

Corporate Governance and International Portfolio Investment in Equities

JINSOO LEE*

*KDI School of Public Policy and Management
Seoul, Korea*

SEONGWUK MOON**

*KDI School of Public Policy and Management
Seoul, Korea*

Abstract

Previous articles examined international portfolio investments either by a single investor or to a single destination. We examine the determinants of international equity investment patterns using multiple pairs of source and host countries. Specifically, we investigate how the corporate governance institutions in investing and recipient countries are associated to equity investment and divestiture using the 2006 and 2008 Coordinated Portfolio Investment Survey (CPIS) data. We find that source countries buy equities in host countries with strong governance more than in host countries with weak governance. We also find that investors from strong governance countries disproportionately sell more their equities in weak governance countries during the recent economic crisis. However, investors from weak governance countries do not demonstrate such divestiture pattern.

Keywords: Corporate Governance, International Portfolio Investment in Equities

* KDI School of Public Policy and Management, 87 Hoegiro, Dongdaemun-gu, Seoul, 130-868, Korea (jlee@kdischool.ac.kr).

** KDI School of Public Policy and Management, 87 Hoegiro, Dongdaemun-gu, Seoul, 130-868, Korea (swmoon@kdischool.ac.kr).

INTRODUCTION

The determinants of international equity investment patterns between countries have been one of the fundamental issues in international finance. Although traditional capital asset pricing model (CAPM) predicts the difference in returns and risks of international stock markets as the main force of international equity investments, empirical articles have pointed out that some patterns exist in bilateral international investment, for instance “home bias,” which CAPM approach cannot fully explain. Recent studies suggest that either imperfections in product market or frictions in asset market affect the bilateral equity investment patterns (Obstfeld and Rogoff 2001; Martin and Rey 2004; Lane and Milesi-Ferretti 2008). Corporate governance may be one of such frictions which drive the bilateral international portfolio investment.

Finance scholars have examined the role of corporate governance in portfolio investment. As Shleifer and Vishny (1997) put it, “corporate governance deals with the ways in which suppliers of finance to corporations assure themselves of getting a return on their investment.”¹⁾ Thus, when corporate governance of a firm is so weak that portfolio investors cannot be properly protected, they fear that there may be an expropriation by either management or controlling shareholders. In such case, portfolio investors may avoid or decrease investment in the firm.

In line with this argument, previous empirical studies provide evidence that international portfolio investors may invest less in a country or a firm with poorer corporate governance. For example, Aggarwal, Klapper, and Wysocki (2005) find that U.S. mutual funds invest less in emerging markets with weaker shareholder rights. Leuz, Lins, and Warnock (2009) also report that U.S. investors invest less in a foreign firm with higher levels of managerial and family controls, when the firm is located in a country with poor investor protection and disclosure rules. In addition, Giannetti and Simonov (2006) find that foreign investors are reluctant to invest in Swedish firms with weak corporate governance. However, a recent study by Kim, Sung, and Wei (2008) suggest that corporate governance of a firm or a country may not be a concern for a certain type of

1) Shleifer and Vishny 1997 p. 737.

international investors. They examine foreign investors' holdings of Korean stocks and find that international investors from a country with low degree of control-ownership disparity (presumably, a country which provides strong investor protection, such as the U.S.) indeed tend to invest less in a Korean firm with higher degree of control-ownership disparity. However, they don't find such tendency among international investors from a country with high degree of control-ownership disparity (such as Italy): those investors are indifferent between Korean firms with high disparity and those with low disparity.

Although the aforementioned literature provides valuable insight into the role of corporate governance in international portfolio investment, most of the previous studies focus on either a single country or a specific region as their experimental venue.²⁾ In addition, as Kim, Sung, and Wei (2008) suggest, it is not clear yet whether international investors from weak governance countries are also concerned about corporate governance of host countries. Thus, we examine the role of corporate governance in international portfolio investment in more general environment and study whether research findings from one country case still hold in the multi-countries setting.

Specifically, in this exploratory study, we examine whether international portfolio investors invest less in equities of a country with weaker corporate governance using multiple pairs of source and host countries. For this purpose, we use data from the Coordinated Portfolio Investment Survey (CPIS), sponsored by the IMF, where the information on the balance of foreign portfolio investment is available for more than 70 countries. Participants of the survey includes countries with strong corporate governance (such as the U.S., U.K., Germany and Sweden), and countries with weak corporate governance (such as Russia, Argentina, and Venezuela). Countries which host portfolio investments are also divergent in terms of corporate governance. Therefore, using the CPIS data, we are better able to study the effect of corporate governance on foreign

2) A notable exception is Chan, Covrig, and Ng (2005). They study stock portfolios of more than 20,000 mutual funds in 26 countries and find that those mutual funds invest less in markets with weaker investor rights. However, since most of the 26 countries can be categorized as developed countries with strong corporate governance, their results may not hold for countries with weak corporate governance.

portfolio investment.

As a related issue, we also examine whether international portfolio investors have withdrawn their equity investment more from countries with weaker corporate governance during the recent economic crisis. Previous literature suggests that as a firm's prospect is worsened in an economic crisis, controlling shareholders have more incentive to expropriate portfolio investors. Having realized the possibility of more expropriation by controlling shareholders, portfolio investors reduce their investment in a firm with poor corporate governance and thus stock price of such firm exhibits a large fall during a crisis. Consistent with this projection, Johnson, Boone, Breach and Friedman (2000) report that stock market index of an emerging market with weaker corporate governance declined more during the Asian Crisis of 1997~98. Lemon and Lins (2003) also find that, during the Asian Crisis, stock returns of Asian firms where managers had control rights, but separated their control and cash flow ownership were 10~20 percent lower than those of their counterparts. In our study, we confirm whether a similar phenomenon during the recent crisis is observed with our larger sample.

The key findings of our paper can be summarized as follows. First, we find that international investors — regardless of the quality of their corporate governance institutions — buy equities in countries having strong corporate governance institutions more than in countries having weak corporate governance institutions. Thus, we conclude that corporate governance plays a role in international portfolio investment for investors from weak governance countries as well as investor from strong governance countries.

Second, during the recent economic crisis, investors from strong governance countries sell equities in weak governance countries disproportionately more than in strong governance countries as previous literature suggests. However, in our sample, investors from weak governance countries do not differentiate their divestiture based on the quality of host countries' governance institutions. It is a puzzle why investors from weak corporate countries have not withdrawn more from host countries with weak corporate governance during the recent economic crisis, although they differentiate host countries' corporate governance institutions for their investment in equities during a normal period. This warrants a further study in the future.

The rest of the paper is organized as follows. Section 2 describes our empirical strategy. Section 3 explains data, and Section 4 provides the empirical analyses of the relationship between corporate governance and international portfolio investment in equities. Section 5 provides summary and conclusion.

EMPIRICAL STRATEGY

We investigate the effect of corporate governance institutions in host and source countries on international equity investments. To do so, we model that the international equity investments by a source country are affected by (1) the source country's propensity for international investment (2) host countries' attractiveness and (3) the bilateral relationship between the source and host countries. Source countries vary in the propensity for international investments and host countries differ in their attractiveness as the destination of equity investment (Lane and Milesi-Ferretti (2008)). Thus, our initial model is as follows:

$$Inv_{sh} = \beta_1 G_h + \beta_2 X_{sh} + \alpha_s + \alpha_h + \varepsilon_{sh},$$

Source s : 1, ..., S, Host h : 1, ..., H

where Inv_{sh} is the level of equity investment of source country s in host country h , G_h is a "corporate governance" variable, which is our main independent variable. A vector of X_{sh} contains variables controlling for the bilateral relationship between source and host countries, α_s represents control variables influencing international investments of source country s , α_h represents control variables influencing the attractiveness of host country h , and ε_{sh} is an idiosyncratic error.

When we estimate the effect of corporate governance institutions of host countries on international portfolio investments, we have to address a possibility that investment by source country s_1 to host country h_1 may be correlated to investment by source country s_1 to host country h_2 . For example, source country's specific factors — such as financial regulation or investor's specific preference — can influence its international investments simultaneously across different host countries.

Thus, we use a “cluster sample method” which is a general version of a short panel data method (Wooldridge 2003; Cameron and Trivedi 2005, 2009) for the estimation of coefficients.³⁾ In the cluster sample method, each source country is regarded as a “cluster” — corresponding to cross-sectional unit in a panel data — and host countries for a given source country are regarded as “members” of the cluster — corresponding to temporal unit in a panel data. The cluster sample method can address the “within-cluster” correlation — correlation among investments from a given source country to different host countries — in a general level. Moreover, as in a fixed effect model of the panel data, unobserved heterogeneity of a source country can be addressed by a fixed effect estimation of the cluster sample method.

Also, we need to address unobserved heterogeneity in the attractiveness of host countries. However, unlike the unobserved heterogeneity of source countries, when we address the unobserved attractiveness of host country using the host country’s fixed effect approach, a strong multi-collinearity problem between the fixed effect variable and governance variable will arise. This is because the corporate governance institution of a host country is a part of the host country’s attractiveness variables. Thus, instead of including host country’s fixed effect in our specification, we use proxy variables in order to control for the unobserved attractiveness of a host country.

After considering all of these issues into account, our baseline specification becomes as follows:

$$Inv_{sh} = \beta_1 G_h + \beta_2 X_h + \beta_3 X_{sh} + \beta_4 X_s + \alpha_s + \varepsilon_{sh},$$

Source s : 1, ..., S, Host h : 1, ..., H

where Inv_{sh} is the level of equity investment of source country s in host country h , G_h is the corporate governance variable — which is our main independent variable, X_h is a vector of proxy variables controlling unobserved heterogeneous attractiveness of

3) For the similarity and difference between the cluster sample method and the panel data method, refer to Cameron and Trivedi (2005, 2009). According to them, “short-panel data can be viewed as a special case of clustered data” (Cameron and Trivedi (2009), p. 306). One difference is that there may be no temporal order among members within a cluster in the cluster sample method.

host countries, a vector of X_{sh} contains variables controlling for the bilateral relationship between source and host countries, X_s is a vector of variables controlling for the propensity of source country s for international investment, α_s is an unobservable fixed effect for international investments of source country s — which is addressed by the cluster sample method, and ε_{sh} is a idiosyncratic error. The coefficient of our interest is β_1 .

We also apply the traditional panel data method with two periods (2006 and 2008) to examine the effect of corporate governance on international investment. In this case, we use each source country as cross-sectional unit and year as temporal unit. In order to address the correlation across host countries within cross-sectional unit, we use various interaction terms.

To examine the effect of source country's corporate governance, we divide our sample into two sub-samples depending on whether a source country has "strong" corporate governance institutions or "weak" corporate governance institutions. We apply our baseline model to each subsample and compare the coefficients of corporate governance institutions between the two corporate governance regimes of source countries. We also examine whether the relationship between portfolio investments and corporate governance may differ across economic environments. Specifically, we examine the relationship in a "normal" period — i.e., before the 2007 economic crisis and in a "crisis" period — i.e., after the 2007 crisis.

DATA

International Portfolio Investment and Corporate Governance

For international portfolio investment in equities, we use data from the IMF's Coordinated Portfolio Investment Survey (CPIS) where information on the balance of foreign portfolio investment is available for more than 70 countries.⁴⁾⁵⁾ The survey started in

4) Some of non-sovereign regions such as Hong Kong participate in the survey. However, we use the term of 'country' rather than the term of 'economy', which is a terminology used by the IMF, because we just include sovereign countries in our sample.

5) The CPIS data has been widely used in previous studies including Warnock (2002),

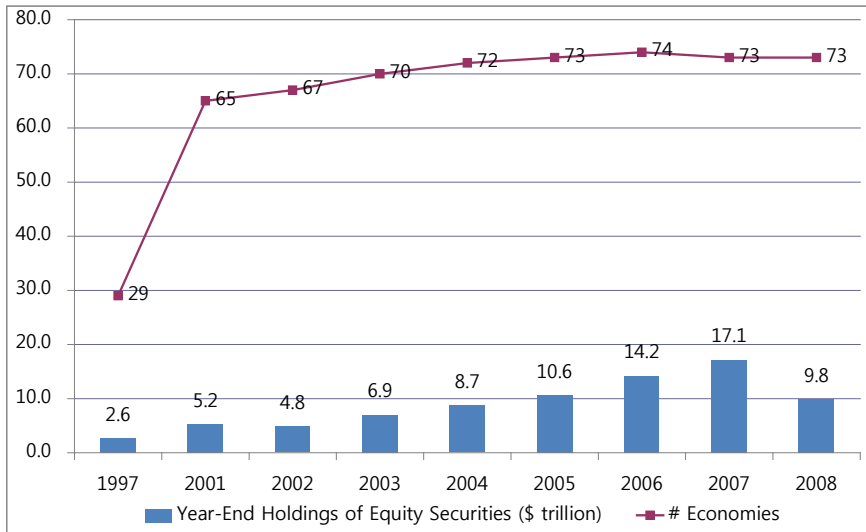


Figure 1. Number of Participating Countries and Their Year-End Holdings of Equity Securities in Coordinated Portfolio Investment Survey (CPIS)

1997 and has been annually conducted since 2001. The number of participating countries has increased over time, and 74 countries participated in the 2008 survey.⁶⁾ In the survey, each participating country reports data on foreign portfolio holdings for three asset categories such as equity, long-term and short-term debts by residence of issuers at the end of a year. We use foreign portfolio holdings of equities in this study. As shown in Figure 1, the number of participating countries has increased over time, and 73 countries report their balance of foreign equity investment at the end of 2008. The total amount of foreign equities held by participating countries shows an increasing tendency and peaked at \$17.1 trillion at the end of 2007. However, as the 2007 economic crisis spread to many countries in the middle of 2008, the balance of foreign equity investment by participating countries substantially decreased to \$9.8 trillion at the end of 2008.

For our study, we use the balance of foreign equity investment by each participating country at the end of 2006 and 2008. Since

Lane and Milesi-Ferretti (2007, 2008), and Imbs (2006).

6) The list of participating countries is available at <http://www.imf.org/external/np/sta/pi/part.asp>.

Table 1. Top Ten Countries of Foreign Portfolio Equity Assets and Liabilities at the End of Year 2006 and 2008

| | Assets (\$ billion) | | Liabilities (\$ billion) | |
|----|-----------------------------|----------------------------|-----------------------------|----------------------------|
| | Year-End 2006 | Year-End 2008 | Year-End 2006 | Year-End 2008 |
| 1 | United States (4,329.0) | United States (2,748.4) | United States (2,174.6) | United States (1,486.9) |
| 2 | United Kingdom (1,366.5) | United Kingdom (829.0) | United Kingdom (1,540.4) | Luxembourg (1,124.2) |
| 3 | Luxembourg (1,148.2) | Luxembourg (757.7) | Luxembourg (1,414.2) | United Kingdom (919.9) |
| 4 | Germany (928.2) | Germany (589.5) | Japan (1,101.4) | Japan (626.1) |
| 5 | France (743.0) | France (461.6) | France (849.7) | France (574.9) |
| 6 | Ireland (573.2) | Ireland (431.0) | Germany (691.2) | Germany (511.2) |
| 7 | Netherlands (558.1) | Netherlands (402.9) | Switzerland (551.1) | Cayman Islands (426.3) |
| 8 | Italy (534.9) | Japan (394.7) | Cayman Islands (507.3) | Switzerland (421.5) |
| 9 | Japan (510.4) | Canada (368.7) | Netherlands (642.4) | Bermuda (255.5) |
| 10 | Canada (499.6) | Switzerland (320.4) | Ireland (374.0) | Ireland (244.9) |

the correlations between the balances of foreign equity investment of earlier years and 2006 are very high,⁷⁾ and the current economic crisis started in 2007, we choose the balance at the end of 2006 to study a representative pattern of foreign equity investment during a normal period. Also, we study the balance of foreign equity investment at the end of 2008 in order to examine whether there is any change in the pattern of foreign equity investment during a crisis period. Table 1 reports top ten countries of portfolio equity assets and liabilities at the end of 2006 and 2008, respectively. The U.S. has the largest foreign assets and liabilities at the end of each year.

7) The correlations spans from 0.98 to 0.99.

In order to measure the quality of corporate governance for each country, we use a survey result in Global Competitiveness Report published by the World Economic Forum.⁸⁾ The World Economic Forum conducts an executive opinion survey every year on various aspects of business environment of countries. For this study, we use the results from 2006 and 2008 surveys because the 2006 and 2008 survey results reflect the perception of business leaders on corporate governance as of 2006 and 2008, respectively.⁹⁾ For each item in the survey, a survey participant evaluates the current condition of business environment in question on scale of 1 (worst) to 7 (best). As previous research finds that investor protection and disclosure rules are relevant in portfolio allocation of assets (Leuz, Lins, and Warnock 2009), we specifically choose four items from the survey as variables to proxy for the quality of corporate governance: (i) property rights (i.e., whether property rights are well defined and well protected), (ii) efficacy of corporate boards (i.e., whether investors and boards exert strong supervision of management), (iii) protection of minority shareholders' interests (i.e., whether interests of minority shareholders are protected by law and actively enforced), and (iv) strength of auditing and reporting standards (Global Competitiveness Report 2006, 2008). Then, we construct a "corporate governance index" variable for each country by averaging the four variables. If the index for a country is larger, corporate governance of the country is interpreted as stronger. Table 2 reports corporate governance index thus computed with the 2006 and 2008 survey results for our source countries. The number of our source countries is 53 for both 2006 and 2008.¹⁰⁾ In order to be included in our sample, a country should have information on international portfolio investment in equities and the quality of corporate governance.

We also collect information on other factors related to international portfolio investment, as described in Section 3.2, for our sample

8) Data from Global Competitive Report has been used in previous studies such as Wei (1997), Johnson, Kaufmann, and Zoido-Lobaton (1998), Van Stel, Carree, and Thurik (2005), and Cornelius (2005). Especially, Cornelius (2005) has used corporate governance variables similar to ours.

9) The numbers of participants in 2006 and 2008 surveys are 11,232 from 125 countries and 12,209 from 134 countries, respectively.

10) Alternatively, we have excluded four countries (Bahrain, Cyprus, Mauritius, and Luxembourg) from our sample because they are centers for offshore funds. The results of analyses without the four countries are qualitatively similar to those reported in this paper.

Table 2. Corporate Governance Index for Sample Countries in Year 2006 and Year 2008

| | Year 2006 | Year 2008 |
|-----------------------|--|--|
| High Governance Index | (20 Countries) UNITED KINGDOM (6.28), GERMANY (6.25), SWEDEN (6.25), DENMARK (6.20), FINLAND (6.13), AUSTRALIA (6.10), IRELAND (6.03), NETHERLANDS (6.00), AUSTRIA (5.98), ICELAND (5.98), NEW ZEALAND (5.95), NORWAY (5.88), SWITZERLAND (5.85), SOUTH AFRICA (5.85), CANADA (5.8), SINGAPORE (5.78), FRANCE (5.73), UNITED STATES (5.70), BELGIUM (5.68), LUXEMBOURG (5.63) | (20 Countries) SWEDEN (6.20), DENMARK (6.05), FINLAND (6.03), GERMANY (6.00), AUSTRALIA (6.00), AUSTRIA (6.00), NORWAY (6.00), SINGAPORE (6.00), NEW ZEALAND (5.98), IRELAND (5.95), CANADA (5.95), SWITZERLAND (5.90), NETHERLANDS (5.88), SOUTH AFRICA (5.85), ICELAND (5.78), UNITED STATES (5.73), LUXEMBOURG (5.70), BELGIUM (5.68), UNITED KINGDOM (5.65), FRANCE (5.63) |
| Low Governance Index | (33 Countries) INDIA (5.60), MALAYSIA (5.60), ISRAEL (5.50), JAPAN (5.45), CHILE (5.40), ESTONIA (5.25), MAURITIUS (5.20), HUNGARY (5.13), PORTUGAL (5.13), SPAIN (5.05), THAILAND (5.05), GREECE (5.00), BAHRAIN (4.95), CYPRUS (4.88), INDONESIA (4.83), COLOMBIA (4.68), CZECH REPUBLIC (4.68), KUWAIT (4.68), LATVIA (4.68), BRAZIL (4.65), KOREA (4.65), MEXICO (4.65), PHILIPPINES (4.6), TURKEY (4.60), ITALY (4.50), EGYPT (4.48), ROMANIA (4.13), PAKISTAN (4.08), POLAND (3.95), ARGENTINA (3.85), RUSSIA (3.75), BULGARIA (3.73), VENEZUELA (3.63) | (33 Countries) CHILE (5.48), MAURITIUS (5.45), BAHRAIN (5.43), MALAYSIA (5.40), JAPAN (5.40), ISRAEL (5.38), ESTONIA (5.33), KOREA (5.3), CYPRUS (5.25), INDIA (5.18), PORTUGAL (5.18), SPAIN (5.15), KUWAIT (4.98), BRAZIL (4.88), HUNGARY (4.83), THAILAND (4.83), GREECE (4.83), LATVIA (4.83), CZECH REPUBLIC (4.8), PHILIPPINES (4.73), INDONESIA (4.63), EGYPT (4.6), COLOMBIA (4.5), MEXICO (4.48), ROMANIA (4.35), PAKISTAN (4.33), POLAND (4.3), ITALY (4.28), TURKEY (4.18), KAZAKHSTAN (4.15), BULGARIA (4.03), RUSSIA (3.88), ARGENTINA (3.8) |

countries. Then, we divide our sample into two sub-samples using the value of governance index variable. The criterion for the sub-sampling is to have similar number of observations in each sub-sample: The cut-off value of governance index is 5.63 in both years. If a country has its governance index value larger than 5.63, the country is defined as a “strong” corporate governance country. If a country’s governance index value is less than 5.63, the country is defined as a “weak” corporate governance country.¹¹⁾ As shown in Table 2, a group of countries with high corporate governance index consists of 22 countries, while the other group of countries with low corporate governance index includes 33 countries for both years.

Other Factors Related to International Portfolio Investment

To control for economic factors other than corporate governance institutions, we use variables suggested in a gravity model and other models for foreign portfolio investment. A gravity model has been widely used for trade in goods since the 1960s.¹²⁾ The model explains trade in goods between two countries mainly by their GDPs and distance. Portes and Rey (2005) show that a gravity model can be applied to trade in financial assets as well. They find that international equity flows between two countries also depend on their market sizes and distance between them. Recently, Aviat and Coeurdacier (2007) and Lane and Milesi-Ferretti (2008) also show that a gravity model can explain international holdings of financial assets.

As suggested by a gravity model, source and host countries’ GDPs and distance between them are included in our model. GDP is a proxy for size of a country and distance is related to trading and information costs. Thus, the balance of international portfolio investment is expected to be larger when GDPs of source and host countries are larger. On the other hand, the balance of international portfolio investment is expected to be larger when the two countries are closer each other. GDPs for our sample countries are collected from World Development Indicators. Distance between two countries is computed as distance between their capital cities in kilometers,

11) We also use alternative criterion for the sub-sampling that each sub-sample has similar number of countries. The results of analyses with these alternative sub-samples are qualitatively similar to those presented in this paper.

12) Portes and Rey 2005 p.270.

which is obtained from Gleditsch's website.¹³⁾ We use the natural logarithms of GDP and distance as used in other studies.

Then, we include source and host countries' stock market capitalizations. Stock market capitalization of a country measures the size of the country's stock market. In addition, if international capital asset pricing model (ICAPM) holds, international equity holdings of a country should be proportional to stock market capitalizations of host countries. Thus, we expect that the balance of foreign portfolio investment has a positive relationship with both source and host countries' stock market capitalizations. Stock market capitalization of a country is collected from World Development Indicators. We also use the natural logarithm of stock market capitalization.

Next, trade in goods between source and host countries is considered. Aviat and Coeurdacier (2007) find that there is a complementarity between bilateral trade in goods and bilateral asset holdings: As bilateral trade in goods is larger between two countries, bilateral asset holdings of the two countries tend to be larger. Thus, we include source and host countries' trade in goods (export and import) in our analysis. Data on bilateral trade is obtained from the IMF's Direction of Trade Statistics. Again, we use the natural logarithms of export and import for a country.

We also include measures of "informational" or "cultural" proximity between two countries (Lane and Milesi-Ferretti 2008): (i) common language, (ii) former colonial relationship, (iii) common currency, and (iv) common legal origin. We expect that as two countries are closer in terms of these measures, bilateral asset holdings of the two countries will be larger. We use a dummy variable for each measure, which takes a value of one when both countries have common language, former colonial relationship, common currency, or common legal origin, and takes a value of zero, otherwise. The information on language, former colonial relationship, currency, and legal system for each country is gathered from the World Factbook.¹⁴⁾

Lastly, past performance of stock market and correlation between stock market returns are included. It is well known that stock

13) The data is available at <http://privatewww.essex.ac.uk/~ksg/data-5.html>.

14) The on-line version of the World Factbook is available at '<http://www.cia.gov/cia/publications/factbook/>'.

returns exhibit a property of short-term continuation (Jegadeesh and Titman 1993, 2001) and such phenomenon of momentum in stock returns are prevalent around the world (Griffin, Ji, and Martin 2003; Rouwenhorst 1998). Thus, given the momentum effect, international portfolio investors may buy more equities from a country where recent performance of the stock market is better. In addition, according to a finance theory, it is beneficial for international portfolio investors to spread their assets across countries so that they can diversify away country-specific risks. The benefit from international diversification would be greater when investors put their money into a country of which the correlation with their own country is smaller. Thus, international portfolio investors may invest more in a country which exhibits smaller correlation in stock returns with their own country (Forbes 2010; Lane and Milesi-Ferretti 2008). In our study, we use previous year's stock market returns as the recent performance of the stock market and compute correlation between two countries with monthly stock market returns of past three years. Data on stock market returns are collected from DataStream.

RESULTS

Corporate Governance and International Equity Investments

Table 3 reports our first result. The results show that source countries — both with strong and weak governance institutions — buy more equities in countries having strong corporate governance institutions than equities in countries having weak corporate governance institutions. The result holds in both the normal and crisis periods.

Panel A of Table 3 shows the result of year 2006, which is before the 2007 economic crisis and is regarded as a normal period. The coefficient on corporate governance index of host country is positive (0.64) and statistically significant at the 0.1% level. This suggests that investors buy more equities from host countries with strong corporate governance.

For all the four individual variables on corporate governance of host country, the coefficients are also positive and significant at the 0.1% level. However, the magnitude of the coefficients is different:

Table 3. Corporate Governance and Bilateral Portfolio Equity Holdings: Total Sample
Panel A: 2006

| Dependent Variable | Log (Balance of Portfolio Equity Investment at the End of Year 2006) | | | | |
|--|--|------------|------------|------------|------------|
| | | | | | |
| Governance Index (2006, Host) | 0.6390*** | | | | |
| Property Rights (2006, Host) | | 0.5316*** | | | |
| Corporate Boards (2006, Host) | | | 0.7044*** | | |
| Protection of Minority Shareholders (2006, Host) | | | | 0.3272*** | |
| Auditing and Reporting Standards (2006, Host) | | | | | 0.6420*** |
| Log GDP(2005, Host) | 0.3954*** | 0.4099*** | 0.3705*** | 0.3648*** | 0.4013*** |
| Log Market Cap (2005, Host) | 0.1375*** | 0.1343*** | 0.1417*** | 0.1473*** | 0.1136*** |
| Log Export (2005) | -0.1236 | -0.1321 | -0.1026 | -0.1235 | -0.1220 |
| Log Import (2005) | 0.2395*** | 0.2422*** | 0.2146*** | 0.2607*** | 0.2549*** |
| Log Distance | -0.5863*** | -0.5841*** | -0.5673*** | -0.5709*** | -0.5644*** |
| Common Language Dummy | 0.3832* | 0.4099* | 0.4244* | 0.4532** | 0.3217 |
| Colony Dummy | 0.4567 | 0.4858 | 0.4244 | 0.4904* | 0.4557 |
| Common Currency Dummy | 0.9151*** | 0.7974** | 1.0436*** | 1.0281*** | 0.9145*** |
| Common Legal Origin Dummy | 0.3520* | 0.3732* | 0.3139* | 0.2659 | 0.3684* |
| Stock Market Return (2005, Host) | -0.1668 | -0.3443 | -0.1598 | -0.2425 | -0.1195 |
| Correlation Between Stock Market Returns | 2.5985*** | 2.5010*** | 2.9002*** | 2.9667*** | 2.5833*** |
| Sample size | 1,556 | 1,556 | 1,556 | 1,556 | 1,556 |
| F-statistic | 136.1164 | 140.5992 | 124.9612 | 147.5209 | 138.7559 |
| R ² | 0.5267 | 0.5348 | 0.5206 | 0.5082 | 0.5296 |

1. We estimate “cluster-specific fixed effect” model with robust variance estimate allowing correlation within a cluster.

2. Legend: * p<.05; ** p<.01, ***p<.001.

Table 3. (continued)**Panel B: 2008**

| Dependent Variable | Log (Balance of Portfolio Equity Investment at the End of Year 2008) | | | | |
|--|--|------------|------------|------------|------------|
| | | | | | |
| Governance Index (2008, Host) | 0.8286*** | | | | |
| Property Rights (2008, Host) | | 0.5535*** | | | |
| Corporate Boards (2008, Host) | | | 0.8509*** | | |
| Protection of Minority Shareholders (2008, Host) | | | | 0.8671*** | |
| Auditing and Reporting Standards (2008, Host) | | | | | 0.6515*** |
| Log GDP(2007, Host) | 0.4235*** | 0.4015*** | 0.4602*** | 0.3432*** | 0.3899*** |
| Log Market Cap (2007, Host) | 0.1274*** | 0.1366*** | 0.1175*** | 0.1421*** | 0.1336*** |
| Log Export (2007) | -0.0845 | -0.0932 | -0.0888 | -0.0692 | -0.0853 |
| Log Import (2007) | 0.2290** | 0.2507*** | 0.2452*** | 0.2013** | 0.2526*** |
| Log Distance | -0.5958*** | -0.5474*** | -0.5867*** | -0.5917*** | -0.5818*** |
| Common Language Dummy | 0.2440 | 0.2819 | 0.2224 | 0.2370 | 0.2931 |
| Colony Dummy | 0.4325 | 0.4835* | 0.4015 | 0.3996 | 0.3977 |
| Common Currency Dummy | 1.0385*** | 0.9822*** | 1.0004*** | 1.2499*** | 1.0885*** |
| Common Legal Origin Dummy | 0.4847*** | 0.4802*** | 0.4800*** | 0.4505*** | 0.4307*** |
| Stock Market Return (2007, Host) | 0.9843*** | 1.1665*** | 0.9227*** | 0.8002** | 0.5592* |
| Correlation Between Stock Market Returns | 1.5352*** | 1.7621*** | 1.3443** | 1.9899*** | 1.5962*** |
| Sample size | 1,592 | 1,592 | 1,592 | 1,592 | 1,592 |
| F-statistic | 94.5836 | 91.8826 | 93.8501 | 90.5806 | 85.8788 |
| R ² | 0.4817 | 0.4772 | 0.4864 | 0.4708 | 0.4687 |

1. We estimate “cluster-specific fixed effect” model with robust variance estimate allowing correlation within a cluster.

2. Legend: * p<.05;** p<.01, ***p<.001.

The efficacy of investors' control for management decision in host countries (i.e., "corporate boards" variable) is the most strongly associated with investment decisions in source countries and the efficacy of protecting minority shareholders is the least important for the investment.

The effects of control variables in Panel A of Table 3 are as follows. Both GDPs and market capitalizations of host countries are positive and significant at the 0.1% level. This shows that the size of a host country plays a crucial role in international portfolio investment. Distance has a negative sign as expected and significant at the 0.1% level. These observations — both size and distance are important determinants of international portfolio investment in equities— confirms that a gravity model holds in our sample of international equity holdings. In addition, the coefficient of import variable is positive and significant at the 1% level, which suggests that investors buy more equities from a country when the import from the country is larger.

Some of the variables on informational and cultural proximity between source and host countries are also positive and significant at least at the 5% level. Those variables are common language, common currency, and common legal origin dummies. Thus, a country tends to invest more into another country with the same language, currency or legal origin as expected.

Surprisingly, the coefficient on correlation between source and host countries' stock market returns is positive and significant at the 0.1% level. This implies that contrary to the prediction of a theory of international diversification, source countries increase their investments in stock market of host countries if the host countries' markets exhibit the larger correlation with the source countries' stock markets.

Panel B of Table 3 shows that the positive relationship between corporate governance and international equity investment is maintained after the 2007 economic crisis. The coefficients on corporate governance index and four individual indexes are positive and statistically significant at the 0.1% percent level. The effects of control variables after the crisis are similar as before the crisis. Source countries buy equities more from host countries with larger GDPs and market capitalization than those with smaller GDPs and market capitalization. Those coefficients are positive and significant at the 0.1% level. The coefficient of distance is negative and

Table 4. Corporate Governance and Bilateral Portfolio Equity Holdings: Strong vs. Weak Governance Countries

| Dependent Variable | Log (2006 Balance of Portfolio Equity Investment) | | Log (2008 Balance of Portfolio Equity Investment) | |
|-------------------------------------|---|-----------|---|-----------|
| | Strong | Weak | Strong | Weak |
| Source Country Governance | | | | |
| Governance Index | 0.7509*** | 0.5956*** | 1.2404*** | 0.5243*** |
| Property Rights | 0.6262*** | 0.5001*** | 0.8298*** | 0.3205*** |
| Corporate Boards | 0.7535*** | 0.7303*** | 1.2293*** | 0.6328*** |
| Protection of Minority Shareholders | 0.4013*** | 0.2305* | 1.1585*** | 0.5736*** |
| Auditing and Reporting Standards | 0.7274*** | 0.6372*** | 1.0301*** | 0.3523*** |
| Sample size | 839 | 717 | 829 | 763 |

1. We estimate “cluster-specific fixed effect” model with robust variance estimate allowing correlation within a cluster.
2. Legend: * $p < .05$; ** $p < .01$, *** $p < .001$.

significant at the 0.1% level. The coefficient of import is positive and significant at the 0.1% level. Informational and cultural proximity variables such as common currency and common legal origin have positive effects on international equity investment and are significant at the 0.1% level. Both previous year's (i.e. 2007) stock market return of host country and correlation between source and host countries' stock market returns have positive signs and are significant at the 0.1% level. These findings suggest that investors increase their investment in host stock markets which perform well and are positively correlated to their markets.

Table 4 shows how source countries with different quality of corporate governance respond to host countries' governance institutions before and after the 2007 crisis. In Table 4, the coefficients of governance related variables are all positive regardless of the governance types in source countries and are significant at least at the 5% level. This suggests that both investors from strong and weak governance countries are more likely to invest in equities of host countries with strong governance institutions.

Table 7 reports the results of the traditional panel data method

for two periods. The coefficients of corporate governance variables are all positive and significant at the 0.1% level. This result also supports our previous finding that investors buy more equities from host countries with strong corporate governance. Furthermore, the interaction term between protection of minority shareholders and year 2008 dummy is positive and significant at the 0.1% level. This finding suggests that protection of minority shareholders in host countries becomes more important for international investments during a crisis period.

Table 8 shows the results of the panel data method for strong and weak governance countries. Both types buy more equities in host countries with strong governance. The governance variables are all positive and significant at least at the 5% level. And source countries with strong governance become more attentive to the governance of host countries during the crisis. For strong governance countries, the interaction terms between all the governance variables and year 2008 dummy are positive and significant at least at the 5% level. For investors from weak governance countries, however, only the interaction term between protection of minority shareholders and year 2008 dummy is positive and significant at the 1% level. Thus, during a crisis period, investors from weak governance countries become very attentive to minority shareholders' protection.

Overall, the results of this subsection strongly suggest that both investors from strong and weak governance countries are more likely to invest in equities of host countries with strong governance institutions for both normal and crisis periods. Our finding implies that both investors from strong and weak governance countries fear that when corporate governance of a country is weak, there may be an expropriation by either management or controlling shareholders.

Corporate Governance and International Equity Divestiture

In this subsection, we examine the second issue, whether investors have sold their equity more in host countries with weak corporate governance than in host countries with strong corporate governance during the recent economic crisis. For this analysis, we compute the difference between the year-end balances of foreign equity investment in 2006 and 2008 and investigate what explains the difference. As explanatory variables of the difference, we use the same variables as used in 2008 investment in the previous section.

Table 5. Corporate Governance and Equity Divestiture: Total Sample

| Dependent Variable | Difference between Log (Balance of Portfolio Equity Investment at the End of Year 2008) and Log (Balance of Portfolio Equity Investment at the End of Year 2006) | | | | |
|--|--|-----------|-----------|-----------|-----------|
| | | | | | |
| Governance Index (2008, Host) | 0.0320 | | | | |
| Property Rights (2008, Host) | | 0.0176 | | | |
| Corporate Boards (2008, Host) | | | 0.0628 | | |
| Protection of Minority Shareholders (2008, Host) | | | | 0.0032 | |
| Auditing and Reporting Standards (2008, Host) | | | | | 0.0227 |
| Log GDP (2007, Host) | -0.0740 | -0.0759 | -0.0655 | -0.0800 | -0.0759 |
| Log Market Cap (2007, Host) | 0.0145 | 0.0151 | 0.0125 | 0.0158 | 0.0148 |
| Log Export (2007) | 0.1035 | 0.1031 | 0.1030 | 0.1035 | 0.1036 |
| Log Import (2007) | -0.0625 | -0.0613 | -0.0633 | -0.0604 | -0.0615 |
| Log Distance | 0.0579 | 0.0603 | 0.0539 | 0.0625 | 0.0590 |
| Common Language Dummy | -0.0949 | -0.0931 | -0.1009 | -0.0908 | -0.0928 |
| Colony Dummy | 0.1500 | 0.1517 | 0.1485 | 0.1491 | 0.1489 |
| Common Currency Dummy | 0.0717 | 0.0714 | 0.0613 | 0.0799 | 0.0745 |
| Common Legal Origin Dummy | 0.0228 | 0.0217 | 0.0285 | 0.0170 | 0.0201 |
| Stock Market Return (2007, Host) | 0.8614*** | 0.8631*** | 0.8793*** | 0.8376*** | 0.8442*** |
| Correlation Between Stock Market Returns | -0.0937 | -0.0796 | -0.1433 | -0.0567 | -0.0872 |
| Sample size | 1426 | 1426 | 1426 | 1426 | 1426 |
| F-statistic | 4.3947 | 4.0682 | 4.9658 | 3.8566 | 4.1587 |
| R ² | 0.0526 | 0.0525 | 0.0537 | 0.0523 | 0.0525 |

1. We estimate “cluster-specific fixed effect” model with robust variance estimate allowing correlation within a cluster.

2. Legend: * p<.05;** p<.01, ***p<.001.

Table 6. Corporate Governance and Equity Divestiture: Strong vs. Weak Governance Countries

| Dependent Variable | Difference between Log (2006 Balance of Portfolio Equity Investment) and Log (2008 Balance of Portfolio Equity Investment) | |
|-------------------------------------|--|---------|
| | Strong | Weak |
| Governance Index | 0.1442* | -0.0692 |
| Property Rights | 0.1086* | -0.0717 |
| Corporate Boards | 0.1620** | -0.0143 |
| Protection of Minority Shareholders | 0.1034 | -0.0925 |
| Auditing and Reporting Standards | 0.1024 | -0.0537 |
| Sample size | 787 | 639 |

1. We estimate "cluster-specific fixed effect" model with robust variance estimate allowing correlation within a cluster.
2. Legend: * $p < .05$; ** $p < .01$, *** $p < .001$.

Table 5 reports the results of regressions on the change in bilateral portfolio equity holdings using the whole sample. We find that the coefficient on governance index is not significant. In addition, neither of the four individual variables on corporate governance is significant. These findings suggest that investors do not sell more equities in countries with weaker corporate governance during this crisis.

However, Table 6 shows that the divestiture behaviors may depend on the quality of governance in source countries. For source countries with strong corporate governance, the coefficient on governance index is positive and significant at the 5% level. Among the four individual variables on corporate governance, the coefficients of property rights and corporate boards are positive and significant at the 5% level. Thus, investors from strong governance countries sell more equities in countries with weaker corporate governance during this crisis. On the contrary, for source countries with weak corporate governance, the coefficient on governance index is not significant. Also, neither of the four individual variables on corporate governance is significant. These findings suggest that investors from weak governance countries do not sell more equities

Table 7. Corporate Governance and Bilateral Portfolio Equity Holdings: Panel Data (Total Sample)

| Dependent Variable | Log (Balance of Portfolio Equity Investment: 2006 & 2008) | | | | |
|--|---|-----------------|------------------|-----------------------|----------------------|
| “Corporate Governance”: | Governance Index | Property Rights | Corporate Boards | Minority Shareholders | Auditing & Reporting |
| Corporate Governance | 0.6525*** | 0.5366*** | 0.7201*** | 0.3420*** | 0.6499*** |
| Year 2008 | -3.3547* | -2.5789 | -3.9606** | -4.5001** | -1.5029 |
| Corporate Governance * Year 2008 | 0.1664* | 0.0157 | 0.1118 | 0.5094*** | -0.0039 |
| Log GDP (Source) | 2.3621* | 2.4572* | 2.2273 | 2.2221 | 2.5306* |
| Log Market Cap (Source) | -0.3784 | -0.4303 | -0.2754 | -0.3411 | -0.4220 |
| Stock Market Return (Source) | 0.5444 | 0.5298 | 0.6695 | 0.5432 | 0.5134 |
| Log GDP (Host) | 0.3930*** | 0.3928*** | 0.3720*** | 0.3664*** | 0.4011*** |
| Log Market Cap (Host) | 0.1391*** | 0.1364*** | 0.1436*** | 0.1497*** | 0.1344*** |
| Stock Market Return (Host) | -0.1987 | -0.3524 | -0.2060 | -0.2765 | -0.1553 |
| Log Export | -0.0995 | -0.1034 | -0.0821 | -0.1013 | -0.0968 |
| Log Import | 0.2358*** | 0.2460*** | 0.2146*** | 0.2539*** | 0.2485*** |
| Correlation Between Stock Market Returns | 2.2221*** | 2.1829*** | 2.4543*** | 2.5850*** | 2.2218*** |
| Log Distance | -0.5984*** | -0.5714*** | -0.5851*** | -0.5898*** | -0.5803*** |
| Common Language Dummy | 0.3216* | 0.3555* | 0.3314* | 0.3545* | 0.3151 |
| Colony Dummy | 0.3651 | 0.4188 | 0.3166 | 0.5238* | 0.3536 |
| Common Currency Dummy | 0.9313** | 0.8616** | 1.1540*** | 1.1404*** | 0.9818*** |
| Common Legal Origin Dummy | 0.4790*** | 0.4829*** | 0.4593*** | 0.4330*** | 0.4404*** |
| Sample size | 3148 | 3148 | 3148 | 3148 | 3148 |
| F-statistic | 92.9000 | 93.0863 | 87.0555 | 96.0733 | 89.4583 |
| R ² | 0.4991 | 0.5011 | 0.4976 | 0.4841 | 0.4945 |

1. Fixed effect estimation with robust variance estimate allowing correlation within a cluster.

2. Constant term, the interaction terms between year2008 and Log GDP (source, host), Log Market Cap (source, host), Stock Market Return (source, host), Log Export, Log Import, Correlation between Stock Market Returns, Colony, Currency, Common Legal Origin are not reported in this table.

3. Legend: * p<.05; ** p<.01, *** p<.001.

Table 8. Corporate Governance and Bilateral Portfolio Equity Holdings: Panel Data (Strong vs. Weak Governance Countries)

| Dependent Variable | Log (Balance of Portfolio Equity Investment) | |
|---|--|-----------|
| | Strong | Weak |
| Source Country Governance | | |
| Governance Index | 0.7814*** | 0.5976*** |
| Year 2008 | -9.2381*** | -0.5344 |
| Governance Index * Year 2008 | 0.4235*** | -0.0701 |
| Property Rights | 0.6393*** | 0.5013*** |
| Year 2008 | -6.9595* | -0.1108 |
| Property Rights * Year 2008 | 0.1801*** | -0.1811* |
| Corporate Boards | 0.7912*** | 0.7172*** |
| Year 2008 | -11.2275** | -1.0597 |
| Corporate Boards * Year 2008 | 0.3892** | -0.0900 |
| Protection of Minority Shareholders | 0.4304*** | 0.2348* |
| Year 2008 | -8.9881* | -1.8986 |
| Protection of Minority Shareholders * Year 2008 | 0.6773*** | 0.3532** |
| Auditing & Reporting Standards | 0.7435*** | 0.6418*** |
| Year 2008 | -6.2505 | 0.9041 |
| Auditing & Reporting Standards * Year 2008 | 0.2540* | -0.2796** |
| Sample size | 1,668 | 1,480 |

1. Fixed effect estimation with robust variance estimate allowing correlation within a cluster.
2. Constant term, the interaction terms between year 2008 and Log GDP (source, host), Log Market Cap (source, host), Stock Market Return (source, host), Log Export, Log Import, Correlation between Stock Market Returns, Colony, Currency, Common Legal Origin are not reported in this table.
3. Legend: * p<.05; ** p<.01, *** p<.001.

in countries with weaker corporate governance during this crisis.

We also use the panel data method in order to examine this issue. Table 7 reports the test results for the whole sample. The results show that the year 2008 dummy is negative for all the five specifications and significant at least at the 5% level for three among them. This finding suggests that investors have withdrawn their investments from host countries in 2008. Furthermore, the interaction terms between all the governance variables and year 2008 dummy are positive. Among the interaction terms, the coefficients of governance index and minority shareholders are significant at least at the 5% level. We conclude that investors have

indeed withdrawn more from host countries with weaker corporate governance, especially from host countries with weaker protection of minority shareholders.

Table 8 shows the results of the panel data method for strong and weak governance countries. For strong governance countries, the year 2008 dummy is negative for all the five specifications and significant at least at the 5% level except a case of auditing and reporting standards. This finding suggests that investors from strong governance countries have withdrawn their investments from host countries in 2008. In addition, the interaction terms between all the governance variables and year 2008 dummy are positive and significant at least at the 5% level. Thus, from both of these findings, we conclude that investors from strong governance countries have withdrawn during the crisis. For investors from weak governance countries, the year 2008 dummy is not significant for all the five specifications. This finding shows that the divesture by weak governance countries could be fully explained by our control variables and thus there is no additional divesture due to the current crisis. Interestingly, among the interaction terms between all the governance variables and year 2008 dummy, only the interaction term for minority shareholders has a positive and significant coefficient at the 1% level. This finding suggests that investors from weak governance countries may buy more from host countries which provides better protection of minority shareholders during a crisis period.

Overall, the results of this subsection indicate that investors from strong governance countries have withdrawn more from host countries with weaker corporate governance. This finding is consistent with previous literature suggesting that since controlling shareholders have more incentive to expropriate portfolio investors in a crisis period, portfolio investors tend to reduce their investment in a firm with poor corporate governance in the crisis period. However, in general, we don't find such pattern for investors from weak governance countries. Considering that investors from weak governance countries also show the preference for better corporate governance in a normal period, it is a puzzle why they do not reflect the quality of corporate governance institutions in host countries when selling their equities during this economic crisis. This warrants a further study in the future.

CONCLUSION

In this study, we examine whether international investors buy less equities of a country with weaker corporate governance using multiple pairs of source and host countries. We also examine whether international portfolio investors have withdrawn their equity investment more from countries with weaker corporate governance during the recent economic crisis.

We have found that both investors from strong and weak governance countries are more likely to invest in equities of host countries with strong governance institutions for both normal and crisis periods.

In case of divestiture, our analysis shows that investors from strong governance countries have withdrawn more from host countries with weaker corporate governance during the crisis. However, we don't find such pattern for investors from weak governance countries in general. This asymmetric association is puzzling and warrants further research.

REFERENCES

- Aggarwal, R., L. Klapper, and P. Wysocki (2005), "Portfolio Preference of Foreign Institutional Investors," *Journal of Banking and Finance*, 29, 2919-2946.
- Aviat, A. and N. Coeurdacier (2007), "The Geography of Trade in Goods and Asset Holdings," *Journal of International Economics*, 71, 22-51.
- Cameron, C. and P. Trivedi (2005), *Microeconometrics: Methods and Applications*, Cambridge University Press, New York, New York.
- Cameron, C. and P. Trivedi (2005), *Microeconometrics Using Stata*, Stata Press Publication, College Station, Texas.
- Chan, K., V. Covrig, and L. Ng (2005), "What Determines the Domestic Bias and Foreign Bias? Evidence from Mutual Fund Equity Allocation Worldwide," *Journal of Finance*, 60, 1495-1534.
- Cornelius, P. (2005), "Good Corporate Practices in Poor Corporate Governance Systems," *Corporate Governance*, 5, 12-23.
- Forbes, K. (2010), "Why Do Foreigners Invest in the United States," *Journal of International Economics*, 80, 3-21.
- Giannetti, M. and A. Simonov (2006), "Which Investors Fear Expropriation? Evidence from Investors' Portfolio Choices," *Journal of Finance*, 61,

- 1507-1547.
- Griffin, J., Z. Ji, and J. Martin (2003), "Momentum Investing and Business Cycle Risk: Evidence from Pole to Pole," *Journal of Finance*, 58, 2515-2547.
- Imbs, J. (2006), "The Real Effects of Financial Integration," *Journal of International Economics*, 68, 296-324.
- Jegadeesh, N. and S. Titman (1993), "Returns to Buying Winners and Selling Losers: Implication for Stock Market Efficiency," *Journal of Finance*, 48, 65-91.
- Jegadeesh, N. and S. Titman (2001), "Profitability of Momentum Strategy: An Evaluation of Alternative Explanation," *Journal of Finance*, 54, 699-720.
- Johnson, S., P. Boone, A. Breach, and E. Friedman (2000), "Corporate Governance in the Asian Financial Crisis," *Journal of Financial Economics*, 58, 141-186.
- Johnson, S., D. Kaufmann, and P. Zoido-Lobaton (1998), "Regulatory Discretion and the Unofficial Economy," *American Economic Review*, 88, 387-392.
- Kim, W., T. Sung, and S. Wei (2008), "How Does Corporate Governance Risk at Home Affect Investment Choice Abroad?" *NBER Working Paper*, 13721.
- Lane, P. and G. Milesi-Ferretti (2007), "The External Wealth of Nations Mark II: Revisited and Extended Estimates of Foreign Assets and Liabilities, 1970-2004," *Journal of International Economics*, 73, 223-250.
- Lane, P. and G. Milesi-Ferretti (2008), "International Investment Patterns," *The Review of Economics and Statistics*, 90, 538-549.
- Lemon, M. and K. Lins (2003), "Ownership Structure, Corporate Governance, and Firm Value: Evidence from the East Asian Financial Crisis," *Journal of Finance*, 58, 1445-1468.
- Leuz, C., K. Lins, and F. Warnock (2009), "Do Foreign Invest Less in Poorly Governed Firms?" *Review of Financial Studies*, 22, 3245-3285.
- Martin, Philippe, and Helene Rey (2004), "Financial Super-Markets: Size Matters for Asset Trade," *Journal of International Economics*, 64:2, 335-361.
- Obstfeld, Marius, and K. Rogoff (2001), "The Six Major Puzzles in International Macroeconomics: Is There a Common Cause?" *NBER Macroeconomics Annual*, 15, 339-390.
- Portes, R. and H. Rey (2005), "The Determinants of Cross-Border Equity Flows," *Journal of International Economics*, 65, 269-296.
- Rouwenhorst, K. (1998), "International Momentum Strategies," *Journal of Finance*, 53, 267-284.
- Shleifer, A. and R. Vishny (1997), "A Survey of Corporate Governance," *Journal of Finance*, 52, 737-783.

- Van Stel, A., M. Carree, and R. Thurik (2005), "The Effect of Entrepreneurial Activity on National Economic Growth," *Small Business Economics*, 24, 311-321.
- Warnock, F. (2002), "Home Bias and High Turnover Reconsidered," *Journal of International Money and Finance*, 21, 795-805.
- Wei, S. (1997), "Why Is Corruption So Much More Taxing Than Tax? Arbitrariness Kills" *NBER Working Paper*, 6255.
- Wooldridge, J. (2003), "Cluster-Sample Methods in Applied Econometrics," *The American Economic Review*, 93:2, 133-138.
- World Economic Forum (2006), *The Global Competitiveness Report 2006-2007*.
- World Economic Forum (2008), *The Global Competitiveness Report 2008-2009*.

Received March 5, 2010

Revision received November 3, 2010

Accepted December 14, 2010

