted for very little group separation or between group variance. Put another way, financial executives from both the Asean and non-Asean countries included in this study were inclined to perceive the Asian crisis in virtually the same way when judged in terms of how they responded to the set of common statements regarding the crisis. Subsequently, a discriminant classification function was computed and used to actually classify (Asean or non-Asean) respondents *a priori* based on their responses to the common statements dealing with the Asian crisis. The results of the cross-validated classification process are presented in Exhibit 5 followed by a discussion of the results.

**Exhibit 4**  
**Wilks' Lambda and Standardized Discriminant Coefficients: Region of Origin**

Wilks' Lambda			
Test of Function	Wilks' Lambda	Degrees of Freedom	Level of Significance
Function 1	.956	10	.889
Standardized Discriminant Coefficients			
	Function		
Statements (Variables)	1		
Statement (Variable) 1	.329		
Statement (Variable) 2	-.438		
Statement (Variable) 3	-.142		
Statement (Variable) 4	-.197		
Statement (Variable) 5	.527		
Statement (Variable) 6	.057		
Statement (variable) 7	-.259		
Statement (Variable) 8	.735		
Statement (Variable) 9	-.095		
Statement (Variable)10	-.343		

**Exhibit 5**  
**Cross-validated Classification Matrix: Region of Origin**

Actual Group	Predicted Group		Total
Region of Origin	1	2	
1	88	0	88
2	31	0	31

Once again, because a cross-validated classification requires that each case (financial executive participating in the study) be classified by the classification function(s) derived from all cases other than that case, one is left with an unbiased classification result. Referring the Exhibit 5, the diagonal values are those cases correctly classified and off-diagonal values are misclassifications. Reading from the diagonal, the classification

function correctly classified all of the financial executives from Asean countries but misclassified all of those executives from non-Asean countries. Overall, the “hit-ratio” or percentage of financial executives correctly classified *a priori* was 73.9 percent [i.e., number of respondents correctly classified (88) ÷ total number of respondents (119)]. Put another way, knowing *a priori* how a financial executive responded to the set of common statements would be of little use in determining his or her region of origin. Correspondingly, knowing that a financial executive is from one of the selected Asean countries and not Hong Kong or South Korea would reveal little about that executive’s perceptions of the crisis when measured in terms of responses to the set of common statements used in this analysis. Whether measured statistically or in terms of classification power, the results of the two-group discriminant analysis clearly suggest that region of origin (Asean or non-Asean) did not account for a statistically significant difference in the way financial executives participating in this study responded. Therefore, the null hypothesis ( $H_2$ ) cannot be rejected.

Finally, the data were subjected to a common factor analysis to determine whether significant latent (not easily observed) interdependencies existed that would lend themselves to interpretation (definition) and, in turn, contribute to a more complete understanding of respondent thinking. Common factor analysis, unlike principal component analysis, derives a solution from only that variance that is shared or that is common with all other variables in the analysis. Whenever one’s primary interest is to identify the latent dimensions or constructs represented in the original variables, and little is known about the amount of specific or error variance and therefore one wants to eliminate this variance, common factor analysis is the appropriate model to use (Hair, 1979). A varimax rotation was employed, the effect of which being to redistribute the common variance from earlier factors to later factors to achieve a simpler, theoretically more meaningful set of factor loadings. In deciding on the number of factors to extract, the latent root criterion was adopted and, as a consequence, only those factors with eigenvalues greater than one were extracted. With respect to interpreting the factors, only those variables (statements) with loadings greater than .30 were utilized and only for the factor where the loading is highest. The results of the common factor analysis are presented in Exhibit 6 and the loadings used for interpretation are underlined.

The initial communalities measure the common variance where total variance (i.e., common+specific+error) for each variable is equal to one. The measures of extracted (explained) common variance suggest that the analysis accounted for a significant percentage of the total common variance on all of the variables (statements), although variable five accounted for so little initial common variance that its contribution to the analysis is insignificant. Of the four factors extracted, only the first two had factor loading patterns sufficient for interpretation. Interpretation of factor solutions is an intuitive process governed by the judgment of the analyst. In this regard, the labels assigned to the first two factors reflect the latent themes in the set of variables with factor loadings of .30 or above on each factor. The first factor was labeled “*culture*” because statements two, eight, nine, and 10 share, to one degree or another, a cultural dimension. In other words, in the judgment of the financial executives who participated in this study, a cultural component played a prominent part in precipitating the crisis.

Interpretation of this result within the context of the overall analysis suggests that the presence of this cultural artifact is likely to make a full recovery more difficult, although certainly not impossible. Furthermore, Asian culture is likely to remain somewhat more forgiving of the “quick deal” gone awry and more willing to tolerate as “boys being boys” a higher level of crony capitalism. And these, after all, are risks that experienced investors can adjust for.

The second factor was labeled “*due-diligence*” because statements one, three, and four share a latent theme embodying both closer control of lending activity and, broadly put, more effective regulation of the financial services industry in East Asia. Financial executives participating in this study were of the opinion that relationship-based lending was a significant factor contributing to the crisis and that better controls at both transaction and industry levels could significantly reduce the likelihood of another severe economic crisis within the region. Of course, it is one thing to have such controls in place and another matter entirely to apply them in a consistent and rigorous fashion.

**Exhibit 6**  
**Communalities and Rotated (Varimax) Common Factor Matrix**

Statements (Variables)	Communalities			Factors			
	Initial	Extracted	Percentage	1	2	3	4
1	.362	.305	84.3	.251	<u>.440</u>	.180	.126
2	.265	.208	78.5	<u>.444</u>	-1.605	.102	-.020
3	.211	.157	74.4	-.103	<u>.321</u>	-.039	.205
4	.327	.250	76.5	.086	<u>.469</u>	.150	.023
5	.115	.079	68.5	.102	.052	.252	.044
6	.266	.203	76.3	.169	.195	.179	.324
7	.230	.192	83.5	.275	.213	.199	.176
8	.339	.280	82.6	<u>.477</u>	.075	.160	.144
9	.237	.211	89.0	<u>.321</u>	.150	.272	.105
10	.282	.234	83.0	<u>.343</u>	.145	.304	.048

Finally, weak loading patterns on the last two factors made interpretation problematic.

### Summary

Although there are some early signs of a recovery beginning to take place, most who have followed the crisis closely would likely argue that its impact on the world economy and the people of East Asia will continue to be felt for some time to come (Frank, 1999). This study represents a look at the economic crisis that, beginning in 1997 with the dramatic fall in the value of the Thai baht, swept across East Asia and roiled financial markets worldwide. A crisis that may well have been exacerbated by IMF intervention that, although well intended, appears to many to have been misguided and mismanaged. What sets this study apart from earlier research is: (1) its reliance on primary data gathered through a randomly drawn sample of financial executives from the Asean countries of Indonesia, Malaysia, the Philippines, Singapore, Thailand, and from the non-Asean countries of Hong Kong and South Korea, (2) its emphasis on the

distinction between symptoms and causes of the crisis, which earlier studies tend to conflate, and (3) its focus on the role of relationship-based lending and the lack of due diligence in precipitating the crisis, factors largely ignored by earlier research. Of the 375 executives sampled, 119 or roughly one-third responded by returning completed e-mail questionnaires. Along with the questionnaires, a number of insightful comments also were received.

Respondents were asked to make a series of judgments about relationship-based lending, the practice of due diligence, regulation of Asian financial markets, corruption, and frequently mentioned causes of the Asian financial crisis. The questions were designed to broadly address the extent to which relationship-based lending contributed to the crisis and is indeed fundamental to doing business within the region, and whether more strict government regulation of financial services, combined with the opening of Asian financial markets, will eliminate the practice and lead to a greater reliance on due diligence. Participants were also asked whether relationship-based lending is a cultural artifact that is unlikely to disappear and about the extent to which relationship-based lending might be viewed as a euphemism for “crony capitalism.” Finally, participants were asked to assess whether the region is really making progress in changing the way business is done and in remedying fundamental structural weaknesses. This is important research because for the first time, the East Asian economic crisis is viewed through the eyes of those in the middle of the meltdown.

It was first necessary to identify the distributive characteristics of the data, which led to an understanding of the respondent’s central tendencies and broad areas of agreement/disagreement. A two dimensional statistical analysis was subsequently conducted incorporating multiple discriminant analysis and factor (image) analysis. The first objective was to determine whether statistically significant perceptual differences existed among respondents based on managerial rank and employment location and, if so, to account for and explain the variance. The second objective was to determine whether latent (not easily observed) factors were present that might help one better understand and interpret the perceptions of respondents.

Discriminant analyses were subsequently conducted to determine whether there were statistically significant differences in the perceptions of respondents based on (1) organizational rank and (2) on whether they worked in an Asean or in a non-Asean country (i.e., Honk Kong or South Korea). No statistically significant differences were found based on either criterion. In fact, perceptions were remarkably similar among top to middle managers and across Asean and non-Asean companies. Any notion that a lending officer might view the crisis differently than a managing director, or that a financial executive from Hong Kong might view the crisis differently than his counterpart from Thailand, seems to be dispelled by these results.

Finally, a common factor analysis was conducted to determine whether any latent themes or constructs characterized the thinking of the financial executives. Two factors were identified and labeled. The first factor was labeled “*culture*” because the responses of financial executives participating in this study clearly suggest that they

believe a cultural component played a prominent part in precipitating the crisis. The presence of this cultural artifact is likely to make a full recovery more difficult, although certainly not impossible. As suggested earlier, Asian culture is likely to remain somewhat more forgiving of the “quick deal” gone awry and more willing to tolerate as “boys being boys” a higher level of crony capitalism. And these, after all, are risks that experienced investors can adjust for and should be prepared for.

The second factor was labeled “*due-diligence*” because response patterns were characterized by a latent theme embodying both closer control of lending activity and, broadly put, more effective regulation of the financial services industry in East Asia as ways of significantly reducing the region’s broad reliance on relationship-based lending. Financial executives participating in this study were of the opinion that relationship-based lending was a significant factor contributing to the crisis and that better controls at both transaction and industry levels could significantly reduce the likelihood of another severe economic crisis. However, these same executives were less sanguine about relationship-based lending ever being eradicated as an artifact of Asian capitalism.

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## **Appendix 1 Sample Companies**

ABN AMRO Asia Limited

AIG Financial Products Hong Kong Limited

Asahi Finance (Hong Kong) Limited

Baden-Württembergische Bank AG

Bangkok Bank Public Company Limited

Bangkok Bank Public Company Limited

Bank Industri & Teknologi Malaysia

Bank of America NT & SA

Bank of Thailand

Bank Universal

Barclays Capital Asia Limited

Barclays Capital Securities Limited

Bayerische Hypo-und Vereinsbank AG

Bayerische Landesbank

Bear Stearns Asia Limited

BSN Commercial Bank (Malaysia) Berhad

Bumiputra-Commerce Bank Berhad

Canadian Imperial Bank of Commerce

Chase Manhattan Asia Limited

Citicorp Investment Bank (Singapore) Limited

Clearstream Banking

Commerce International Merchant Bankers Berhad  
Compagnie Financière de CIC et de L'Union Européenne  
Crédit Agricole Indosuez  
Crédit Lyonnais  
Credit Suisse First Boston (Hong Kong ) Limited  
Daewoo Securities Company Limited  
Dah Sing Bank Limited  
Dah Sing Financial Holdings Limited  
Daishin Securities Comopany  
Deutsche Bank Securities Asia Limited  
Deutsche Management (Asia) Limited  
DKB Panin Finance (PT)  
Dresdner Bank AG  
FIMAT Futures Hong Kong Limited  
Fortis Bank  
Global Thai Finance & Securities Limited  
Hoenig (Far East) Limited  
Hong Kong Bank Securities Services  
Hong Leong Bank Berhad  
HQ Pacific Goodmorning Securities  
Jardine Fleming  
Jian Sing Bank Limited  
KBC Bank NV

Krung Thai Bank Public Company Limited  
Kumho Merchant Bank  
Mansion House Group Limited  
Merrill Lynch (Asia Pacific) Limited  
Merrill Lynch International Incorporated  
Multi-Purpose Bank Berhad  
National Bank of Canada (Asia) Limited  
Nomura International (Hong Kong) Limited  
OCBC Securities Private Limited  
PT Bank NISP Tbk  
PT Dharmala Securities  
PT Vickers Ballas Tamara  
Salomon smith Barney Asia Pacific  
SG Seoul  
Shinhan Bank  
Société Générale Asia Limited  
Société Générale-Bangkok International Banking Facility  
Standard Chartered  
Standard Chartered Bank  
Standard London (Asia) Limited  
State Bank of India  
Tai Fook Securities Limited  
Thai Farmers Bank Public Company Limited

The Bank of Bermuda Limited

The Bank of Tokyo-Mitsubishi Limited

The Hong Kong & Shanghai Banking Corporation Limited

The Nanto Bank Limited

The Northern Trust Company of Hong Kong Limited

The World Bank

UBS Warburg

United Overseas Bank Limited

Vietnam Export Import Commercial Joint Stock Bank

## Appendix 2 Transmittal Letter and Questionnaire

Trinity University  
715 Stadium Drive  
San Antonio, Texas 78212-7200  
210-999-7286  
Fax 210-999-8134  
[dwaldron@trinity.edu](mailto:dwaldron@trinity.edu) (<mailto:dwaldron@trinity.edu>)

Dear:

I am a member of the business faculty at Trinity University and I am conducting research involving the East Asian economic crisis. Attached is a questionnaire consisting of ten questions that pertain either directly or indirectly to the role that relationship based lending may have played in precipitating and perpetuating the crisis. This questionnaire is being e-mailed to financial executives throughout both East and Southeast Asia. As you can see by looking at the questions being asked, this research attempts to look beyond what most analysts have identified as the "major causes" of the crisis to more fully explore the distinction between symptoms and causes.

My hope is that you will not be offended by this intrusion on your valuable time and that you will take a moment to look at, complete, and return the questionnaire via e-mail at your earliest convenience. All responses will be held in the strictest confidence.

Thank you for your consideration.

Sincerely,

Darryl G. Waldron, Ph.D.  
Professor  
Department of Business Administration

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PLEASE CLICK "REPLY", COMPLETE THE FOLLOWING QUESTIONNAIRE, AND THEN CLICK "SEND".

### Relationship Based Lending Survey

The purpose of this research is to determine whether the practice of relationship based lending was an important contributory factor in precipitating and prolonging the East Asian economic crisis that began in 1997. To provide a clear understanding of what is intended by relationship based lending, the premise here is that relationship based transactions are neither arms-length in nature, nor do they rely on due diligence. Instead, loans are made based largely on the word of the borrower and the trust and good faith of the lender, unsupported by a careful and thoroughly objective analysis of a borrower's business plan, financial position, and credit worthiness.

Please click on and place an "X" in the space before the choice that best expresses the extent to which you agree with the following statements dealing with various aspects of relationship based lending and the East Asian economic crisis.

1. Although largely overlooked, the practice of relationship based lending was a major factor contributing to the East Asian economic crisis.

- Strongly Agree
- Agree
- Hard to Say
- Disagree
- Strongly Disagree

2. Because relationship based lending is a fundamental part of the business culture of East Asia, it is unlikely to ever disappear as an accepted business practice.

- Strongly Agree
- Agree
- Hard to Say
- Disagree
- Strongly Disagree

3. More strict government regulation of the financial services industry, combined with the opening of Asian financial markets to foreign investment and the broader adoption of western banking methods, will eliminate the practice of relationship based lending.

- Strongly Agree
- Agree
- Hard to Say
- Disagree
- Strongly Disagree

4. A strict reliance on due diligence and an "arms-length" approach to lending would have significantly reduced the likelihood of an economic crisis like the one that struck East Asia in 1997.

- Strongly Agree
- Agree
- Hard to Say
- Disagree
- Strongly Disagree

5. An over dependence on short-term foreign debt, too much speculative borrowing and investment, and a precipitous decline in currency values should be viewed as symptoms and not causes of the East Asian economic crisis.

- Strongly Agree
- Agree
- Hard to Say
- Disagree
- Strongly Disagree

6. Relationship based lending is simply another way of saying "crony capitalism."

- Strongly Agree
- Agree
- Hard to Say
- Disagree
- Strongly Disagree

7. Leading up to the East Asian financial crisis, too many transactions were characterized by "an over reliance on dollar/yen denominated short-term debt in financing long-term projects, insufficient equity, inadequate due diligence, and over optimism among both borrowers and lenders."

- Strongly Agree
- Agree
- Hard to Say
- Disagree
- Strongly Disagree

8. A strictly arms length approach to banking is likely to prove unworkable in East Asia because in Asian cultures to insist on due diligence or to turn down a loan request constitutes a breach of faith that can result in a "loss-of-face" for both the lender and the borrower.

- Strongly Agree
- Agree
- Hard to Say
- Disagree
- Strongly Disagree

9. One feature of Asian capitalism that is frequently cited as a competitive advantage is the ability to respond quickly in financing new investment. Because much of this financing is relationship based, it does not receive the kind of scrutiny it should and thus a disproportionately high number of marginal investments tend to result.

- Strongly Agree
- Agree
- Hard to Say
- Disagree
- Strongly Disagree

10. In discussing East Asia's recovery from its crisis, a leading fund manager recently observed: "There has been a whitewash on the outside, but the rot's still on the inside." Harsh though this assessment may be, it accurately reflects what is really occurring with respect to restructuring the banking system, the forced liquidation of assets and elimination of non-performing loans, and the eradication of "crony capitalism."

- Strongly Agree
- Agree
- Hard to Say
- Disagree
- Strongly Disagree

Please provide a general indication of your rank by placing an "X" in the appropriate space.

Senior Executive Officer  
 Executive Officer  
 Senior Management  
 Middle Management

Thank you for taking the time to help with this research.

### Appendix 3 Follow-up Letter

Dear:

I recently wrote to you regarding research that I am conducting on the East Asian economic crisis, asking that you complete a questionnaire consisting of ten questions dealing with the role *relationship based lending* may have played in causing the crisis. I certainly understand why you may view my unsolicited request for your help an intrusion on your valuable time and, if I offended you, I am truly sorry. On the chance, however, that you might still be willing to help me with my research, I have provided another copy of the questionnaire (see below) for you to complete. So far, nearly 100 banking and financial services company executives from throughout East Asia have responded and, by all indications, this study has the potential to be the most complete empirical analysis of the crisis produced to date.

Again, my hope is that you will not be offended by this intrusion on your valuable time and that you will take a moment to look at, complete, and return the questionnaire. Also, if you have any questions about the study that I may respond to, please do not hesitate to contact me.

Thank you very much for your help and your response will be held in the strictest confidence.

Sincerely,

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