

**Differences in Governance Practices between U.S. and Foreign Firms:  
Measurement, Causes, and Consequences**

Reena Aggarwal  
McDonough School of Business  
Georgetown University  
Washington, D.C. 20057  
(202) 687-3784  
[aggarwal@georgetown.edu](mailto:aggarwal@georgetown.edu)

Isil Erel  
Fisher College of Business  
Ohio State University  
806 Fisher Hall  
2100 Neil Avenue  
Columbus, OH 43210-1399  
Tel. 614-292-5174  
[erel\\_1@fisher.osu.edu](mailto:erel_1@fisher.osu.edu)

René M. Stulz  
Fisher College of Business  
Ohio State University  
806 Fisher Hall  
2100 Neil Avenue  
Columbus, OH 43210-1399  
Tel. 614-292-1970  
[stulz\\_1@fisher.osu.edu](mailto:stulz_1@fisher.osu.edu)

Rohan Williamson  
McDonough School of Business  
Georgetown University  
Washington, D.C. 20057  
(202) 687-2884  
[williarg@georgetown.edu](mailto:williarg@georgetown.edu)

# **Differences in Governance Practices between U.S. and Foreign Firms: Measurement, Causes, and Consequences**

## **Abstract**

In this paper, we compare the governance of foreign firms to the governance of comparable U.S. firms using propensity scores. We find that it is quite important, when comparing the governance of foreign firms and U.S. firms, to do so by comparing apples to apples, namely firms with similar characteristics. Comparisons based on country averages of firm-level governance indices understate the magnitude of the differences in investment in internal governance across countries because small firms, which typically invest less in internal governance, are over-weighted in the U.S. We call the difference in governance between a foreign firm and its matching U.S. firm the governance gap. For the typical foreign firm, the governance gap is negative in that the foreign firm invests less in internal governance than its matching U.S. firm. A foreign firm is much less likely to have a negative governance gap in a country with good investor protection, so that there is clear evidence that investment in internal governance and investor protection are complements rather than substitutes.

We find that the governance gap is strongly related to firm value. Firms which invest less in internal governance than their matching U.S. firm are worth less and their value shortfall increases with their internal governance investment shortfall. We conclude that a firm's underinvestment in governance compared to its matching U.S. firm cannot be explained by unobserved firm characteristics which would make it optimal for the foreign firm to invest less in internal governance. Country characteristics play an extremely important role in explaining why the typical foreign firm invests less in internal governance than its matching U.S. firm. However, neither investor protection nor other country characteristics completely explain the relation between a firm's internal governance investment and its value. It is quite likely that firms typically underinvest in internal governance because doing so is optimal for their controlling shareholder and suboptimal for their minority shareholders. An increase in a typical foreign firm's investment in internal governance would make minority shareholders better off, but would not make its controlling shareholder better off. Further, in countries which place greater weight on the interests of stakeholders, an improvement in internal governance might also adversely affect these stakeholders.

## **Differences in Governance Practices between U.S. and Foreign Firms: Measurement, Causes, and Consequences**

### **Research Objectives and Initial Results**

Based on the well-known definition of Shleifer and Vishny (1997), governance consists of the mechanisms which insure that shareholders receive a return on their investment. Governance depends both on country-level as well as firm-level mechanisms. The country-level governance mechanisms include a country's laws, its culture and norms, and the institutions which enforce the laws. Firm-level or internal governance mechanisms are the mechanisms that operate within the firm. Firm-level governance mechanisms are costly, so that the adoption of internal governance mechanisms or attributes by a firm is an investment, and the payoffs from that investment differ across countries and across firms (see, e.g., Doidge, Karolyi and Stulz (2007), Fulghieri and Suominen (2006), John and Kedia (2006)).

The U.S. is recognized to have extremely high financial and economic development, to have strong investor protection, and to protect property rights well. Consequently, we would expect the internal governance of firms in the U.S. to come as close as possible to what the optimal internal governance of a firm would be in a foreign country if it were not constrained by poorer institutions and lower development than in the U.S. The internal governance of firms in the U.S. therefore provides a benchmark that can be used to evaluate the impact of different institutions and different development from the U.S. on governance choices and, through these choices, on firm value.

On theoretical grounds, it is not clear whether the characteristics of the U.S. make firm-level investment in governance more or less advantageous for U.S. firms relative to firms from countries which do not have the same high level of development and investor protection as the U.S. One possibility is that foreign firms would invest less in firm-level governance if they were in the U.S. because firm-level governance and country-level investor protection are substitutes.

An alternative possibility is that investment in firm-level governance is less productive in countries with poor economic development and weak investor protection than it is in the U.S., so that firm-level governance and investor protection are complements. Though there is a considerable literature that compares the quality of institutions across countries, there is no systematic comparison of firm-level investment in governance between the U.S. and foreign countries and furthermore there is no investigation of whether differences in firm-level governance between foreign firms and comparable U.S. firms have implications for the valuation of foreign firms.

In our initial analysis, we find evidence that foreign firms invest less in governance than comparable U.S. firms, which indicates that investment in firm-level governance is higher when a country becomes more economically and financially developed and better protects investor rights. Further, to the extent that institutional and development weaknesses reduce a foreign firm's investment in corporate governance compared to a U.S. firm, we would expect the value of the foreign firm to be lower. Our early examination supports this, as expected, we find that the value of foreign firms, measured by Tobin's  $q$ , is negatively related to the size of their governance investment shortfall relative to U.S. firms. Our preliminary results show that a little more than 10% of foreign firms have governance attributes that are stronger than the matched U.S. firms. Surprisingly, the vast majority of these firms are from Canada and the U.K., so that firms from countries more similar to the U.S. are the ones that are the most likely to invest more in governance than comparable U.S. firms. Such a result is inconsistent with the hypothesis that investor protection and internal governance mechanisms are substitutes. This we plan to explore in much more detail.

The next step in this study is to determine whether the governance gap we have developed helps explain a firm's valuation. It could be that the governance differences are unrelated to firm value because the governance attributes we focus on are not value relevant for foreign countries. Alternatively, the governance attributes we use might not capture the dimensions of governance

that are important for shareholder wealth maximization. Our preliminary results are inconsistent with either of these hypotheses. It seems that the value of foreign firms, measured by Tobin's  $q$ , increases as their index shortfall relative to the index of matching U.S. firms falls.

In addition to investigating the value relevance of differences in the governance index between foreign firms and comparable U.S. firms, we will also consider the value relevance of specific governance provisions.

### **Related Literature**

Our paper contributes to a growing literature on the determinants and value relevance of firm-level governance attributes. This literature has been reviewed extensively (see, for instance, Becht, Bolton, and Roell (2003), and Denis and McConnell (2003)). A subset of this literature uses corporate governance indices as we do. In the U.S., authors have shown that firm value is related to indices of firm-level governance attributes (e.g., Gompers, Ishii, and Metrick (2003), Bebchuk and Cohen (2005), Bebchuk, Cohen, and Ferrell (2005)). Most importantly, from our perspective, Brown and Caylor (2006) show that the ISS index is value relevant in the U.S. and Aggarwal and Williamson (2006) demonstrate that changes in the index are associated with changes in firm value in the U.S. In an international setting, Durnev and Kim (2005) use the Credit Lyonnais Securities Asia (CLSA) corporate governance ratings and demonstrate that they are value relevant. The CLSA ratings cover 24 emerging countries and newly-emerging countries for 2000 and provide ratings for 494 companies. Francis, Khurana, and Pereira (2005) show that disclosure-related governance attributes measured by the Standard & Poor's rankings affect firms' cost of capital across the world. Doidge, Karolyi, and Stulz (2007) show that country characteristics are important determinants of firm-level governance indices for firms outside the U.S. A couple of contemporaneous papers examine the relation between firm level governance provisions and firm value across countries using ISS data. Bruno and Claessens (2007) find that companies with strong corporate governance rely heavily on external finance. Chhaochharia and

Laeven (2007) show that firms that adopt corporate governance provisions beyond those that are mandated by the country or corporate norms gain a positive valuation impact for their efforts. Though the results of many of these papers are complementary to the preliminary results of this paper, no paper compares the internal governance of foreign firms to the internal governance of comparable U.S. firms and derives the implications of that comparison for the value of these foreign firms.

### **Data and Methodology**

To conduct our investigation, we need information about firm-level corporate governance attributes for a large number of firms across a large number of countries. Additionally, we would like measures of individual governance attributes to be computed in the same way across all these firms. Two widely known governance rankings include both U.S. and foreign firms. One of these two rankings, the Standard and Poor's ranking, focuses on disclosure. The other one, produced by Institutional Shareholder Services (ISS), uses a comprehensive inventory of governance attributes. We will attempt to use the ISS governance attributes in this paper. By doing so, we can analyze common governance attributes for U.S. and non-U.S. firms. Based on what ISS currently has available we will have firms covering at least 23 developed countries. To compare firm-level governance across the U.S. and foreign countries, we will need to create our own index making sure that the governance attributes included are relevant both for U.S. firms and foreign firms.

ISS collects information on governance attributes for a large number of U.S. and foreign companies and provides the individual firm-level attributes used to construct our various indices. 5,296 U.S. companies and 2,234 foreign companies are covered in 2005. The international coverage includes non-U.S. firms that are part of the major indices. The three foreign countries with the largest number of firms covered are Japan (589), U.K. (530) and Canada (168). The three countries with the smallest number of firms covered are Portugal (14), Ireland (16) and New Zealand (18).

We use attributes that are common for both U.S. and foreign firms. The attributes we select cover four broad sub-categories: 1) *Board*, 2) *Audit*, 3) *Anti-takeover*, and 4) *Compensation and Ownership*. *Board* attributes attempt to capture the aspects of the functioning of the board of directors that relate to board independence, composition of committees, size, transparency, and how work is conducted; *Audit* includes questions regarding the independence of the audit committee and the role of auditors; *Anti-takeover* provisions are from the firm's charter and bylaws and refer to dual-class structure, role of shareholders, poison pill and blank check preferred; and *Compensation and Ownership* deals with executive and director compensation issues related to options, stock ownership and loans, and how these types of compensation are determined and monitored.

We will use the individual attributes to create an index for each company. The index assigns a value of one to a governance attribute if the company meets the threshold level for that standard and zero otherwise. In contrast to prior studies in the literature, our index is computed for U.S. firms and foreign firms using the same criteria. It is common in the literature to use additive indices (e.g., Gompers, Ishii, and Metrick (2003), Bebchuk, Cohen and Ferrell (2004), Bebchuk and Cohen (2005)).

The average values of our index for non-U.S. firms and for U.S. firms are 50% and 59%, respectively. Canada (68%), the U.S. (59%), Finland (56%), Switzerland (55%) and the U.K. (55%) are the countries with the highest average governance index. Countries with the lowest average governance index are Belgium (39%), Portugal (39%), Italy (41%) and Norway (41%). These results indicate that there is a wide degree of variation in the average value of *GOV* across countries. Every country except Canada has a lower average index than the U.S. and the difference is statistically significant at the 1% level.

There is an obvious problem of interpretation when one compares country averages of this or any other index: we are comparing governance for firms with different characteristics. A comparison of the index across countries with different types of firms may mean we are

comparing apples to oranges. To make our comparison of the governance of U.S. firms with the governance of foreign firms more precise, we will match firms based on industry, size and potentially other factors. One idea is to use a propensity score matching methodology, to improve on the matches. Drucker and Puri (2005) argue that this econometric method is superior because this matching employs fewer restrictions. Rosenbaum and Rubin (1983), Rubin (1997), and Conniffe, Gash, and O'Connell (2000), among others, have shown this approach to be more accurate.

We define a firm's governance gap, as the difference between its governance index value and the index value of its matching U.S. firm. Our sample has 22 non-U.S. countries. Based on these preliminary matches we find that only 15 countries have at least one firm that has better governance than its matching U.S. firm. There are only three countries with more than five firms that have a positive index gap: Canada, Finland, and the U.K. Canada has the largest fraction of firms investing more in governance than their U.S. counterpart. It is the only country with a majority of firms with a positive gap. Strikingly, two of the three countries with the largest percentage of firms with a positive gap are common law countries. We find that the  $q$  of firms which invest more in governance than their matching U.S. firms is significantly greater than the  $q$  of firms which invest less. In the next section, we examine this valuation difference in greater detail.

The firms with a positive gap differ from those with a negative gap in many other ways besides having a higher  $q$ . In particular, the firms with a positive gap have a market capitalization and total assets that are smaller than the firms with worse governance. They also have greater sales growth, R&D to sales, cash to assets, debt/assets, and closely-held ownership, but their capital expenditures are significantly lower.

We also investigate how country characteristics differ between firms with a positive gap and firms with a negative gap. The firms which invest more in governance than their U.S. counterparts come from countries with greater stock market capitalization to GDP, with common

law, with a better judicial system, and with better laws and regulations to curb self-dealing by insiders. This result is completely inconsistent with the view that firm-level governance and country-level investor protection are substitutes and is supportive of the role of financial development (but not economic development).

A firm's governance is chosen by those who control the firm to maximize their welfare and most foreign firms have a controlling shareholder (La Porta, Lopez-de-Silanes, and Shleifer, 1999). Investments in corporate governance reduce the controlling shareholder's ability to extract private benefits from the firm, investments in corporate governance are more costly for the controlling shareholder than they are for minority shareholders. The controlling shareholder's choice of governance mechanisms depends on firm and country characteristics. He will find investments in governance more valuable if he expects the firm to need external funds because investments in governance reduce the cost of external capital. It follows that the controlling shareholder's choice of an optimal governance mechanism raises an endogeneity issue. High  $q$  firms have greater investment opportunities and hence are more likely to raise external funds. As a result, high  $q$  firms might invest more in governance, so that instead of having investments in governance increase  $q$  it is possible that a higher  $q$  would make the firm invest more in governance. Like other authors, we will control for growth opportunities, but there could still be a relation between  $q$  and governance because of other growth opportunities that we may fail to control for. To address this issue, we plan to use two distinct approaches. First, we will use an instrumental variable approach. Second, we are devising an experiment inspired by Rajan and Zingales (1998). If internal governance is more costly for foreign firms than for U.S. firms, we expect that the foreign firms comparable to the U.S. firms that benefit the most from investing in internal governance will find it optimal to invest less in governance than these U.S. firms because such investment is more expensive for them and they will suffer a loss of value as a result. We can therefore use regression analysis to investigate whether a foreign firm's  $q$  is negatively related to the governance index value it would have in the U.S. We find that this is the case. Such

a coefficient is not subject to an endogeneity bias because we are measuring the governance of a U.S. firm and the valuation of a foreign firm.

### **Proposal for Future Work**

One main issue still to be addressed more clearly in the completed project is whether firm and country level governance are substitutes or complements and what is the impact of the controlling shareholder in the quality of governance. We will also work more carefully on addressing the issues of endogeneity that is of major concern in this type of research. We will also look at specific governance attributes to examine the relevance across U.S. and non-U.S. firms.

### **Proposed Timetable**

Preliminary Empirical Analysis and Draft  
Revision with Robustness  
Final Draft

November 1, 2007  
February 1, 2008  
April 1, 2008

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## ISIL EREL

The Ohio State University  
Fisher College of Business  
Department of Finance  
832 Fisher Hall  
2100 Neil Avenue  
Columbus, OH 43210-1144

Office: 614-2925174  
Cell: 617-283 0062  
Fax: 614-292 2418  
Email: erel\_1@cob.osu.edu  
Web: [http://fisher.osu.edu/~erel\\_1](http://fisher.osu.edu/~erel_1)

### **ACADEMIC EMPLOYMENT:**

**The Ohio State University, Fisher College of Business**, June 2006 – *present*  
*Assistant Professor of Finance*

**MIT Sloan School of Management**, November 2005 – May 2006  
*Post-Doctoral Associate*  
Worked with Prof. Stewart C. Myers on Corporate Governance Theory

### **EDUCATION:**

**MIT Sloan School of Management**, September 2000 - October 2005

*PhD in Financial Economics*

Thesis Title: Essays on Banking

Thesis Committee: Stewart C. Myers (Co-chair), Stephen A. Ross (Co-chair), and Antoinette Schoar.

**Koc University**, Istanbul/Turkey, September 1995 - May 2000

*B.A. in Economics & Business Administration*

Double Major; GPA: 4.00/4.00.

### **ACADEMIC FELLOWSHIPS and AWARDS:**

- Nominated as the First Runner Up for the Best Paper Award in Financial Markets and Institutions by Financial Management Association, October 2005. *Sponsored by Fannie Mae*  
Paper Title: The effect of Bank Mergers on Loan Prices: Evidence from the U.S.
- Recipient of MIT Sloan School of Management Henry B. Dupont Fellowship, September 2000-May 2005.
- Valedictorian of Koc University, Istanbul/Turkey, Class of 2000.
- Recipient of the Werner-von-Siemens Excellence Award, Koc University, June 2000.
- Recipient of Vehbi Koc Fellowship for full-tuition & Vehbi Koc Scholarship for outstanding academic performance, Koc University, September 1995-May 2000.
- Named in the high honour list of Koc University, September 1995-May 2000.
- Ranked 7th among around one million high school graduates in the 1995 Nationwide University Entrance Examination of the Turkish Republic Higher Education Council.

### **FIELDS:**

Corporate Finance; Banking; Corporate Governance; Mergers and Acquisitions; Regulation

### **RESEARCH EXPERIENCE:**

**MIT Sloan School of Management**, June 2005 - October 2005

Research assistant for Prof. Stewart Myers on corporate governance theory

**Board of Governors of the Federal Reserve System**, June 2004 - September 2004

Dissertation intern in Capital Markets and Monetary and Financial Studies Sections;  
Conducted research on the effect of banking consolidation on loan prices and credit availability to small businesses, banking regulation and Basel II rules.

**MIT Sloan School of Management**, June 2001 - May 2004

Research assistant for Prof. Steven Ross on closed-end funds, for "Princeton Lectures in Finance, a Neoclassical Look at Behavioral Finance: Closed End Fund Puzzle".

**Koc University, Department of Economics**, September 1999 - Spring 2000

Research Assistant for Assoc. Prof. Kamil Yilmaz on macroeconomics using Turkish macro-data, financially supported by Ford Foundation in Turkey.

### **RESEARCH PAPERS:**

#### **The Effect of Bank Mergers on Loan Prices: Evidence from the U.S.**

##### **(Job Market Paper)**

Bank mergers will increase or decrease loan spreads, depending on whether the increased market power outweighs the reduction in operating costs. Using a loan-level data set for U.S. commercial banks, I find that, on average, mergers reduce loan spreads, and that the results are stronger for acquirers with larger declines in operating costs post merger. However, while the reduction in spreads is larger if the acquirer and the target have some market overlap, and, consequently, more potential for cost savings, spreads widen when there is significant market overlap and, therefore, increased market power post merger. Furthermore, contrary to what might be expected, bigger acquirers do not impose less favourable terms on small businesses.

#### **Incentive-based Regulation of Banks: An Interpretation of Basel II**

This paper models the incentives of banks to undertake "Regulatory Capital Arbitrage," under the current capital requirements. I show that in equilibrium banks making risky investments pool with the banks investing safely so that they can be subject to a lower amount of regulatory capital because the risk exposures of banks cannot be precisely measured. The paper examines whether the proposed "Basel II" regulatory system would be more or less efficient and effective than the current system. I show that the Internal Ratings-based (IRB) Approach of Basel II can be interpreted as a way of forcing a separating equilibrium, in which good banks that do not pursue unduly risky strategies identify themselves to the regulators and are rewarded with a lower capital requirement. Such a separating equilibrium can only be sustained under an effective supervision system or by giving some incentives to the excessively risk-taking banks to stay in the current system rather than opting into the new IRB approach.

### **WORK IN PROGRESS:**

#### **Do U.S. Firms Have the Best Corporate Governance? A Cross-Country Examination of the Relation between Corporate Governance and Shareholder Wealth**

(with Reena Aggarwal, Rene Stulz and Rohan Williamson)

#### **Capital Allocation for Financial Institutions**

(with Stewart Myers and James Read)

### **INVITED PRESENTATIONS:**

- University of Georgia, November 2006
- Conference on Corporate Finance of Financial Intermediaries, Wharton School of University of Pennsylvania, September 2006.
- Bilkent University, Koc University, and Sabanci University, May 2006
- Federal Reserve Bank of Chicago, Indiana University (Kelley), MIT (Sloan), University of Michigan (Ross), Ohio State University (Fisher), University of Oregon (Lundquist), University of Rochester (Simon), UCLA (Andersen), UNC (Kenan-Flagler), UTD, and the University of Washington at Seattle, January-February 2006
- MIT Sloan School of Management Batterymarch Finance Seminar, October 2005
- Financial Management Association Annual Meetings, October 2005
- MIT Sloan School of Management Finance Lunch, September 2005 Banking

- Research Conference of the FDIC Center for Financial Research, September 2005
- Bank Structure Conference of the Federal Reserve Bank of Chicago, May 2005
- MIT Sloan School of Management Finance Lunch, February 2005
- Board of Governors of the Federal Reserve System Finance Seminar, July 2004

**TEACHING EXPERIENCE:**

- The Ohio State University, Fisher College of Business, Spring 2007
- Professor, Business Finance 726 & 826 (Financial Institutions)
- Koc University, Department of Mathematics, September 1999 – December 1999
- Teaching Assistant, Math 203 (Linear Algebra & Multivariable Calculus)
- Koc University, Department of Economics, September 1998 - May 2000
- Teaching Assistant, Econ 202 (Introduction to Macroeconomics) & for Econ 200 (Introduction to Economics)

**WORK EXPERIENCE:**

- |  |             |
|--|-------------|
| Istanbul Stock Exchange, Turkey          | July 1999   |
| <i>Internship in Research Department</i> |             |
| Yapi ve Kredi Bankasi, Istanbul/Turkey   | August 1998 |
| <i>Internship in Research Department</i> |             |
| CITIBANK, Istanbul/Turkey                | July 1998   |
| <i>Internship in Treasury Department</i> |             |

**SOCIAL ACTIVITIES:**

- President of Turkish Democracy Foundation, Istanbul/Turkey, Sept 1998 – Feb 2000
- President of Economics Club, Koc University, Istanbul/Turkey, Oct 1998 – June 2000
- President of Politics and Economics Club, Koc University, Oct 1997-October 1998

**PERSONAL:**

- Date and Place of Birth: 17th of July 1977, Turkey
- Citizenship: Turkish; Gender: Female
- Fluent in English and Turkish, at introductory level in German.

**REFERENCES:**

- Stewart C. MYERS**, Gordon Y. Billiard Professor of Finance  
MIT Sloan School of Management, office: 617- 253 6696, e-mail: scmyers@mit.edu
- Stephen A. ROSS**, Franco Modigliani Professor of Finance & Economics  
MIT Sloan School of Management, office: 617-258 8371, e-mail: sross@mit.edu
- Antoinette SCHOAR**, Michael Koerner Associate Professor of Entrepreneurial Finance  
MIT Sloan School of Management, office: 617- 253-3763, e-mail: schoar@mit.edu

## RENÉ M. STULZ

Fisher College of Business  
2100 Neil Avenue  
Columbus, OH 43210-1399  
Phone: (614) 292-1970  
Cell: (614) 206-0265  
Fax: (614) 292-2359  
e-mail: [stulz@cob.osu.edu](mailto:stulz@cob.osu.edu)  
Homepage: [http://www.cob.ohio\\_state.edu/fin/faculty/stulz/](http://www.cob.ohio_state.edu/fin/faculty/stulz/)

2469 Southway Drive  
Columbus, OH 43221  
Phone/Fax: (614) 486-3756

### UNDERGRADUATE STUDIES

University of Neuchâtel, Switzerland, Licence es Sciences Économiques, 1975.

### GRADUATE STUDIES

London School of Economics, 1975-1976, Visiting Graduate Student.

Massachusetts Institute of Technology (MIT), 1976-1980, Ph.D. in Economics.

### ACADEMIC APPOINTMENTS

Ohio State University; Everett D. Reese Chair of Banking and Monetary Economics, 1996 to present.

University of Southern California, Visiting Professor, 2007.

University of Chicago, Visiting Professor, Stigler Center, 2003-2004.

Northwestern University, Visiting Scholar, Kellogg School of Management, 2003-2004.

Harvard University; Business School, August 1996 to July 1997, Bower Fellow.

Ohio State University; Director of the Dice Center for Research in Financial Economics, 1995 to present.

Ohio State University; Ralph Kurtz Chair in Finance, 1993-1996.

Ohio State University; Riklis Chair in Business and its Environments, 1988-1993.

Ohio State University; Professor of Finance, 1985 to present.

University of Chicago; Visiting Professor of Finance, 1986-1987.

Massachusetts Institute of Technology; Visiting Associate Professor of Finance, Fall 1985.

Ohio State University; Associate Professor of Finance, 1983-1985.

University of Rochester; Assistant Professor of Finance and Economics, 1980-1983.

## **OTHER RELEVANT POSITIONS HELD**

Research Associate, National Bureau of Economic Research (Asset Pricing Group and Corporate Finance Group).

Director, NBER Project on the Risks of Financial Institutions.

President, Scientific Council, Swiss Finance Institute, 2006 to present.

Board of Directors, American Finance Association, 1988 to 2000, 2002 to present.

Consultant to the World Bank, the IMF, the NYSE, Federal Reserve Bank of New York, corporations, and law firms.

Taught executives in Europe, Asia and North America (open enrollment as well as for firms; courses on risk management, banking, derivatives, corporate valuation, investments).

Advisory Committee, Morningstar, 2000-2002.

Director, Banque Bonhôte, 2002 to present.

Director, Weggelin Fund Management, 1999 to present.

President, Gamma Foundation, 2002 to present.

Director, Community First Financial Group, Inc., 2001 to present.

Director, Peninsula Banking Group, Inc., 2001 to present.

Trustee, Global Association of Risk Professionals, 2002 to present; Executive Committee, 2004 to present.

Chairman, Financial Risk Management Examination Certification Committee, Global Association of Risk Professionals, 2002 to present.

International Advisory Committee, NCCR, 2002 to present.

Advisory Committee, Gutmann Center, Vienna, 2003 to present.

External Reviewer, London Business School Finance Department, 2005.

Financial Advisory Roundtable (FAR), Federal Reserve Bank of New York.

## **HONORS, SCHOLARSHIPS, AND FELLOWSHIPS**

Advanced Researcher Fellowship, Swiss National Science Foundation, 1978-1980.

Dean's Research Professorship, Ohio State University, Spring 1984.

Pacesetter Research Award, Ohio State University, April 1986.

President-Elect (1993) and President (1994), International Economics and Finance Society.

Docteur Honoris Causa, University of Neuchâtel, Switzerland, 1998.

Eastern Finance Association Scholar Award, 1998.

Keynote speaker, Asia-Pacific Finance Association, Eastern Finance Association, European Corporate Finance Institute, European Finance Association, European Financial Management Association, FDIC Annual Conference, Financial Management Association, French Finance Association, German Finance Association, Northern Finance Association.

Assurant Lecture, Georgia Tech University, 2004.

Fellow, Financial Management Association, 2000.

Fellow, American Finance Association, 2005.

Fellow, European Corporate Governance Institute, 2005.

Vice-President (2002), Program Chair, (2003), President (2004), Western Finance Association.

Vice-President (2002), President-elect (2003), President (2004), American Finance Association.

Who's Who in Banking and Finance; Who's Who in Economics.

Jensen Prize for best article in Corporate Finance in the Journal of Financial Economics, 2000.

William F. Sharpe Award for the best paper published in the Journal of Financial and Quantitative Analysis during the year 2003.

Selected by the magazine Treasury and Risk Management as one of the 100 most influential people in finance (June 2004).

René M. Stulz Scholar Development Fund, created in 2005 by former Ph.D. students.

Fama/DFA Prize for best article in Capital Markets and Asset Pricing in the Journal of Financial Economics, 2005.

Nominated for a Brattle Prize for best paper in Corporate Finance in the Journal of Finance in 2005.

Risk Who's Who, Charter Member, 2006.

Best paper, First Asian-Pacific Capital Markets Conference, Seoul, 2006.

## **BOOKS**

Risk Management and Derivatives, Southwestern College Publishing, 2003.

Handbook of the Economics of Finance, 2 volumes, edited with George Constantinides and Milton Harris, North-Holland, 2003.

International Capital Markets, 3 volumes, edited with Andrew Karolyi, Edward Elgar, 2003.

Readings for the Financial Risk Manager, edited with Richard Apostolik, Wiley, 2004.

Readings for the Financial Risk Manager, edited with Richard Apostolik, Wiley, 2005.

The risks of financial institutions, edited with Mark Carey, University of Chicago Press, 2006.

## **PUBLISHED PAPERS**

"On the Effects of Barriers to International Investment," Journal of Finance, 1981, v36(4), 923-934, reprinted in Emerging Markets, Bekaert and Harvey, ed., Edward Elgar Publishing, 2004, 1-36.

"A Model of International Asset Pricing," Journal of Financial Economics, 1981, v9(4), 383-406.

"The Forward Exchange Rate and Macroeconomics," Journal of International Economics, 1982, v12(3/4), 285-299.

"Options on the Minimum or the Maximum of Two Risky Assets: Analysis and Applications," Journal of Financial Economics, 1982, v10(2), 161-185, reprinted in Options Markets, vol. 2, George Constantinides and A. G. Malliaris, eds., Edward Elgar Publishing, 2001.

"On the Determinants of Net Foreign Investment," Journal of Finance, 1983, v38(2), 459-468.

"The Demand for Foreign Bonds," Journal of International Economics, 1983, v15(3/4), 225-238.

"Optimal Hedging Policies," Journal of Financial and Quantitative Analysis, 1984, v19(2), 127-140.

"Currency Preferences, Purchasing Power Risks and the Determination of Exchange Rates in an Optimizing Model," *Journal of Money, Credit and Banking*, 1984, v16(3), 302-316; reprinted in *Monetary Policy and Uncertainty*, Manfred J. M. Neumann, ed., Nomos, 1986.

"Pricing Capital Assets in an International Setting: An Introduction," *Journal of International Business Studies* (Winter 1984), 55\_73; reprinted in *International Financial Management: Theory and Applications*, Donald R. Lessard, ed., John Wiley & Sons, 1985.

"Macroeconomic Time-Series, Business Cycles and Macroeconomic Policies," with Walter Wasserfallen, *Carnegie-Rochester Conference Series on Public Policy* (Spring 1985), 9-55.

"An Analysis of Secured Debt," with Herb Johnson, *Journal of Financial Economics*, 1985, v14(4), 501-522, reprinted in *The Debt Market*, vol. 3, Steve A. Ross, editor, Edward Elgar, 2000.

"The Determinants of Firm's Hedging Policies," with Clifford W. Smith, *Journal of Financial and Quantitative Analysis*, 1985, v20(4), 391-406; reprinted in *Studies in Financial Institutions: Commercial Banks*, C. James and C.W. Smith, eds., McGraw-Hill, 1993, and in *Corporate Hedging in Theory and Practice: Lessons from Metallgesellschaft*, Christopher L. Culp and Merton H. Miller, eds, Risk Publications, London, 1999.

"Asset Pricing and Expected Inflation," *Journal of Finance*, 1986, v41(1), 209-224.

"Risk Bearing, Labor Contracts and Capital Markets," with Patricia B. Reagan, *Research in Finance*, 1986, v6, 217-232.

"Interest Rates and Monetary Policy Uncertainty," *Journal of Monetary Economics*, 1986, v17(3), 331-348.

"Time-Varying Risk Premia, Imperfect Information and the Forward Exchange Rate," *International Journal of Forecasting*, 1987, v3(1), 171-178.

"The Pricing of Options with Default Risk," with Herb Johnson, *Journal of Finance*, 1987, v42(2), 267-280.

"An Equilibrium Model of Exchange Rate Determination and Asset Pricing with Non-Traded Goods and Imperfect Information," *Journal of Political Economy*, 1987, v95(5), 1024-1040.

"Managerial Control of Voting Rights: Financing Policies and the Market for Corporate Control", *Journal of Financial Economics*, 1988, v20(1/2), 25\_54, reprinted in M.C. Jensen and C.W. Smith, eds., *The Modern Theory of Corporate Finance*, McGraw-Hill, 1989 (second edition).

"Risk and the Economy: A Finance Perspective," with K.C. Chan, *Risk and the Economy*, in C.C. Stone, ed., *Financial Risk: Theory, Evidence and Implications*, Proceedings of the Eleventh Annual Economic Conference of the Federal Reserve Bank of St. Louis, Kluwer Academic Publishers, 1988.

"Capital Mobility and the Current Account," *Journal of International Finance and Money*, 1988, v7(2), 167-180.

"The Eurobond Market and Corporate Financial Policy: A Test of the Clientele Hypothesis," with Yong Cheol Kim, *Journal of Financial Economics*, 1988, v22(2), 189-205.

"Contracts, Delivery Lags, and Currency Risks," with Patricia Reagan, *Journal of International Money and Finance*, 1989, v8(1), 89-104.

"The Pricing of Stock Index Options in General Equilibrium," with Warren Bailey, *Journal of Financial and Quantitative Analysis*, 1989, v24(1), 1-12.

"Managerial Performance, Tobin's  $q$ , and the Gains from Successful Tender Offers," with Larry Lang and Ralph Walkling, *Journal of Financial Economics*, 1989, v24(1), 137-154.

"Real Exchange Rate Dynamics and the Financial Theory of the Trading Firm," in *Recent Developments in International Banking and Finance*, S. Khoury and A. Ghosh, eds., Probus Publishing Company, 1989, v3, 247-262.

"Properties of Daily Stock Returns from the Pacific Rim Stock Markets: Evidence and Implications," with Warren Bailey and Edward Ng, in S.G. Rhee and R. Chang, eds., *Pacific-Basin Capital Markets Research*, North Holland, 1990, 155-171.

"The Pricing of Currency Options: A Review," in R. E. Schwartz and C. W. Smith, eds., *Handbook of Currency and Interest Rate Risk Management*, Simon & Schuster, 1990, 5/1-5/20.

"Stock Index Futures in Switzerland: Pricing and Hedging Performance," with Walter Wasserfallen and Thomas Stucki, *Review of Futures Markets*, 1990, v9(3), 576-592.

"The Distribution of Target Ownership and the Division of Gains in Successful Takeovers," with Ralph A. Walkling and Moon H. Song, *Journal of Finance*, 1990, v45(3), 817-834.

"Managerial Discretion and Optimal Financing Policies," *Journal of Financial Economics*, 1990, v26(1), 3-26, reprinted in *The Theory of Corporate Finance*, M.J. Brennan, ed., Edward Elgar, 1995.

"Benefits of International Diversification: The Case of Pacific Basin Stock Markets," with Warren Bailey, *Journal of Portfolio Management*, 1990, v16(4), 57-61.

"A Test of the Free Cash Flow Hypothesis: The Case of Bidder Returns," with Ralph A. Walkling and Larry H. Lang, *Journal of Financial Economics*, 1991, v29(2), 315-335.

"Is There a Global Market for Convertible Bonds?," with Yong-Cheol Kim, *Journal of Business*, 1992, v65(1), 75-92.

"Industry Contagion Effects of Bankruptcy and Firm Size," with Larry Lang, in Ed Altman, ed., *Bankruptcy and Distressed Restructurings*, Business One Irwin, 1992, 215-221.

"Contagion and Competitive Intra-Industry Effects of Bankruptcy Announcements," with Larry Lang, *Journal of Financial Economics*, 1992, v32(1), 45-60.

"Global Financial Markets and the Risk Premium on U.S. Equity," with K.C. Chan and Andrew Karolyi, *Journal of Financial Economics*, 1992, v32(2), 137-168.

"Portfolio Management and Exchange Rate Risks: New Theoretical and Empirical Perspectives," with Warren Bailey and Edward Ng, S. Khoury and A. Ghosh, eds., *Recent Developments in International Banking and Finance*, 1992, v6, 230-248.

"Optimal Hedging of Stock Portfolios Against Foreign Exchange Risks: The Case of the Nikkei 225," with Warren Bailey and Edward Ng, *Global Finance Journal*, 1992, v3(2), 97-114.

"Contracting Costs, Inflation and Relative Price Volatility," with Patricia Reagan, *Journal of Money, Credit and Banking*, 1993, v25(3), Part 2, 585-601.

"Tobin's q, Diversification, and Firm Performance," with Larry Lang, *Journal of Political Economy*, 1994, v102(6), 1248-1280, reprinted in *Empirical Corporate Finance*, vol. IV, Michael J. Brennan, ed., Edward Elgar, 2001.

"International Asset Pricing: An Integrative Survey," *Handbook of Modern Finance*, R. Jarrow, M. Maksimovic and W. Ziemba, eds., North Holland-Elsevier, 1995, 201-223.

"Asset Sales, Firm Performance and the Agency Costs of Managerial Discretion," with Larry Lang and Annette Poulsen, *Journal of Financial Economics*, 1994, v37(1), 3-37, reprinted in *Empirical Corporate Finance*, vol. III, Michael J. Brennan, ed., Edward Elgar, 2001.

"The Cost of Capital in Internationally Integrated Markets," *European Financial Management*, *European Financial Management*, 1995, 11-22.

"An Analysis of the Wealth Effects of Japanese Offshore Dollar-Denominated Convertible and Warrant Bond Issues," with Jun-Koo Kang, Yong-Cheol Kim and Kyung-Joo Park, *Journal of Financial and Quantitative Analysis*, 1995, v30(2), 257-270.

"Globalization of Capital Markets and the Cost of Capital: The Case of Nestlé," *Journal of Applied Corporate Finance*, 1995, v8(3,Fall), 30-38.

"Foreign Equity Investment Restrictions, Capital Flight, and Shareholder Wealth Maximization," with Walter Wasserfallen, *Review of Financial Studies*, 1995, v8(4), 1019-1057.

"Leverage, Investment and Firm Growth," with Larry Lang and Eli Ofek, *Journal of Financial Economics*, 1996, v40(1), 3-29.

"How Different is Japanese Corporate Finance?," with Jun-Koo Kang, *Review of Financial Studies*, 1996, v9(1), 109-139.

"Information, Trading and Stock Returns: Lessons from Dually-Listed Securities," with K.C. Chan, Wai-Ming Fong, and Bong-Chan Kho, *Journal of Banking and Finance*, 1996, v20(7), 1161-1187.

"Timing, Investment Opportunities, Managerial Discretion, and the Security Issue Decision," with Kooyul Jung and Yong-Cheol Kim, *Journal of Financial Economics*, 1996, v42(2), 159-185, reprinted in *Empirical Corporate Finance*, vol. III, Michael J. Brennan, ed., Edward Elgar, 2001.

"Why Do Markets Move Together? An Investigation of U.S.-Japan Stock Return Comovements," with G. Andrew Karolyi, *Journal of Finance*, 1996, v51(3), 951-986.

"Rethinking Risk Management," *Journal of Applied Corporate Finance*, 1996 (Fall), 8-24. Reprinted in *Corporate Hedging in Theory and Practice: Lessons from Metallgesellschaft*, Christopher L Culp

and Merton H. Miller, eds, Risk Publications, London, 1999, and in *Corporate Risk: Strategies and Management*, Gregory W. Brown and Donald H. Chew, eds, Risk Publications, London, 1999.

"Why Is There a Home Bias? An Analysis of Foreign Portfolio Equity Ownership in Japan," with Jun-Koo Kang, *Journal of Financial Economics*, 1997, v46(1), 3-28.

"Are Internal Capital Market Efficient?," with Hyun-Han Shin, *Quarterly Journal of Economics*, 1998, v108(2), 531-552.

"The Determinants and Implications of Corporate Cash Holdings," with Tim Opler, Lee Pinkowitz, and Rohan Williamson, *Journal of Financial Economics*, 1999, v52(1), 3-46. A shortened version of this paper appeared as "Corporate Cash Holdings," *Journal of Applied Corporate Finance*, 2001 v14(1), 55-79.

"Do Foreign Investors Destabilize Stock Markets? The Korean Experience in 1997," with Hyuk Choe and Bong-Chan Kho, *Journal of Financial Economics*, 1999, v54(2), 227-264.

"The Underreaction Hypothesis and the New Issue Puzzle: Evidence from Japan," with Yong-Cheol Kim and Jun-Koo Kang, *Review of Financial Studies*, 1999, v12(3), 519-534.

"International Portfolio Flows and Security Markets", in *International Capital Flows*, edited by Martin Feldstein, University Chicago Press, 1999, 257-293; reprinted in *Emerging Markets*, Bekaert and Harvey, ed., Edward Elgar Publishing, 2004, 387-423.

"Globalization, Corporate Finance and the Cost of Capital," *Journal of Applied Corporate Finance*, 1999, v12(3), 8-25.

"Do Banking Shocks Affect Firm Performance? An Analysis of the Japanese Experience," with Jun-Koo Kang, *Journal of Business*, 2000, v73(1), 1-23.

"Banks, the IMF, and the Asian crisis," with Bong-Chan Kho, *Pacific Basin Finance Journal*, 2000, v8(2), 177-216.

"U.S. Banks, Crises, and Bailouts: From Mexico to LTCM," with Bong-Chan Kho and Dong Lee, *American Economic Review*, 2000, v90(2), 28-31.

"Financial Structure, Corporate Finance and Economic Growth," *International Review of Finance*, 2000, v1(1), 11-38.

"Merton Miller and Modern Finance," *Financial Management*, 2000, v29(4), 119-131. Reprinted in the *Journal of Applied Corporate Finance*, 2001(Winter), 8-20.

"International Competition and Exchange Rate Shocks: A Cross-Country Industry Analysis of Stock Returns," with John Griffin, *Review of Financial Studies*, 2001, v14(1), 215-241.

"Divestitures and the Liquidity of the Market for Corporate Assets," with Frederick Schlingemann and Ralph A. Walkling, *Journal of Financial Economics*, 2002, v64, 117-144, reprinted in *Corporate Restructuring*, Campbell and Denis, ed., Edward Elgar Publishing, 2005.

"Should we Fear Capital Flows?," in *International Financial Markets: The Challenge of Globalization*, Leonardo Auernheimer (Editor), University of Chicago Press, 2003, Chicago, Ill.

“Corporate Governance and the Home Bias,” with Magnus Dahlquist, Lee Pinkowitz, and Rohan Williamson, *Journal of Financial and Quantitative Analysis*, 2003, v38(1) 87-110.

“Equity Market Liberalizations as Country IPOs,” with Rodolfo Martell, *American Economic Review, Papers and Proceedings*, 2003, v93 (2), 97-101.

“Culture, Openness, and Finance,” with Rohan Williamson, *Journal of Financial Economics*, 2003, v70(3) 313-349.

“A New Approach to Measuring Financial Contagion,” with Kee-Hong Bae and Andrew Karolyi, *Review of Financial Studies*, 2003, v16, 717-763.

“Are Assets Priced Locally or Globally?” with Andrew Karolyi, in Constantinides, George, Milton Harris and René Stulz (eds.), *The Handbook of the Economics of Finance*, North Holland, 2003.

“Why are Foreign Firms Listed in the U.S. Worth More?,” with Craig Doidge and Andrew Karolyi, *Journal of Financial Economics*, 2004, v71(2), 205-238.

“Daily Cross-Border Flows: Pushed or Pulled?” with Federico Nardari and John Griffin, *Review of Economics and Statistics*, 2004, v86(3), 641-657.

“Firm Size and the Gains from Acquisitions,” with Sara Moeller and Frederick Schlingemann, *Journal of Financial Economics*, 2004, v.73, 201-228.

“Should we fear derivatives?,” *Journal of Economic Perspectives*, 2004, v18 (3), 173-192.

“Wealth destruction on a massive scale? A study of acquiring-firm returns in the recent merger wave,” with Sara Moeller and Frederick Schlingemann, *Journal of Finance*, 2005, v60 (2), 757-782.

“Do domestic investors have an edge? The trading experience of foreign investors in Korea,” with Hyuk Choe and Bong-Chan Kho, *Review of Financial Studies*, 2005, v18(3)795-829.

“The limits of financial globalization,” *Journal of Finance*, 2005, v60(4), 1595-1638.

“Does the Contribution of Corporate Cash Holdings and Dividends to Firm Value Depend on Governance? A cross-country analysis,” with Lee Pinkowitz and Rohan Williamson, *Journal of Finance*, 2006, v61(6) 2725-2751.

“Dividend policy and the earned/contributed capital mix: a test of the life-cycle theory,” with Harry DeAngelo and Linda DeAngelo, *Journal of Financial Economics*, 2006, v81(2) 227-254.

“Enterprise Risk Management: Theory and Practice,” with Brian W. Nocco, *Journal of Applied Corporate Finance*, Fall 2006, v18(8) 8-20.

“Do investors trade more when stocks have performed well? Evidence from 46 countries,” with John M. Griffin and Federico Nardari, *Review of Financial Studies*, 2007, v20 (3) 905-951.

“Why do firms become widely held? An analysis of the dynamics of corporate ownership,” with Jean Helwege and Christo Pirinsky, *Journal of Finance*, forthcoming.

"Hedge Funds: Past, Present, and Future," *Journal of Economic Perspectives*, 2007, v21 (2), 175-194.

"The economics of conflicts of interests in financial institutions," with Hamid Mehran, *Journal of Financial Economics*, 2007, v85 (2) 267-296.

"How do diversity of opinion and information asymmetry affect acquirer returns?," with Sara B. Moeller and Frederik P. Schlingemann, *Review of Financial Studies*, forthcoming.

"Why do countries matter so much for corporate governance?," with Craig Doidge and Andrew Karolyi, *Journal of Financial Economics*, forthcoming.

"Do local analysts know more? A cross-country study of performance of local analysts and foreign analysts," with Kee-Hong Bae and Hongping Tan, *Journal of Financial Economics*, forthcoming.

## **PROFESSIONAL JOURNAL ARTICLES, BOOK REVIEWS, NOTES AND COMMENTS**

Review of "Managing Foreign Exchange Risk," Richard J. Herring, ed., *Journal of Money, Credit and Banking* (February 1985), 124-125.

"On Capital Mobility in the World Economy," *Carnegie-Rochester Conference Series on Public Policy* (Spring, 1986), 105-114.

"Portfolio Management in International Capital Markets," *Financial Markets and Portfolio Management* (1, 1986), 18-23.

"Portfolio Insurance, Program Trading and the Crash of 1987," *Financial Markets and Portfolio Management* (1, 1988), 11-22.

"SMI Futures," with T. Stucki and W. Wasserfallen, *Financial Markets and Portfolio Management* (4, 1989), 288-300.

"Benefits of International Diversification with Daily Data: The Case of Pacific-Basin Stock Markets," with Warren Bailey, *Journal of Portfolio Management* (4, 1990), 57-61.

"Portfolio Insurance with Options and Futures on the SMI," with T. Stucki and W. Wasserfallen, *Financial Markets and Portfolio Management* (2,1990), 99-115.

"Securities Transaction Taxes: Lessons from the International Experience," in *The Globalization of Equity Markets*, Jeffrey Frankel, ed., University of Chicago Press, 1994.

"Identifying and Quantifying Exposures," with Rohan Williamson, in *Financial Risk and the Corporate Treasury: New Developments in Strategy and Control*, Robert Jameson, ed., Risk Publications, London, 1997, 33-51. Reprinted in *Corporate Risk: Strategies and Management*, Gregory W. Brown and Donald H. Chew, eds, Risk Publications, London, 1999.

"What's Wrong with Modern Capital Budgeting?", Financial Practice and Education, Fall/Winter 1999, 5-9.

"Diminishing the threats to shareholder wealth," Financial Times, Mastering Risk Series, April 25, 2000.

"Why risk management is not rocket science," Financial Times, Mastering Risk Series, June 27, 2000.

"An Emotional High for Stocks?," a review of "Irrational Exuberance" by Robert J. Shiller, Science (June 30, 2000), 2323.

"Demystifying Financial Derivatives," The Milken Institute Review, Third Quarter 2005, 20-31.

"Merton Miller," New Palgrave Dictionary, 2006.

## **SELECTED RESEARCH IN PROGRESS AND WORKING PAPERS**

"Fundamentals, Market Timing, and Seasoned Equity Offerings," (with Harry DeAngelo and Linda DeAngelo)

"Has New York become less competitive in global markets? Evaluating foreign listing choices over time," (with Craig Doidge, G. Andrew Karolyi)

"Managerial ownership dynamics and firm value," (with Rüdiger Fahlenbrach)

"Why do U.S. firms hold so much more cash than they used to?," (with Thomas W. Bates and Kathleen M. Kahle)

"Earnings, growth, and acquisitions," (with Fred Schlingemann and Sara Moeller). "Financing flows," (with Han Shin).

"Is there hedge fund contagion?" with Niki Boyson and Christof Stahel.

"Financial globalization, governance, and the evolution of the home bias," with Bong-Chan Kho and Francis E. Warnock.

"Private benefits of control, ownership, and the cross-listing decision," with Craig Doidge, G. Andrew Karolyi, Karl A. Lins, and Darius Miller.

"How much do banks use credit derivatives to reduce risk?," with Bernadette Minton and Rohan Williamson.

"Is U.S. governance the best? A Cross-Country Examination of the Relation between Corporate Governance and Shareholder Wealth," with Reena Aggarwal, Isil Erel, and Rohan Williamson.

## **EDITORIAL AND REFEREEING ACTIVITIES**

Advisory Editor, Journal of Investment Management, 2003 to present.

Advisory Editor, The Review of Finance, 2003 to present.

Advisory Editor, Journal of Financial Economics, 2000 to present.

Advisory Editor, Journal of Financial Services, 1999 to present.

Advisory Editor, Journal of Economic Perspectives, 2006 to present.

Editor, Journal of Finance, 1988 to 2000.

Editor, Corporate Finance Abstracts, Social Science Research Network, 1998 to present.

Editor, Journal of Financial Economics, 1982 to 1987.

Editor, Journal of Banking and Finance, 2008 to present.

Co-Editor, Banking and Financial Institutions Abstracts, Social Science Research Network, 1998 to present.

Co-Editor, Financial Markets and Portfolio Management, 1999 to present.

Associate Editor, Journal of Risk, 2006 to present.

Board of Editors, Japan and the World Economy, 2006 to present.

Associate Editor, Journal of Economic Perspectives, 2003 to 2005.

Associate Editor, Journal of Financial Abstracts, 1994 to 1998.

Associate Editor, Journal of Financial Economics, 1988 to 1999.

Associate Editor, Journal of International Finance and Accounting, 1988 to present.

Associate Editor, Global Finance Journal, 1988 to present.

Associate Editor, Journal of International Financial Markets, Institutions and Money, 1989 to present.

Associate Editor, Journal of Fixed Income, 1991 to present.

Associate Editor, Journal of International Trade and Finance, 1992 to present.

Associate Editor, Journal of Financial and Quantitative Analysis, 1983\_1985.

Guest Contributor, Harvard Law School Corporate Governance Blog.

Acted as an ad hoc referee for AER, JIE, JAE, JFE, JME, JMCB, JFQA, QJE, JF, JB, JPE, Canadian Journal of Economics, Management Science, Marketing Science, Journal of International Money and Finance, Journal of International Business Studies, the Canadian NSF and the NSF.

## Rohan G. Williamson

*Associate Professor of Finance, Area Coordinator and  
Holowesko Faculty Research Fellow*

Georgetown University  
McDonough School of Business  
Washington, DC 20057  
Phone: (202) 687-2284  
Fax: (202) 687-4031  
e-mail: willliarg@georgetown.edu

### EDUCATION

The Ohio State University	Finance	Ph.D.
The Ohio State University	Finance	M.A.
Clark-Atlanta University	Finance	MBA
University of Dayton	Mech. Eng.	BME

### PUBLICATIONS

“The Market Value of Cash” (with Lee Pinkowitz), *Journal of Applied Corporate Finance*, forthcoming 2007.

“Cash Holdings Dividend Policy and Corporate Governance: A Cross-country Analysis,” (with Lee Pinkowitz and René M. Stulz), *Journal of Applied Corporate Finance* 19 (2006) 81 – 86.

“Does the Contribution of Corporate Cash Holdings and Dividends to Firm Value Depend on Governance? A cross-country analysis”, (with Lee Pinkowitz and René M. Stulz), *Journal of Finance* 61 (2006),2725-2753.

“Measuring the Economic Importance of Exchange Rate Exposure?”, (with Craig Doidge and John Griffin), *Journal of Empirical Finance* 13 (2006), 550-576.

“Corporate Governance, and the Home Bias”, (with Magnus Dahlquist, Lee Pinkowitz and René M. Stulz), *Journal of Financial and Quantitative Analysis* 38, (2003), 87-110.

**Winner of the 2003 William F. Sharpe Best Paper Award**

“Culture, Openness, and Finance”, (with René M. Stulz), *Journal of Financial Economics* 70 (2003), 313-349.

“The Use of Risk Management by Corporations”, in The Growth of Risk Management: A History, Risk Publications, 2003.

“Corporate Cash Holdings”, (with Tim Opler, Lee Pinkowitz and René M. Stulz), *Journal of Applied Corporate Finance* 14, (2001), 8-19.

“Bank Power and Cash Holdings: Evidence from Japan”, (with Lee Pinkowitz), *Review of Financial Studies* 14 (2001).

“Exchange Rate Exposure and Competition: Evidence from the Automotive Industry”, *Journal of Financial Economics* 59 (2001) 441- 475.

“Identifying and Quantifying Exposures”, with René M. Stulz in Corporate Risk: Strategies and Management, *Risk Publications*, 2000,

“The Determinants and Implications of Corporate Cash Holdings”, (with Tim Opler, Lee Pinkowitz and René M. Stulz), *Journal of Financial Economics* 52 (1999), 3-46.

**Winner of the 1999 Jensen Prize for Corporate Finance and Organizations**

“Identifying and Quantifying Exposures”, with René M. Stulz in Financial Risk and the Corporate Treasurer: New Developments in Strategy and Control, *Risk Publications*, 1997.

## **WORKING PAPERS**

“Identifying and Quantifying Corporate Exposures”, (with René M. Stulz), The Ohio State University, Dice Center WP96-14.

“Exchange Rate Changes and Wealth Transfer: An Industry Analysis”

“What is a Dollar Worth? The Market Value of Cash Holdings” (with Lee Pinkowitz)

“How Much do Banks Use of Credit Derivatives to Reduce Risk?” (with Bernadette Minton and René M. Stulz)

“Did New Regulations Target the Relevant Corporate Governance Attributes?” (with Reena Aggarwal)

“Differences in Governance Practices between U.S. and Foreign Firms: Measurement, Causes, and Consequences” (with Reena Aggarwal, Isil Erel, and René M. Stulz)

## **RESEARCH IN PROGRESS**

“The Post-Issue Performance of Equity Carve-Outs”

“The Determinants Liquid Asset Holdings: A Cross-Country Analysis”, with Lee Pinkowitz and René M. Stulz.

“Openness and Investor Protection” with René M. Stulz

## **SELECTED CONFERENCE PRESENTATIONS**

American Finance Association, 2007, *Banks’ Use of Credit Derivatives*

American Finance Association, 2003, *Corporate Governance and the Home Bias*

Eastern Finance Association, 2002, *What is a Dollar Worth? The Market Value of Cash Holdings*

Washington Area Finance Association, 2002, *Corporate Governance and the Home Bias*

International Finance Conference, Georgia Institute of Technology, 2001, *Culture, Openness, and Finance*

International Finance Conference, Georgia Institute of Technology, 2000, *An International Comparison of Exchange Rate Exposure*

Financial Management Association, 1998, *Bank Power and Cash Holdings: Evidence from Japan*

The American Finance Association, 1998, *The Determinants and Implications of Corporate Cash Holdings*

The Western Finance Association, 1997, *Exchange Rate Exposure, Competitiveness and Firm Valuation: Evidence from the World Automotive Industry*

International Finance Conference, Georgia Institute of Technology, 1997, *Exchange Rate Exposure, Competitiveness and Firm Valuation: Evidence from the World Automotive Industry*

## **COURSES TAUGHT**

International Finance (Undergraduate)

International Finance (MBA)

Advanced Corporate Finance (MBA)

International Corporate Finance (Executive)

Managing Foreign Exchange Risk (Executive, International Executive)

Financial Management (Executive)

## **HONORS AND AFFILIATIONS**

Winner of the 2003 William F. Sharpe Award for best paper published in the Journal of Financial and Quantitative Analysis

Faculty Research Award, 2003

Dean's Fellowship, 2003-2005

Holowesko Fellow, 2005-2009

American Finance Association - Nominating Committee, 2003

Steers Faculty Research Fellow, 2002, 2003

Summer Academic Research Grant, 2000, 2001

Winner of the 1999 Jensen Prize for best paper in Corporate Finance and Organizations published in the Journal of Financial Economics

Junior Faculty Fellowship (Georgetown University)

American Finance Association

Financial Management Association

General Electric Faculty Development Fellow, The Ohio State University

Ohio State University Pace Setters Award

Ohio State University Dean's Fellow

Beta Gamma Sigma

## **CONFERENCE PARTICIPATION**

Western Finance Association, 2004-2005- Discussant

Western Finance Association, 2003-2006 - Program Committee

Financial Management Association Program Committee 2004-2005

Washington Area Finance Association, 2002 - Discussant

Eastern Finance Association, 2002 - Discussant  
Financial Management Association, 2001 - Discussant  
Financial Management Association, Europe 2000 - Program Committee  
American Finance Association, 1998 - Session Chair  
Financial Management Association, 1998 - Discussant

## **REFEREE**

The Journal of Finance  
The Journal of Financial Economics  
Review of Financial Studies  
Journal of Financial and Quantitative Analysis  
Financial Management  
Journal of Money Credit and Banking  
Journal of International Economics  
Pacific-Basin Finance Journal  
Review of Financial Economics  
Journal of Corporate Finance  
Journal of International Financial Management and Accounting

## **OTHER RELEVANT POSITIONS**

Copy Editor, Journal of Finance  
Financial Analyst, Chrysler Corporation  
Aircraft Research Engineer, Lockheed Corporation

## REENA AGGARWAL

McDonough School of Business  
Georgetown University, Washington, D.C. 20057

(202) 687-3784  
[aggarwal@georgetown.edu](mailto:aggarwal@georgetown.edu)

**EDUCATION:** Ph.D. in Finance, University of Maryland  
M.M.S. (Master of Management Studies), an integrated Engineering-cum-Business Management five-year degree, B.I.T.S., Pilani, India.

### POSITIONS:

1986- Present Professor of Finance (2000-present); Associate Professor (1992-2000); Assistant Professor (1986-1992), McDonough School of Business, Georgetown University  
2004-2005 Interim Dean and Deputy Dean (2006-present)  
2005-2006 Visiting Professor Finance, Sloan School of Management, MIT  
2003, 2004 Visiting Scholar, International Monetary Fund (Aug-Dec, 2003, Nov-Jan, 2004)  
1997-1999 Senior Research Scholar, U.S. Securities and Exchange Commission, Washington, D.C. (including part-time consultant for five months)

### GRANTS/AWARDS/HONORS:

2003-Present Ann and Thomas Stallkamp Faculty Fellow  
2003 Allan N. Nash Distinguished Doctoral Graduate Award, University of Maryland  
2003 Senior Faculty Research Fellowship (university-wide competition), Georgetown Univ.  
2002 Paper nominated for the best paper in corporate finance published in *Journal of Finance*  
2000 Paper nominated for the best paper in corporate finance published in *Journal of Finance*  
2000, 1999 Faculty Research Award, McDonough School of Business, Georgetown University  
2002-1999, 1997-87 McDonough School of Business Summer Research Grant  
2004, 2002, 1999, 1990, 1989 Georgetown University, Graduate School of Art and Science, Summer Research Grant  
1994, 1993, 1992 Center for International Business Education and Research Grant  
1992, 1991 Fulbright Scholar Award (Brazil, Chile), invited to do research work on Latin American Capital Markets, New Issues, and Privatization  
1991 U.S. Department of Defense Grant (co-author)  
1988 U.S. Small Business Administration Financial Research Grant, (with P. Rivoli)  
1986 Superior Presentation Award, Financial Management Association  
1985 Dr. Raval Memorial Award for Outstanding Scholastic Achievement  
1983 Doctoral Dissertation Research Award, University of Maryland

**CONSULTING:** Credit Suisse, Wachovia, Wilmer, Cutler & Pickering, NERA Economic Research, U.S. SEC, The Nasdaq Stock Market, Fidelity, Bechtel, World Bank, IFC, OPIC, Governments of Mexico, Peru, Ecuador (all IDB projects) and India, United Nations, U.S. AID projects, Government of China and OECD. Consultant on matters including IPOs, investment banking industry, stock prices, valuation and market microstructure. Serve on the Board of FBR Funds and on the Advisory Board of Pulsemetrics.

### RESEARCH ACTIVITIES:

#### Published Articles

“ADR Holdings of U.S.-Based Emerging Market Funds,” (with Leora Klapper and Sandeep Dahiya), *Journal of Banking and Finance*, 31, 6, 1649–1667, 2007.

“Demutualization and Public Offerings of Financial Exchanges,” (with Sandeep Dahiya), *Journal of Applied Corporate Finance*, 18, 3, 96-103, Summer 2006.

“Portfolio Preferences of Foreign Institutional Investors,” (with Leora Klapper and Peter Wysocki), *Journal of Banking and Finance* 29, 12, 2919-2946, 2005. (lead article).

“Allocation of Initial Public Offering and Flipping Activity,” *Journal of Financial Economics*, 68, 1, 111-135, 2003. (Summarized in *CFA Digest*, November 2003).

“Demutualization and Corporate Governance of Stock Exchanges,” *Journal of Applied Corporate Finance*, 15, 1, 105-113, Spring 2002.

“Allocation and Price Support in IPOs: Who Benefits?” *Journal of Finance* (with Manju Puri and N. Prabhala), 57, 3, 1421-1442, June 2002. (Nominated for the best paper in corporate finance published in *JF* 2002).

“Stabilization Activities by Underwriters after New Offerings,” *Journal of Finance*, (Nominated for the best paper in corporate finance published in *JF* 2000; Summarized in *CFA Digest*, February 2001), 55, 3, 1075-1103, June 2000.

“Price Discovery in Initial Public Offerings and Role of the Lead Underwriter,” (with Pat Conroy), *Journal of Finance*, 55, 6, 2903-2922, December 2000.

“Capital Formation and the Internet,” (with Sandeep Dahiya), *Journal of Applied Corporate Finance*, 13, 1, 108-113, Spring 2000.

“The Rise and Fall of the AMEX Emerging Company Marketplace,” (with Jim Angel), *Journal of Financial Economics*, 52, 257-289, 1999.

“Equity Performance of Firms Emerging from Bankruptcy,” (with Allan Eberhart and Ed Altman), *Journal of Finance*, 54, 5, 1855-1868, October 1999.

“Volatility in Emerging Markets,” (with Carla Inclan and Ricardo Leal), *Journal of Financial and Quantitative Analysis*, 34, 1, 33-55. March 1999.

“Capital Raising in the Offshore Market,” (with Ian Gray and Hal Singer), *Journal of Banking and Finance*, 23, 1181-1194, 1999.

“Detecting Volatility Changes Across the Oil Sector,” (with Carla Inclan and Berry Wilson), *Journal of Futures Markets*, 16, 3, 313-330, 1996.

“Linkages and Volatility in Emerging Capital Markets,” in *Portfolio Management and Hedging Strategies in Emerging Capital Markets*, Irwin, 1996.

“Integration and Anomalies in the Emerging Markets of Asia and Latin America,” (with Ricardo Leal), In *Research in International Business and Finance*, edited by John Doukas and Larry Lang. Greenwich, CT: JAI Press Inc., 75-99, 1996.

“Explaining the Underpricing of Initial Public Offerings: Evidence from Switzerland,” (with Roger Kunz), *Journal of Banking and Finance*, 18, 705-723, 1994.

"The Aftermarket Performance of Initial Public Offerings in Latin America," (with Ricardo Leal and Leonardo Hernandez), *Financial Management*, 42-53, Spring 1993.

"Distribution of Equity Returns and Market Structure: Evidence from the NYSE/AMEX and the NASDAQ Markets," (with Raj Aggarwal), *Journal of Financial Research*, 209-220, Fall 1993.

"Evaluating the Costs of Raising Capital through an Initial Public Offering," (with P. Rivoli), *Journal of Business Venturing*, 351-361, September 1991. Summary, "Smaller IPOs Cost More to Market," Reprinted in *Bowne Review for CFOs & Investment Bankers*, November 1991.

"Fads in the Initial Public Offering Market?" (with P. Rivoli), *Financial Management*, 45-57, Winter 1990. Summary, "Study Examines IPO Price Run-Ups," Reprinted in *Bowne Review for CFOs & Investment Bankers*, April 1991.

"The Adjustment of Stock Returns to Block Trading Information," (with Son-Nan Chen), *Quarterly Journal of Business and Economics*, Winter 1990, 46-56.

"Seasonal and Day-of-the-Week Effects in Four Emerging Stock Markets," (with P. Rivoli), *The Financial Review*, November 1989, 541-550.

"The Relationship between the U.S. and Four Asian Stock Markets," (with P. Rivoli), *ASEAN Economic Bulletin*, July 1989, 110-117. Abstract Reprinted in *Asian Pacific Economic Literature*, March 1990.

"Stock Splits and Return Volatility," (with Son-Nan Chen), *Akron Business and Economic Review*, Fall 1989, 89-99.

"Stock Index Futures and Cash Market Volatility," *The Review of Futures Markets*, Vol. 7 (1988), 290-299.

"Optimal Portfolio Selection and Uncertain Inflation," (with Son-Nan Chen), *The Journal of Portfolio Management*, Fall 1986, 44-49.

#### Other Publications.

"Stabilization Activities by Underwriters after Seasoned Equity Offerings," (with N. Prabhala), work-in-process.

"Ownership Structure and Initial Public Offerings," (with Leora Klapper).

"The Role of Institutional Investors in Corporate Governance," (with Leora Klapper). Prepared for the Global Corporate Governance Forum, 2003.

"Nurturing the IPO Market and Capital Market Development," *The Future of Capital Markets in Developing Countries*, Editors Robert E. Litan, Michael Pomerleano and V. Sundararajan, World Bank, IMF, and Brookings Institution Conference, Brookings Institutions Press, 2003, 215-232.

"Globalization, Technology, and Regulation in Capital Markets: Strategies for Latin America and Caribbean," *Focus on Capital*, Editors Kenroy Dowers and Pietro Masci, Inter-American Development Bank and The Johns Hopkins University Press, 2003, 37-64.

"Integrating Emerging Market Countries into the Global Financial System: Regulatory Infrastructure Covering Financial Markets," *Brookings-Wharton Papers on Financial Services*, Editors Robert E. Litan and Richard Herring, Brookings Institutions Press, 2001, 55-76.

“Stock Market Development: Role of Securities Firms and New Products,” prepared for the World Bank workshop on Non-Bank Financial Institutions: Development and Regulation, January 31-February 4, 2000.

“Financial Fraud and Economic Collapse,” (with Demir Yener), paper prepared for the World Bank and OECD workshop on Economic Reform, Securities Market Development, and Fraud, May 1999.

“Corporate Credit Unions,” Chapter in Credit Union Insurance and Regulation, Georgetown University, 1997.

“Project Financing,” (with Ricardo Leal) The Blackwell Encyclopedic Dictionary of Finance, 1997.

“An Evaluation of Market Microstructures,” Background paper prepared for Private Capital Flows and Financial Integration, International Economics Department, The World Bank, 1996.

"Privatizacao: Licoes Uteis Na Hora do Brasil," (with R. Leal), Rumos, July/August 1991.

"As Oportuidades Nos Mercados Financeiros Globais," (with R. Leal), Informativo do Instituto Brasileiro de Mercado de Capitais, July/August 1991.

"Evaluating the Expenses of a New Equity Issue," Proceedings of the Second Small Firm Financial Research Symposium, 1990.

"Theory and Practice in the Market for Initial Public Offerings," (with P. Rivoli), Proceedings of the Small Firm Financial Research Symposium, 1989.

"On the Relationship Between the United States and the Asian Stock Markets," (with P. Rivoli), Proceedings of the Pacific-Asian Management Conference, 1989.

"Globalization of Financial Markets," Foreign Trade Review, April-June, 1989.

"January Effect Under Scrutiny," (with P. Rivoli), Pension and Investment Age, May 1988.

"Foreign Debt Restructurings - The Mexican Plan," CIB&T Analyst, Center for International Business and Trade, Georgetown University, March-April 1988.

"On Increasing the Viability of Going Public for the Small Firm," (with P. Rivoli), U.S. Small Business Administration Financial Research Grant Report, 1988.

## **Presentations**

Discussant - Conference on Small and Medium Enterprises, October 2004, The World Bank.

“ADR Holdings of U.S. Mutual Funds,” (with Sandeep Dahiya and Leora Klapper), Darden, University of Virginia, May 2004, Georgetown Workshop Series, April 2004.

“Portfolio Preferences of Foreign Institutional Investors,” (with Leora Klapper and Peter Wysocki), Boston College, November 2003, University of Colorado, IMF, September 2003, World Bank, June 2003, Ninth Annual Conference on International Finance, Georgia Tech/Fortis, April 2003, University of Texas AIM Conference, March 2003, Penn State University, March 2003, American University, April 2003, Yale University, November 2002; University of Alabama, November 2002; University of Florida, October 2002; Georgetown Workshop Series, October 2002.

“Capital Market Development and “Nurturing” the IPO Market,” at the World Bank, IMF, Brookings Institution Conference on "The Future of Domestic Capital Markets in Developing Countries," April 2003, Washington DC.

Panelist at the U.S. Securities and Exchange Commission’s International Institute on Legal Framework for Capital Market Development, Washington DC, April 2004.

Panelist at the NASD’s Spring Securities Conference on Current Issues in Investment Banking, Hollywood, Florida, May 2003.

Panelist at the U.S. Securities and Exchange Commission’s International Institute on Policy Frameworks for Capital Market Development, Washington DC, April 2003.

“Ownership Structure and Initial Public Offerings,” (with Leora Klapper), Eighth Annual Conference on International Finance, Georgia Tech/Fortis, April 2002; Financial Management Association Annual Meeting, October 2002.

“Stabilization Activities by Underwriters after Seasoned Equity Offerings,” (with N. Prabhala), Georgetown Summer Seminar Series, Summer 2002.

“International Corporate Governance,” Panelist, Eastern Finance Association Annual meeting, Baltimore, April 2002.

“The Future of Research on Corporate Governance in Emerging Markets: Role of Institutional Investors,” Research Network Meeting, Global Corporate Governance Forum, The World Bank, April 5, 2002.

“Institutional Investment in Developing Countries – Corporate Governance,” U.S. SEC International Institute, May 1, 2002.

“Allocation of Initial Public Offering and Flipping Activity,” presented at MSB, Georgetown University Summer Seminar Series, 2000; US Securities and Exchange Commission, Fall 2000; NASD, Fall 2000; University of Notre Dame, 2000; Financial Management Association Annual Meeting, October 2001.

“Allocation and Price Support in IPOs: Who Benefits?” (with Manju Puri and N. Prabhala) paper presented at Western Finance Association Annual Meeting, June 2001, MSB, Georgetown University Summer Seminar Series, 2000

“Integrating Emerging Market Countries into the Global Financial System: Regulatory Infrastructure Covering Financial Markets,” paper presented at The Brookings-Wharton Conference on Financial Services, January 2001.

“Capital Market Development: Strategies for Latin America and Caribbean,” paper presented at Inter-American Development Bank’s Conference, “A New Focus for Capital Market Development in Latin America and the Caribbean,” February 2001.

“Stock Market Development: Role of Securities Firms and New Products,” paper presented at the World Bank Workshop on Non-Bank Financial Institutions: Development and Regulation, January 31-February 4, 2000.

“Price Discovery in Initial Public Offerings and Role of the Lead Underwriter,” at NASD, 1999, U.S. SEC, 1998 and NASD and European Financial Management Association, 1999.

“Stabilization Activities by Underwriters after New Offerings,” at NASD, U.S. SEC, Georgetown University Finance Seminar Series, 1998, American Finance Association Annual Meetings, 1999, Federal Reserve Bank of Chicago and DePaul University Seminar, 1999.

“International Financial Crisis,” Fidelity Investments, September 1998.

“International Financial Crisis- Implications for Regulation of Stock Markets,” U.S. SEC International Institute, 1998.

“Volatility in Emerging Markets,” The Merrill Lynch Center, Hofstra University, 1998.

“Can Volatility be Managed?” Alternative Market Microstructures Conference, Georgetown University, 1998.

“Optimal Listing Policy: Why Intel and Microsoft Do Not List on the NYSE, (with Jim Angel) at NBER Conference, December 1998 and Financial Management Association Annual Meeting, 1997.

“Investing in Emerging Markets,” U.S. SEC International Institute, 1997.

“An Evaluation of Market Microstructure,” Alternative Structures for Securities Markets, September 1997.

Detecting Volatility Changes Across the Oil Sector," (with Carla Inclan and Berry Wilson) at Financial Management Association Annual Meeting, 1995.

"The Rise and Fall of the AMEX Emerging Company Marketplace," (with Jim Angel) at U.S. Securities and Exchange Commission, 1997 and at Alternative Structures for Securities Markets, September 1995, and at the Competition for Order Flow conference, October 1995.

Detecting Volatility Changes Across the Oil Sector," (with Carla Inclan and Berry Wilson) at Financial Management Association Annual Meeting, 1995.

"Linkages and Sudden Changes in Variance in Emerging Markets," (with Carla Inclan and Ricardo Leal) at the European Financial Management Association Annual Meeting, June 1995 and at Multinational Financial Management Association Annual Meeting, 1995.

"Latin American Capital Markets," The Miami Summit and Beyond: Opportunities and Challenges for the Private Sector, Georgetown University, Washington D.C., 1994.

"Differences in P/Es and P/Bs of NASDAQ and NYSE Stocks," at U.S. SEC in May 1995 and at Financial Management Association Annual Meetings, St. Louis, 1994.

"Equity Performance of Firms Emerging from Bankruptcy," (with A. Eberhart and E. Altman), Financial Management Association Annual Meetings, St. Louis, 1994.

"The German New Issues Market and the Role of Universal Banking," European Financial Management Association Annual Meeting, Maastricht, 1994.

"International Market Linkages and Common Volatility in Emerging Markets of Asia and Latin America," (with Carla Inclan and R. Leal) Multinational Financial Management Association Annual Meeting, Atlantic City, 1994.

"Factor Structure of Oil and Gas Producing Companies, Partnerships, and Trusts," (with Berry Wilson and Carla Inclan) Commodities Futures Trading Commission, 1994 and Eastern Finance Association, 1993.

"Order-Driven versus Quote-Driven Trading Systems: The Case of the AMEX Emerging Company Marketplace," (with Jim Angel) Financial Management Association Annual Meetings, Toronto, 1993.

"Capital Market Integration in Asian and Latin American Emerging Markets," (with Ricardo Leal) Financial Management Association Annual Meetings, Toronto, 1993 and Northern Finance Association Annual Meeting, Halifax, 1993.

"Corporate Equity and Debt Security Financing," International Institute for Securities Market Development, U.S. Securities and Exchange Commission, May 1993.

"Explaining the Underpricing of Initial Public Offerings: Evidence from Switzerland," (with Roger Kunz) Financial Management Association Annual Meetings, San Francisco, 1992.

"The Aftermarket Performance of Initial Public Offerings in Latin America," (with Ricardo Leal and Leonardo Hernandez) Financial Management Association Annual Meetings, San Francisco, 1992.

"The Aftermarket Performance of Initial Public Offerings in Latin America," (with Ricardo Leal and Leonardo Hernandez) Eastern Finance Association Annual Meetings, Tampa, 1992.

"Equity Performance of Firms Emerging from Bankruptcy," (with A. Eberhart), Financial Distress and Bankruptcy Workshop, Georgetown University, May 1991.

"Initial Public Offerings and Aftermarket Performance," Financial Management Association Meetings, Chicago, Illinois, October 1991.

"Long-Term Price Behavior of Initial Public Offerings," (with P. Rivoli), Eastern Finance Association Meetings, Charleston, South Carolina, April 1990 and at American University, Spring 1991.

"Theory and Practice in the Market for Initial Public Offerings," with P. Rivoli, U.S. Securities and Exchange Commission, Washington, D.C., March 1990, at Georgetown University, Fall 1990, and at Small Firm Financial Research Symposium, Fresno, California, April 1989.

"Seasonal and Day of the Week Effects in Four Asian Stock Markets," (with P. Rivoli), Southern Finance Association Annual, Orlando, Florida, November 1989.

"Evaluating the Expenses of a New Equity Issue," Second Small Firm Financial Research Symposium, Fresno, California, April 1989.

"Stock Index Futures and Cash Market Volatility," Eastern Finance Association Meetings, Bal Harbour, Florida, April 1988.

"On Increasing the Viability of Going Public for the Small Firm," (with P. Rivoli), U.S. Small Business Administration, March, 1988.

"On the Relationship Between the United States and Asian Markets," (with P. Rivoli), Pacific-Asian Management Conference, Honolulu, Hawaii, January 1988.

"Merger and Acquisition Proposal Announcements and Price Adjustments," Eastern Finance Association Meetings, Nashville, Tennessee, April 1986.

"The Speed of Adjustment of Stock Prices to Block Trading Information," Eastern Finance Association Meetings, Williamsburg, Virginia, April 1985.

## **Participation at Professional Meetings**

Program Committee, Western Finance Association, 2004, 2003, American Finance Association, 2004, 2003, Financial Management Association U.S., 2004 (Chair, International Track), 2003, Financial Management Association Europe, 2004, 2003, European Finance Association, 2004, 2003

Discussant WFA 2004

Chair, IPO Session, American Finance Association, 2003

Discussant, University of Maryland Finance Symposium, November 2002

Program Committee, Review of Financial Studies/Northwestern University Conference on Investments in Imperfect Capital Markets, April 2002.

Program Committee, U.S. Conference, Financial Management Association International, 1995-2003

Program Committee, European Conference, Financial Management Association International, 1999-2001, 2003

Board of Directors, Financial Management Association, 2004-2002

Vice President, Global Services, Financial Management Association International, 1999-2001

Board of Directors, Eastern Finance Association, 2000, 2001

Conference Chair, Annual Alternative Structures for Securities Markets, sponsored by The Nasdaq Stock Market, 2002-1995

Conference Chair, India Forum, Georgetown CIBER, 1995

Panelist on "Investing in Emerging Markets," U.S. SEC International Institute for Market Development, May 1995.

Chairperson, Cross-Border Acquisitions, Financial Management Association, 1991

Chairperson, Market Efficiency and Anomalies, Eastern Finance Association, 1991

Chairperson, Stock Exchange Listing and Structure, Eastern Finance Association, 1991

Chairperson, Efficiency in Futures Market, Eastern Finance Association, 1990

Panelist, Research Issues in Emerging Markets, Financial Management Association, 1991

Panel Moderator and Organizer, Issues in Stock Market Volatility, Eastern Finance Association, 1991

Discussant, "The Response of the Securities Industry to Deregulation," Eastern Finance Association, 1987.

Discussant, "The Impact of Dividend Capture on Public Utility Stock Prices Around the Ex-Dividend Date," Financial Management Association, 1986

Discussant, "Research on Publicly Traded Funds and Market Efficiency," Southern Finance Association, 1985

Discussant, "Relative Strength as an Aid to PE Ratios in Selecting Stocks," Financial Management Association,

## **PROFESSIONAL SERVICES:**

Editorial Board, *European Financial Management Journal*, *Global Finance Journal*, *Journal of Financial Research*, *International Quarterly Journal of Finance*, *Istanbul Stock Exchange Review*, *Financial Review*

Advisory Board, *The Merrill Lynch Center for the Study of International Financial Services and Markets*

Vice President - Global Services, Financial Management Association, 1996-1999

Ad-hoc Reviewer for, National Science Foundation, *Journal of Finance*, *Review of Financial Studies*, *American Economic Review*, *Journal of Financial and Quantitative Analysis*, *Journal of Financial Intermediation*, *Financial Management*, *Journal of Banking and Finance*, *Journal of Financial Research*, *Journal of International Money and Finance*, *The European Journal of Finance*, *European Financial Management*, *Financial Review*, *Global Finance Journal*, *Quarterly Journal of Business and Economics*, *Economic Inquiry*, *Review of Quantitative Finance and Accounting*

