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CAPITAL MARKETS, GLOBALIZATION, AND ECONOMIC DEVELOPMENT

Edited by

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The University of Alabama



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To Jean, Lincoln, Andrew, Jeremy, and Carol.

CONTENTS

Preface ix

About the Authors xi

1. Insights from a Global Survey on Bank Capital 1
BENTON E. GUP
2. The Effects of Basel II on Developing Countries: A Summary of a Global Public Goods
Network eForum on Basel II 9
BENTON E. GUP
3. Capital Games 17
BENTON E. GUP
4. The International Transmission of Capital Shocks: Implications of a Revised Basel Accord
for Developing Countries 31
KEVIN T. JACQUES
5. Designing Banking Sector Safety Nets: The Australian Experience 45
KEVIN DAVIS
6. Globalization and the Growth of International Stock Exchanges 59
WILLIAM L. MEGGINSON AND NATALIE L. SUTTER
7. Globalization of the Bond and Stock Markets: The Japanese Case
an International Perspective 77
IOANA ALEXOPOULOU, GABE DE BONDT, AND ADRIAN VAN RIXTEL
8. Weekly Expected Credit Spreads in Latin-American Brady Bonds 109
FRANCO PARISI, IKE MATHUR, AND JORGE URRUTIA

9. Rethinking Project Finance	129
ANDREW H. CHEN	
10. Impact of Globalization and Economic Development in Asia and Australia	145
MOHAMED ARIFF	
11. Globalization and the Changing Relationship Between Economic Development and Capital Markets: Innovations in Funding for Microfinance	161
ALEXANDRA BERNASEK, RONNIE PHILLIPS, AND MICHAEL P. ROSS	
12. Waiting for Capital: The Impact of Corruption in Indonesian Financial Markets	175
GORDON MENZIES, CHRIS TERRY, AND ROWAN TRAYLER	
13. Credit Ratings in China	193
WINNIE P. H. POON	
14. Finance and Development: Granger-Causality Tests for Prewar and Postwar U.S.A., U.K., and Japan	207
MASANORI AMANO	
Index	219

PREFACE

The progression of globalization is affecting capital markets and economic development. In this context, globalization involves complex and controversial issues that must be dealt with by governments, regulators, corporations (including banks), and investors. These issues include, but are not limited to the extent to which countries around the world are accepting the Basel II bank capital regulations, the effects of globalization on stock and bond markets, new issues in project finance, the impact of corruption, and other important topics.

The book consists of fourteen articles contributed by authors from Australia, Asia, Europe, South America, and the U.S. who provide a wide range of insights that range from applied to theoretical issues. The contributors include academics, government officials, and regulators. Four of the fourteen articles in this book were presented at a special session “Capital Markets, Globalization, and Economic Development,” at the 2004 Financial Management Association meeting in New Orleans.

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1. INSIGHTS FROM A GLOBAL SURVEY ON BANK CAPITAL

BENTON E. GUP

1. INTRODUCTION

The 1988 Basel Capital Accord (Basel I) was widely accepted and applied around the world. However, Basel I became outdated with respect to the risk management of large complex financial organizations (LCFOs). J.P. Morgan Chase & Co. and Citigroup are examples of LCFOs. Thus, the New Basel Capital Accord (Basel II) was introduced in 2001 to deal with LCFOs; and it is a work in progress that is expected to be implemented at year-end 2006. This article provides insights from a survey of countries around the world to determine 1) whether they applied Basel I, and 2) are they going to apply Basel II?

The remainder of the article is divided into three parts. Part 2 provides an overview of the Basel Committee on Banking Supervision, Basel I and Basel II. Part 3 presents the results of the global survey. Part 4 provides the conclusions.

2. AN OVERVIEW OF THE BASEL COMMITTEE ON BANKING SUPERVISION

The Bank for International Settlements (BIS) was established in 1930 to deal with reparation payments imposed on Germany by the Treaty of Versailles following the First World War. Over time, the BIS's activities changed, and now it concentrates "on cooperation among central banks and, increasingly, other agencies in pursuit of monetary and financial stability."¹ There are 55 central banks that are members of the BIS.

Following failure of Bankhaus I. D. Herstatt in Cologne, Germany, in 1974, the BIS and banking regulators from the Group of 10 (G-10) countries established the Basel

Committee on Banking Supervision.² Currently the Basel Committee on Banking Supervision includes central bankers and regulators from Belgium, Canada, France, Germany, Italy, Japan, Luxembourg, The Netherlands, Spain, Sweden, Switzerland, United Kingdom, and the United States.

2.1. The 1988 Capital Accord

A cornerstone of the Basel Committee's framework is the 1988 Capital Accord (Basel I) which provided for a minimum capital requirement of 8% for internationally active banks in order to 1) ensure an adequate level of capital and 2) competitive equality. Basel I focused exclusively on credit risk.

The BIS reported that more than 100 countries apply the 1988 Basel Capital Accord in their banking systems.³ However, the Basel Committee did not identify the countries. The 8% capital requirement was an arbitrary number—it was not based on studies of the economic capital needs of banks.

In the United States, the 8% Basel I capital requirements apply to all FDIC-insured banks, and similar rules were applied to savings associations. In addition, under the Federal Deposit Insurance Corporation Improvement Act of 1991 (FDICIA), a total risk-based capital ratio of 8%–9.9% is considered “adequately capitalized,” while a ratio of 10% or more is “well-capitalized.” Banks with less than 8% risk-based capital are “undercapitalized” and subject to prompt correct action.

In the years that followed the 1988 Basel I Capital Accord, the U.S. experienced massive bank failures in the late 1980s and early 1990s. During the 1980–1996 period, 133 of the International Monetary Fund's 181 member countries experienced significant banking sector problems, including those countries that signed on to the Basel Accord.⁴ Large banks in Japan began having problems beginning in 1990, and their problems had not been resolved by 2003. In the late 1990s and early 2000s, there were financial crises in Southeast Asia, Russia, Turkey, and Latin America where bank capital requirements may have had some impact. In the late 1990s, the Basel Committee on Banking Supervision began to focus on “financial stability in the wave of economic integration and globalization.”⁵ Federal Reserve Governor Olson (2003) identified “the expanded use of securitization and derivatives in secondary markets and vastly improved risk management systems” as two specific areas of change. In addition, regulatory capital arbitrage has undermined Basel I. LCFOs were of particular concern.⁶ All of these factors suggest that changes in the capital requirements were needed, and they are forthcoming.

Therefore it was not surprising that bank regulators found that the Basel I leverage ratio was no longer an appropriate measure of a bank's capital adequacy because of changes that have occurred in the banking system. Federal Reserve Vice Chairman Ferguson (2003a) said that “Basel I is too simplistic to adequately address the activities of our most complex banking institutions.” He goes on to say “If we do not apply more risk-sensitive capital requirements to these very large institutions, the usefulness of capital adequacy regulation in constraining excessive risk-taking at these entities will continue to erode. Such erosion would present U.S. bank supervisors with a highly undesirable choice. Either we would have to accept the increased risk of instability in the banking system, or we would be forced to adopt alternative—and more intrusive—approaches to the supervision and regulation of these institutions.”

2.2. The New Basel Capital Accord—Basel II

The New Basel Capital Accord (Basel II), proposed in January 2001, will replace Basel I when it is implemented by year-end 2006. Basel II applies to holding companies (on a consolidated basis) that are parents of banking groups; but insurance subsidiaries are excluded in some G 10 countries.⁷ While Basel I deals only with credit risk, Basel II incorporates market risk and operational risk. As previously noted, Basel II targets LCFOs, and as such, it was “not designed for banks in small unsophisticated developing countries.”⁸

In fact, it was not designed for many banks in developed countries either. In the United States, a “bifurcated” regulatory capital framework is proposed.⁹ Only about 10 internationally active “core banks” (and thrifts) with assets of \$250 billion or more and/or cross-border exposures of \$10 billion or more will be required to comply with Basel II advanced internal ratings based (A-IRB) approach to credit risk and the advanced measurement approach (AMA) approach to operational risk. The core banks will account for 99 percent of foreign assets and two-thirds of all assets of domestic U.S. banking organization.¹⁰ They could include U.S. subsidiaries of foreign banking organizations that meet the core bank standards.¹¹

Other U.S. banks may opt-in (“opt-in-banks”) to Basel II using the A-IRB and AMA approaches. However, the remaining 7,700+ “general banks” in the U.S. will continue to use the Basel I capital standards.¹²

As shown in Table 1, the total risk-based capital ratio for U.S. banks is inversely related to the size of banks. The smallest banks have the highest capital ratios, and the totals for all banks exceed the Basel II capital requirements. The fact that the totals are high does not mean that every bank is adequately capitalized. Table 1 also reveals that 83 banks with asset greater than \$10 billion account for 73% of the total assets of all 7,769 banks. Although not shown in the table, the four largest banks (JP Morgan Chase, Bank of America, Citibank, and Wachovia) have total assets of \$2.182 trillion, or 31% of total bank assets.¹³ Simply stated, the banking system in the United States is highly concentrated in a few large banks.

3. GLOBAL SURVEY

The survey consisted of two questions:

1. Are banks in your country required to comply with the 1988 Basel Capital Accord’s 8% risk-based capital?
2. What is your country’s position on adopting Basel II?

Table 1. Total Risk-Based Capital Ratios for U.S. Banks, 2003

	All commercial Banks	Assets Less than \$100 Million	Assets \$100 million–\$1 billion	Assets \$1–10 billion	Assets Greater than \$10 billion
Number of Commercial Banks	7,769	3,911	3,434	341	83
Total Assets (\$billions) (% of Total)	\$7,603.5 (100%)	\$200.7 (2.6%)	\$910.0 (12.0%)	\$947.3 (12.5%)	\$5,544.5 (72.9%)
Total risk-based capital ratio	12.74	17.56	14.27	14.61	12.07

Source: *Quarterly Banking Profile*, Fourth Quarter, FDIC, 2003, Table III–A

Table 2. 66 Responses Used in the Survey

Albania	Brunei Darussalam	El Salvador	Kazakhstan	Mongolia	Slovenia
Argentina	Cameroon	Estonia	Korea	Morocco	South Africa
Algeria	Cayman Islands	Guinea Bissau	Kuwait	New Zealand	Swaziland
Armenia	Chile	Guyana	Lebanon	Nicaragua	Tajikistan
Aruba	China	Hong Kong	Liechtenstein	Norway	Tavalu
Australia	Columbia	Hungary	Lithuania	Pakistan	Thailand
Bahamas	Comoros	Iceland	Macao	Russia	Trinidad and Tobago
Barbados	Croatia	Ireland	Malawi	Rwanda	Turkey
Bermuda	Cyprus	Israel	Mauritius	Sao Tome	Ukraine
Botswana	Czech Rep.	Jamaica	Mexico	Seychelles	United Arab Emirates
Brazil	Eastern Caribbean	Jordan	Moldova	Singapore	Venezuela

In order to get a global perspective, the survey was mailed in November 2003 to the Permanent Missions of the 191 Member States of the United Nations.¹⁴ Excluded from the survey were the previously mentioned 13 countries that served on the Basel Committee on Supervision and 6 additional countries (Austria, Denmark, Finland, Greece, Ireland, and Portugal) that are Member States of the European Union (EU). Members of the EU are required to comply with the Basel I and II capital requirements.

Countries that applied for EU membership, or are considering joining it were included in the survey. Also included in the survey are members of the European Economic Area (EEA), such as Iceland and Norway, which must meet the same capital requirements of the EU countries.

Because of the small number of responses to the mail survey, in January 2004 an e-mail survey was sent to 117 central banks that were listed on the BIS website.¹⁵ Some central banks represent a group of countries or states. For example, the Bank of Central African States (Commission Bancaire De L'Afrique Central) represents Cameroon (listed in Table 2), Chad, Congo, Gabon, Guinea, and the Republic of Central Africa. Similarly, the Eastern Caribbean (listed in Table 2) Central Bank represents Anguilla, Antigua and Barbuda, Dominica, Grenada, Montserrat, St. Kitts and Nevis, St. Lucia, St. Vincent, and the Grenadines. The Bank of Central African States is listed in Table 2 as Cameroon, and the Eastern Caribbean Central Bank is listed as Eastern Caribbean. Therefore, the number of responses understates the number of countries or states that are represented. For simplicity, the terms respondents and countries will be used in the rest of the article.

By mid-April 2004, 66 responses had been recorded from the countries listed in Table 2. The table reveals the global coverage of both large and small countries. The responses of several other countries were not usable because they did not answer the questions.

3.1. Answers to Question 1: Are banks in your country required to comply with the 1988 Basel Capital Accord's 8% risk-based capital?

All of the respondents reported that they had a minimum of 8% or more capital, and many did not answer the question as asked. Thus, it is not clear if the 8% minimum was a result of their needs and regulations, or if it was because of Basel I. As shown in Table 3, 28 respondents have minimum capital requirements that exceed those of Basel I. The list includes both

Table 3. Respondents with Capital Requirements More Than 8%

Respondent	Gross Domestic Product, 2002 est. \$ billions	Capital Requirement
Argentina	\$431	10%
Armenia	\$12	12%
Bahamas	\$5	8%+ ¹⁶
Bermuda	\$2	10%
Botswana	\$14	15%
Brazil	\$1,376	11%
Cayman Islands	\$1	8–15%
Columbia	\$252	9%
Comoros	\$0.4	10%
Cyprus	\$9	10%
El Salvador	\$29	12%
Estonia	\$16	10%
Jamaica	\$10	10%
Israel	\$117	9%
Jordan	\$23	12%
Malawi	\$7	10%
Mauritius	\$12	10%
Moldova	\$11.5	12%
Mongolia	\$5	10%
Nicaragua	\$11	10%
Russia	\$1,409	10–11%
Seychelles	\$1	12%
Singapore	\$112	12%
South Africa	\$428	8–10%
Tajikistan	\$9	12%
Thailand	\$446	8.5%
United Arab Emirates	\$54	10%
Venezuela	\$132	12%

Source: GDP data—*The World Fact Book*, Washington, D.C., Central Intelligence Agency, 2004, <http://www.cia.gov/cia/publications/factbook/index.html>

large and small countries as measured by their Gross Domestic Products. The most common minimum capital ratio is 10%.

Although 10% may seem relatively high, the data shown in Table 1 revealed that the average capital ratio for all U.S. banks was 12.74%. The capital ratio for the smaller U.S. banks (less than \$10 billion in assets) ranged from 14.61% to 17.56%. Comparable data were not available to compute “actual” capital ratios for the respondents.

3.2. Answers to Question 2: What is your country’s position on adopting Basel II?

Some of the answers to Question 2 were a straightforward yes or no. But others required judgment to determine how they should be classified. For example, New Zealand is recommending the adoption of the “Standardized approach,” so it was classified as a yes in Table 4. Similarly, “We are fully committed to its implementation in Bermuda. However, we are unlikely to be in a position to adopt it in 2006,” was counted as a yes. Tuvalu did not adopt Basel I, it only has one bank, and their response was “there is no firm stance as to whether we will adopt it or not.” Tuvalu was classified as a “no.” The response from Armenia said “the debate about possible introduction of Basel II is still in place and there is no final

Table 4. Adoption of Basel II

Albania Yes	Brunei Darussalam Yes	El Salvador ?*	Kazakhstan Yes	Mongolia ?*	Slovenia Yes
Argentina Yes	Cameroon ?	Estonia Yes	Korea No answer	Morocco Yes	South Africa Yes
Algeria ?	Cayman Islands ?*	Guinea Bissau Yes	Kuwait ?	New Zealand Yes	Swaziland Yes
Armenia ?*	Chile ?	Guyana Yes	Lebanon ?	Nicaragua ?*	Tajikistan No
Aruba ?	China Yes	Hong Kong Yes	Liechtenstein ?	Norway ?	Tavalu No
Australia Yes	Columbia Yes	Hungary No answer	Lithuania Yes	Pakistan ?	Thailand ?*
Bahamas Yes	Comoros ?*	Iceland Yes	Macao Yes	Russia Yes	Trinidad and Tobago ?
Barbados ?	Croatia Yes	Ireland Yes	Malawi ?*	Rwanda No	Turkey Yes
Bermuda Yes	Cyprus Yes	Israel Yes	Mauritius ?*	Sao Tome ?	Ukraine ?
Botswana Yes	Czech Rep. Yes	Jamaica ?*	Mexico No answer	Seychelles ?*	United Arab Emirates Yes
Brazil Yes	Eastern Caribbean ?	Jordan Yes	Moldova ?*	Singapore Yes	Venezuela ?

? = undecided; ?* = minimum capital requirement greater than 8%

conclusion..." and it was classified as "undecided," and it is noted in Table 4 with a question mark (?). If the answers were too vague to be interpreted, they were classified as undecided. In several cases, the responses consisted of copies of bank regulations (in foreign languages) or references to various web sites. In the case of Mexico, for example, the regulations that were sent to me did not mention Basel I or II, so it was not included in the total number of responses to Question 2. Hungary did not answer that question so it too was excluded. Thus, judgment played a substantial role in determining if the responses were classified as yes, no, or undecided. A total of 63 responses are shown in Table 4. Three (Hungary, Korea and Mexico) did not answer the question.

With that disclaimer in mind, 33 of the 63 responses were classified as yes—they will adopt Basel II in some form. For the most part, these included the larger countries and those that are actively engaged in international trade. As previously noted, some of the countries that said yes are in the process of joining the EU, or they are members of the EEA.

Three countries (Rwanda, Tajikistan, and Tavalu) said no.

Twenty seven respondents were classified as "undecided." All are small countries. Twelve of the undecided respondents have a minimum capital requirement of 8% or higher (reported in Table 3), and they are designated in Table 4 with an asterisk (*) next to the question mark (?*). One respondent said "In Armenia the debate about possible introduction of Basel II is still in place and there is no final conclusion about the timing and etc. My personal opinion that it is too complicated for Armenian Banks." The Cayman Islands responded that "We are still evaluating the adoption of Basel II, however we recognise that an international

centre with branches and subsidiaries of international banks some changes to the current approach must be expected.”

4. CONCLUSIONS

The 1988 Basel Capital Accord (Basel I) was a major step forward on the road toward the harmonization of bank capital regulations. All 66 of the countries that responded to the survey had 8% or higher minimum capital requirements. Basel II, however, appears to be a bump in the road toward harmonization. In part, this is because the objectives of Basel I and II differ. Basel I was concerned with credit risk, the level of capital, and competitive equality. In contrast, Basel II is targeted at LCFOs, not small and medium size banks.

Thirty three of the respondents surveyed will use Basel II, and most of the remaining respondents are undecided. The division closely follows country size. The larger countries and those that are internationally active will apply it. The “undecided” group tends to be smaller countries and many of them have capital requirements that exceed those of Basel II. Therefore it is highly likely that some of these countries will use Basel II. Only three respondents rejected it.

The most common criticisms by those considering Basel II are that it is too complicated, and not suitable for banks in small unsophisticated developing countries. In addition, the Norwegian Financial Services Association (2003) noted that Basel II has many areas “which either prescribes or opens up for relatively wide national discretions. In many instances such discretion may be used to apply more lenient rules, and thus have the potential to create serious differences in competitive positions of national banking systems in the international market place. The result may well be increased regulatory arbitrage.”

Recall that one of the goals of Basel I was “competitive equality.” Smaller size banks in many of the countries surveyed have minimum capital requirements that meet or exceed those of Basel II, and they are not really affected by it. However, the information presented here suggests that Basel II may undermine that goal for medium and large size banks that don’t opt-in to Basel II using the A-IRB and AMA approaches.¹⁶

ENDNOTES

1. “BIS History,” <http://www.bis.org/about/history.htm>.
2. For further information about Herstatt, see Gup (1998), Chapter 2.
3. “The New Basel Capital Accord: An Explanatory Note,” 2001; also see: The Basel Committee on Banking Supervision, <http://www.bis.org/bcbs/aboutbcbs.htm>
4. Lindgren, et al., (1996). Also see Gup (1998; 1999).
5. “BIS History, 2003.
6. For further discussion of LCFOs, see Bliss 2002A and B; Herring, 2003; DeFerrari and Palmer, 2001.
7. “The New Basel Capital Accord,” Consultative Document, January 2001.
8. “Comments of the Caribbean Group of Bank Supervisors (CGSB) on the Third Consultative Paper on the New Capital Accord,” (no date).
9. Advanced Notice of Public Rule Making, Risk Capital Guidelines, August 4, 2003.
10. Ferguson, 2003b.
11. Ferguson, 2003c.
12. Olsen, 2003.
13. Large Commercial Banks, Federal Reserve Statistical Release, December 31, 2003.
14. *Permanent Mission to the United Nations*, 2003.
15. See: <http://www.bis.org/cbanks.htm>
16. The Financial Stability Institute published the results of a survey on non-Basel committee member countries (Implementation... 2004). Their results also suggest that Basel II will be accepted, at least in part, over time by many nations.

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2. THE EFFECTS OF BASEL II ON DEVELOPING COUNTRIES: A SUMMARY OF A GLOBAL PUBLIC GOODS NETWORK EFORUM ON BASEL II

BENTON E. GUP

1. INTRODUCTION

During the May 26–June 14, 2004 period, Global Public Goods Network (gpgNet) held a discussion forum (eForum) on International Financial Stability—Basel II: Accord or Discord.¹ Over 250 participants from around the world registered for the e-Forum, but relatively few submitted comments or replies. This article summarizes some comments and provides excerpts from others that were posted on the gpgNet web site for the eForum.² They are presented here in the order in which they were sent. No changes or corrections were made in the comments that are quoted. The full-texts of all of the comments are available on that same website.³

Several points suggested for debate included:

- What effects will Basel II have on developing countries?
- What measures could be introduced to reduce the potential negative effects, such as taking the diversification of risk into account?
- Why have measures to curb its potential negative impact on developing countries not been taken into account?

2. COMMENTS AND REPLIES

2.1. Mistakes in Basel Could Harm Developing Countries

The eForum began by asking participants to review a paper by Stephany Griffith-Jones, who argues that Basel II would significantly overestimate the risk of international bank lending to developing economies.⁴ This would lead to the increased cost of borrowing by

those countries, and to a decline in loans to the developing world. Stephany Griffith-Jones and Stephen Spratt go on to say that sophisticated international banks have diversified their portfolios, but Basel II does not take this risk reducing factor into account.⁵

2.2. Insights from a Global Survey on Bank Capital

Insights from a Global Survey on Bank Capital, by Benton E. Gup, revealed that of the 66 countries that responded to the survey, all met or exceeded the 8% capital requirements of Basel I.⁶ About half of the respondents would apply Basel II, and most of the remaining countries were contemplating it. The fact that banks in many countries have excess regulatory capital mitigates some of the effects of Basel II's higher capital requirements for riskier loans.

2.3. Micro vs. Macro

Sunada Sen pointed out that Basel II is focused strictly on the micro-finance of banks; and it ignores the macro-economic aspects of global capital flows.⁷

2.4. Procyclicality

Paul Bance presented a paper on "Prudential Supervision Against Banking Procyclicality: A Critical Assessment of the Line of Defense of the Basel Committee."⁸ He says that "The New Basel Capital Accord may heighten the procyclical impact of the financial system through its proposal for a risk-sensitive regulatory framework. The line of defense of the Basel Committee for Banking Supervision relies on a strengthened supervision mix of public and private discipline to carefully monitor banks' positions and actions and to efficiently prevent them from adopting imprudent behaviors. This essay argues that the impact of increasing supervision on banks' prudential behavior is not monotonic through the economic cycle and may be counterproductive in some points of the cycle."

2.5. Making a Fragile System More So

Avinash Persaud and Stephen Spratt argue that Basel II is too complex and places too much emphasis on risk-sensitivity.⁹ "... the purpose of bank regulation is not to assess private risks: this is the job of the banks and the markets. The purpose regulation is to consider where social risks are different from private risks, and then to use regulatory capital to make those social risks internal to the bank. If the failure of a particular bank would have no negative effects on confidence in the financial system—if, for example, there would be no strong reason to bail out that institution—then it is not clear why we would regulate it any differently than we would regulate a non-financial corporate with concern for the health and safety of its consumers and employees. We regulate banks further because we are worried about their spill-over risks. Sensitivity to private risks is a red-herring. Of course, it is what big banks would like regulators to worry about, because then regulatory capital will be aligned to their narrow risks. Instead regulatory capital should focus on the difference between internal assessments of risk and the regulators' assessment of the wider social risks."

They conclude by saying that "Basle's prescriptions are at the root of its enormous complexity. Complexity is the avenue of capture. Faced with over 200 pages of complex rules and exceptions, the supervisors will be more easily manipulated, the consultants will be happily employed and the big banks will pick off smaller banks straining under the financial costs of implementation."