

**Cross Listing, Management Earnings
Forecasts, and Firm Values**

Ning Yaqi Shi

A Thesis

in

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Abstract

Cross Listing, Management Earnings Forecasts, and Firm Values

*Ning Yaqi Shi, Ph.D.
Concordia University, 2007*

This dissertation investigates the incentives for and consequences of management earnings forecasts released by foreign firms opting into the U.S. markets. It also attempts to measure how country-level governance mechanisms (e.g., legal institutions and the SEC enforcement) and firm-level governance mechanisms (e.g., ownership and auditor) interact to influence the answers. It is the earliest study to link management earnings forecasts, corporate governance and firm valuation in an international setting. Additionally, by investigating issues on voluntary information that cross-listed firms sequentially provide, this dissertation extends the Investor Recognition Hypothesis by Merton (1987), and adds to our understanding about reputational bonding mechanisms (Coffee, 1999; Siegel, 2005).

Essay I provides a primer on the institutional background of cross-listed firms, and demonstrates that these firms are unique in regulatory, economic and legal schemes. Specifically, foreign firms listing in the U.S. are characterized by various home-country legal institutional environments, different listing statuses (ADR Level I, II, III, and direct listing), active global product market interactions and different firm-level concentrated ownerships. These distinctive aspects of cross-listed firms make my study relevant to the literature on management earnings forecasts as well as firm valuation.

Essay 2 focuses on the incentives to provide management earnings forecasts released by foreign firms listing in the U.S. I document that legal institutions, as measured by legal origin, investor protection and judicial efficiency, are positively associated with the likelihood of forecast occurrence. In addition, cross-listed firms are more apt to release forecast disclosures when they list on major U.S. stock exchanges, and have a higher proportion of foreign sales. Further, I indicate that the likelihood of forecasts is positively associated with institutional ownership, but negatively associated with the proportion of cash flow rights controlled by the largest shareholders.

Essay 3 explores how management earnings forecasts, other firm attributes, and country institutional factors interact with each other to affect firm values. I find that forecasting cross-listed firms enjoy higher valuation premiums relative to non-forecasting firms. I also provide evidence that cross-listed firms from weaker legal institutions benefit more from disclosing management earnings forecasts. Moreover, I demonstrate that forecast precision and forecast frequency are favorably associated with firm valuation. Overall, this essay suggests that cross-listed firms are rewarded for their voluntary bonding to transparent financial reporting practices.

Key Words: Cross Listing, Firm Values, International Governance Convergence, Legal Regimes, Management Earnings Forecasts, Reputational Bonding.

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Cross Listing, Management Earnings Forecasts, and Firm Values

Chapter 1 – Introduction

The past two decades have witnessed a rapid pace of globalization in capital markets. Among different approaches to expanding cross-border cash flows, cross listing has become a vital corporate strategy that enables firms to access investors outside their home countries. By the end of 2005, more than 2,000 American Depository Receipt (ADR) programs from 80 countries were registered in the U.S. Equally, the trading of ADR firms grew strikingly from \$75 billion in 1990 to \$1.2 trillion in 2005, and represents 17 percent of the total trading in local U.S. exchanges. Previous research documents that non-U.S. firms may choose to list shares in the U.S. to raise capital, increase liquidity, lower the cost of capital, enhance visibility, protect minority shareholders or bond themselves to increased disclosures (Merton 1987; Karolyi, 1998; Coffee 2002; Pagano, Roell, and Zehner, 2002; Reese and Weisbach, 2002). The accounting literature on cross listings has primarily focused its attention on disclosure changes stemmed from mandated reporting requirements by U.S. regulators (e.g., Frost and Kinney, 1996; Douthett et al., 2003). Although voluntary disclosure is an essential corporate reporting mechanism and might be associated with important economic implications, none of the prior studies has examined this issue for foreign firms listing in the U.S.

To help better understand the world of cross listings, the main objective of this dissertation is to investigate voluntary disclosure practices, as proxied by management earnings forecasts, for foreign firms migrating into the U.S. markets. Specifically, I

attempt to answer two questions. First, what are the factors that drive cross-listed firms to release forecast disclosures to U.S. investors? Second, are cross-listed firms rewarded by U.S. investors for their voluntary convergence to U.S. disclosure and corporate governance norms? That is to say, do forecasting firms enjoy high valuation premiums, as measured by Tobin's Q, relative to non-forecasting firms? I also investigate how country-level legal regimes and firm attributes interact to affect the answers.

The first dissertation essay is presented in Chapter 2. Essay 1 describes the institutional background of cross-listed firms. Specifically, I focus on why these firms are unique from regulatory, economic and legal perspectives. In so doing, I show that cross listing provides an ideal setting to investigate the incentives for and consequences of management earnings forecasts. Firstly, legal regime and investor protection vary widely across countries, so my sample firms afford me an opportunity to study how divergence between local and U.S. legal institutions influences firms' voluntary disclosure practices. Secondly, cross-listed firms are normally controlled by concentrated shareholders (Doidge, 2001; Doidge, Karolyi, and Stulz, 2004a; Doidge et al., 2006), and this gives me an opportunity to examine the effect of agency conflicts on voluntary disclosures. Thirdly, the range of U.S. listing choices (ADR Level I, II, III, and direct listing) allows me to isolate firms listing on a major exchange from those listed as OTC and Rule 144A firms. In this way, I can test how U.S. enforcement affects firms' forecast behaviors, and how benefits from releasing forecasts vary according to different listing types. Finally, cross-listing provides a

special scenario to study the influences of product market interaction on management earnings forecasts. Similar to Khanna, Palepu, and Srinivasan (2004), this is an early attempt to link voluntary disclosure and product market factors in an international context.

The second dissertation essay is presented in Chapter 3. Using a sample of 2,050 cross-listed firms from 42 countries, Essay 2 investigates factors associated with non-US firms' voluntarily disclosure of management forecasts in the period from 1996 to 2005. Potential factors influencing a firm's voluntary disclosure decisions include legal concerns, ownership structure, listing status, and global product market interactions. My findings suggest that legal regimes matter for understanding the world of voluntary disclosures by cross-listed firms. Forecasting firms have stronger home-country legal environments, as measured by legal origin, investor protection, and judicial efficiency. In addition, I provide evidence that cross-listed firms are less likely to forecast when ownership is concentrated, but more likely to forecast when institutional ownership is high. These results imply that ownership concentration is detrimental to voluntary disclosure, whereas global institutional investors induce foreign firms to adopt transparent corporate reporting practices. Essay 2 also shows that foreign firms listing on major U.S. stock exchanges (NYSE/Nasdaq/AMEX) are more apt to release earnings guidance through forecast disclosures compared to OTC/Portal firms, indicating that SEC enforcement may play a pivotal role in encouraging exchange-listed firms to provide voluntary information. With regards to product market interaction, I find that cross-listed firms having more foreign sales are

more likely to release earnings forecasts. Finally, a surprising result is that cross-listed firms are less likely to forecast in the post-Regulation Fair Disclosure period (Reg. FD). This finding suggests that cross-listed firms may curb voluntary disclosures to avoid potential SEC legal actions after the regime shift caused by Reg. FD.

The third dissertation essay is presented in Chapter 4. Essay 3 evaluates the economic consequences of management earnings forecasts by foreign firms in the U.S. In fact, I test whether forecasting firms enjoy enhanced firm value compared to non-forecasting firms, and how home-country legal regimes moderate the relations between voluntary disclosure and firm valuation. I also study how forecast properties (i.e., forecast precision and frequency) influence the results. This essay responds to the call by Leuz (2003), and Doidge et al. (2004a) in its exploration of the sources of cross-listing benefits. My results demonstrate that cross-listed firms disclosing voluntary forecasts have higher Tobin's Q relative to non-forecasting firms. Furthermore, the association between voluntary forecasts and firm values is stronger for firms from weaker legal systems. In fact, cross-listed firms from civil law countries and from countries with lower investor protection and judicial efficiency enjoy higher valuation premiums for their voluntary commitment to transparent financial reporting. I also document that cross-listed firms releasing more precise and frequent information benefit more from higher valuation premiums. Lastly, evidence on home-country economic development indicates that management earnings forecasts are valued significantly for cross-listed firms from low economic development countries, but not for firms from high-GDP countries. Overall, both

country characteristics and firm attributes matter for firm valuation of international firms.

This dissertation contributes to the literature in the following ways. First of all, it adds to the literature on the Reputational Bonding Hypothesis. Management earnings forecasts are in fact not mandated by the SEC. Coffee (1999) posits that cross-listed firms can voluntarily bond themselves not to expropriate minority shareholders by establishing their reputation. Additionally, Siegel (2005) suggests that reputation building can compel foreign firms in the U.S. to voluntarily disclose relevant information. In this dissertation, I provide evidence that some cross-listed firms show further commitment to more transparent corporate reporting to supplement legal bonding arising from cross listings. In this way, cross-listed firms create their supplemental assurances to benefit the minority shareholders in the U.S. Consequently, cross-listed firms that intend to build up their reputation through transparent reporting are rewarded with higher valuation premiums.

Secondly, the dissertation extends our understanding on the Investor Recognition Hypothesis by Merton (1987). Merton (1987) posits that investors are more likely to invest in firms that they recognize. By providing voluntary disclosure, cross-listed firms naturally convey information to investors and improve their visibility. Hence, management earnings forecasts could be viewed as a new proxy for firm visibility. This dissertation confirms the view of prior work (Merton, 1987; Baker, Nofsinger, and Weaver, 2002) that increases in firms' visibility could lower investors' expected returns by reducing the shadow cost of not knowing a firm, and thus enhance firms'

market values.

Finally, this dissertation has implications for the theory of international corporate governance convergence. Currently, there is a debate on this theory. On the one hand, some researchers suggest that country institutions are more important in shaping corporate governance and in determining firm values (Doidge, Karolyi, and Stulz, 2004b). On the other hand, others argue that firm attributes matter more (Durnev and Kim, 2005). This dissertation presents evidence that both country institutions (e.g., legal regimes and economic development) and firm attributes (e.g., disclosure practices, and product market interaction) are essential in explaining corporate governance and firm valuation. Therefore, country-level and firm-level factors are not competing; rather, they interact with each other to explain the world of cross listings.

Chapter 2 – Institutional Background of Cross-listed Firms

2.1 Introduction

Cross listing is an important corporate strategy that enables firms to access investors outside their home countries. Previous research documents that non-U.S. firms may choose to list shares in the U.S. to raise capital, increase liquidity, lower cost of capital, enhance visibility, protect minority shareholders or bond themselves to increased disclosures (Merton 1987; Karolyi, 1998; Coffee 2002; Pagano, Roell, and Zehner, 2002; Reese and Weisbach, 2002). Due to these benefits, cross listing in the U.S. has increased dramatically in the past decades. For example, in 1990, 352 depository receipt programs from 24 countries registered in the United States (Coffee 2002); however, by 2005, this number had grown to about 2,000 programs from 80 countries.¹ Cross-listing in the U.S. is typically realized by the company creating American Depository Receipts (ADRs) with a major U.S. bank (e.g., the Bank of New York). The bank will then issue depository receipts to U.S. investors. In this way, investors can trade the dollar-denominated ADRs conveniently.

Cross-listed firms are unique in many aspects. For instance, these firms are subject to strict U.S. federal securities laws, disclosure requirements, and monitoring by U.S. investors. Therefore, some researchers posit that these firms bond themselves to the U.S. stock markets by upgrading the quality of financial disclosure and corporate governance (Coffee 1999; 2002; Lang, Lins and Miller, 2003a; Lang, Raedy, and Yetman, 2003b). However, other researchers question whether cross-listed firms

¹ Data source: Bank of New York Global Equity Investing Depository Receipt Services (BNY): <http://www.adrbny.com/>

can leapfrog their home countries' legal regimes, investor protection, and other institutional factors (Licht, 2003; Siegel, 2005), leaving this puzzle an empirical issue to explore. Furthermore, there are important differences between various levels of cross listings. Basically, firms can opt into the U.S. markets by direct listings, ADRs Level I, II or III, private placements, and even global registered shares (GRSs). Different levels of cross-listing firms are subject to different regulations and reporting requirements, have different listing incentives, and exhibit different accounting qualities (Frost and Kinney, 1996; Lang et al., 2003b, Frost, Gordon, and Pownall, 2006; Hope, Kang and Zang, 2006). These characteristics make it intriguing to investigate issues about foreign firms listing in the U.S. In what follows, I provide a primer of the regulatory, economic and legal institutions of cross-listed firms.

2.2 Regulatory Background of Cross-Listed Firms

My study covers many types of U.S. cross-listings, including direct listings and various levels of ADRs. The majority of foreign firms choose to list their shares by establishing ADRs. ADRs were developed in 1927 by J.P. Morgan to help U.S. investors engage in cross border investing without accessing foreign markets. Each depository share represents a specific number of the underlying shares in the issuer's home market. The term "ADR" denotes both the security itself and the physical certificate. In regards to listing types, there are several options for issuers to balance the benefits versus costs. Table 1 outlines the SEC reporting requirements for cross-listing firms. Firstly, Level I ADRs conduct trading only on the

over-the-counter (OTC) market (typically, the pink sheet market). They have limited liquidity, but they are not “reporting companies” under the U.S. federal securities laws. Indeed, they are not required to reconcile their financial statements in compliance with U.S. GAAP, and are exempted from submitting Form 20-F by Rule 12g3-2(b). These unlisted foreign private issuers simply continue to file the same documents that they file with their home country regulators. Second, Level II and Level III ADRs, by contrast, list their shares on the primary U.S. stock exchanges (NYSE, AMEX, or Nasdaq), and they require full SEC disclosure, that is, both Form 20-F and a reconciliation to U.S. GAAP. They also need to file “current events” Form 6-K which includes extensive information in accordance with exchange-specific listing rules. Moreover, as Level III ADRs conduct an underwritten public offering in the U.S. markets, they must file Forms F-2 and F-3 to raise capital. Finally, Rule 144A ADRs list securities and raise capital on PORTAL, a private electronic market on which only “Qualified Institutional Buyers” (QIBs) can trade. This last option is sometimes referred to as a “RADRs” (i.e., a Rule 144A offering of ADRs), and it does not involve SEC registration or compliance with U.S. GAAP.

Direct listing is an alternative to ADRs for foreign firms listing on the U.S. stock exchanges. Canadian and Israeli firms generally choose to list their equity directly on U.S. exchanges. The listing and reporting requirements for direct-listed Israeli firms are primarily the same as for ADR firms. With regard to Canadian firms, they are subject to stricter reporting requirements than Level II and Level III ADRs. For example, Canadian companies file annual reports within 90 days of their fiscal year

ends and require quarterly reports as well as proxy statements. Conversely, ADR and Israeli firms file an annual report Form 20-F within 180 days of fiscal year end, and are exempted from quarterly reports and proxy statements. Under the Multi-Jurisdictional Disclosure System (MJDS) in 1991, Canadian issuers are allowed to fulfill their reporting obligations under the SEC by filing or submitting their Canadian disclosure documents.²

[INSERT TABLE 1 HERE]

2.3 Economic Significance of Cross-Listed Firms

2.3.1 Recent Development

Reflecting the increasing desire of individual and institutional investors to diversify their portfolios globally, the total value of U.S. investment in non-U.S. equities grew to a record of \$2.8 trillion in 2005,³ among which the cross-listing markets account for a large proportion. By the end of 2005, more than 2,000 ADR programs from 80 countries were registered in the U.S.⁴ Correspondingly, the trading of ADR firms grew by more than 15 fold from \$75 billion in 1990 to \$1.2 trillion in 2005, and represents 17 percent of trading in local exchanges.⁵ While depository receipts are primarily used to list a stock in a foreign market, their listings can also be accompanied by equity offerings in the foreign market. In 1990, \$2.58 billion was

² See Multi-Jurisdictional Disclosure and Modifications to the Current Registration and Reporting System for Canadian Issues, Securities Act Release No. 6902 (July 1, 1991) and Foerster and Karolyi (1993, 1998, 1999).

³ See the U.S. Federal Reserve Statistics, and the 2005 Year End Market View by the Bank of New York.

⁴ Data source: Bank of New York Global Equity Investing Depository Receipt Services (BNY): <http://www.adrbny.com/>.

⁵ See the 2000-2005 Year End Market View by the Bank of New York.

raised in the U.S. markets through the issuance of depository receipts (both private and public offerings). In contrast, this amount climbed to \$32.12 billion in 2000, about 13-fold increase in ten years. Again, in 2005 alone, 106 new offerings by non-U.S. firms raised a record of \$32.5 billion.⁶ Overall, the impact of cross-listed firms has been pronounced on the U.S. market due to their striking development.

2.3.2 Regional Distribution

Table 2 summarizes the number of cross-listed firms by country and by listing type. There are 2,174 foreign firms listing in the U.S. as of June 30, 2006, representing a broad cross-section of listing characteristics. The majority of firms are listed either on the primary stock exchanges (793) or over-the-counter (1068), rather than on the PORTAL (313). While there are a large number of cross-listed firms from developed countries such as Canada (499), Japan (153), Australia (127), and the U.K. (111), surprisingly there are also a large number of firms from developing countries such as India (88), China (72), and Mexico (61). Table 2 includes a summary of indicators of anti-director rights index, judicial efficiency and ownership concentration across the countries from which the cross-listed firms originate. The anti-director rights index, which ranges from zero to five, reflects the strength of the laws and regulations that protect minority shareholders from majority shareholders and management.⁷ The judicial efficiency captures the integrity of the legal

⁶ Data source: Citigroup corporate and investment banking www.citigroup.com/adr, and Bank of New York Global Equity Investing Depository Receipt Services (BNY) www.adrbny.com.

⁷ Data are taken from La Porta et al. (1998). The anti-director rights value for China is obtained from Allen, Qian and Qian (2005).

environment.⁸ Ownership concentration is the average percentage of common shares not owned by the top three shareholders in the ten largest, non-financial, privately-owned domestic firms in a given country.⁹ The distribution of anti-director rights index, judicial efficiency, and ownership concentration also manifests a broad spectrum of home country environments across cross-listing firms.

[INSERT TABLE 2 HERE]

2.4 Legal Regimes of Cross-Listed Firms

Cross-listed firms expose themselves to the risk of securities litigation in the United States. They are subject to the Foreign Corrupt Practices Act, which precludes bribes, and all forms of falsification of accounting records (Coffee, 1999). Moreover, the SEC and private plaintiffs each possess the legal standing to sue foreign firms for securities fraud. The first of two key laws is the Securities Act of 1933, which precludes fraudulent or deceptive practices in any offer or sale of securities (Ratner and Hazen, 2002; Siegel, 2005). The second, the Securities Exchange Act of 1934, which created the SEC, provides disclosure requirements and prohibits manipulative or deceptive devices or contrivances related to the purchase or sale of securities.

Today most of the securities lawsuits in the U.S. are brought under Section 10(b) and Rule 10b-5 of the Securities Exchange Act of 1934 (Klein and Coffee, 2000; Siegel, 2005). Rule 10b-5 prohibits making any false or misleading statements in connection with the purchase and sale of securities or practicing fraud. Claims both

⁸ Data are obtained from La Porta, Lopez-de-Silanes, and Shleifer (1999).

⁹ Country-level ownership data are extracted from La Porta, Lopez-de-Silanes, and Shleifer (2006)

under section 10(b) and Rule 10b-5 of the Exchange Act can be claimed even if the issuer's securities are not registered with the SEC. The law on Rule 10b-5 has developed merely in the traditional common law manner, with federal courts and other tribunals deciding each case on the basis of precedents.

The U.S. Congress has adopted the Private Securities Litigation Reform Act of 1995 (PLSRA) to mitigate the potential abuse in class action litigations against publicly-held firms for alleged misstatements. The PLSRA raises the standard of specificity that the plaintiff must meet, and thus increases the proportion of overall securities fraud cases ending in dismissal. Johnson, Kasznik, and Nelson (2001) find that the PLSRA has discouraged frivolous securities lawsuits. However, the number of suits being filed did not decline after 1995; in contrast, it increased and exceeded its pre-PLSRA level.¹⁰

Prior literature (e.g., Licht, 2003; Siegel, 2005) posits that the legal and institutional obstacles have prevented the SEC from successfully enforcing the law against cross-listed foreign firms. Nevertheless, in recent years, spurred by the Sarbanes-Oxley Act of 2002 and the heightened alertness to fraud and transparency caused by a series of scandals both in the U.S. (e.g., Enron and Worldcom) and abroad (e.g., Parmalat), more foreign issuers became the subjects of private securities class action lawsuits and the geographic area of companies affected widened. The SEC has expended significant effort through its Division of Enforcement and its Division of Corporate Finance on coordination with other countries' security

¹⁰ See the 1999-2005 Securities Litigation Study by PriceWaterhouseCoopers.

regulators and law-enforcement agencies to develop mutual cooperation agreements. Table 3 summarizes the number of class action suits brought against cross-listing firms in the U.S. from 1999 to 2005. While only 11 foreign firms were sued in 1999, the number of class action lawsuits against foreign firms reached 23 in 2002, more than double the number of cases three years earlier. The number of cases increased to 29 in 2004, among which 8 suits were against European firms, and 21 were for firms from other countries. It is also worth noting that the accounting related cases once dominated the total cases filed, but in 2004, internal controls became the most frequent issue cited.

[INSERT TABLE 3 HERE]

In a similar fashion, settlement amounts have continuously increased over recent years. The total settlements for foreign listing firms in the U.S. reached more than \$1.35 billion in 2005, greatly above \$633.7 million in 2004 and \$494 million in 2003. Table 4 presents information about the top class action settlements in previous years. Among these settlements, Royal Ahold's \$1.1 billion settlement was the third largest for both domestic and foreign issuers, and Deutsche Telekom AG's \$120 million settlement was also one of the ten largest settlements for all issuers in 2005.

[INSERT TABLE 4 HERE]

The primary reason for class action lawsuits against these firms is disclosure violations, accounting violations, and internal control deficiencies. Specifically, in 2005, more firms were charged with disclosure failures. For example, minority shareholders of Mexican broadcaster TV Azteca SA de CV have sued media magnate

Ricardo Salinas Pliego for failing to disclose pertinent information about the debt and subsequent spinoff of mobile-phone company Unefon SA de CV.¹¹ Similarly, Elan Corporation was sued for a failure to disclose or inadequately disclosing certain transactions that were critical to Elan's perceived success¹². These events reinforce the importance of voluntary disclosure to test whether cross-listing enables firms to bond themselves to the highest corporate governance standards (Coffee 1999, 2002; Bailey, Karolyi, and Salva, 2006).

In light of management earnings forecasts, it is well known that the risk of class action securities litigation may greatly influence firms' decisions to issue management earnings forecasts as well as the characteristics of those forecasts (Skinner, 1994; Kasznik and Lev, 1995; Skinner, 1997; Baginski, Hassell, and Kimbrough, 2002; Field, Lowry, and Shu, 2005; Brown, Hillegeist, and Lo, 2005). In addition, as mentioned before, these foreign firms are equally accountable for legal liabilities associated with class actions lawsuits, compared with the U.S. domestic firms. However, the existing empirical literature provides little direct evidence on the role of litigation risk in cross-listing firms' voluntary forward-looking disclosures. Understanding the impact of legal institutions on a foreign firm's forecast decisions is interesting and important for the following reasons. First of all, it will add to the debate about the bonding hypothesis (Coffee, 2002) by showing whether a foreign firm can bypass the legal institutions in its home country and completely converge to the highest disclosure standards in the U.S. Also, it can provide insight to both

¹¹ Source: "TV Azteca: tycoon, facing an SEC suit, plans to pull firms off NYSE", *Wall Street Journal*, May 2, 2005.

¹² Source: *The 10b-5 Daily*, August 18, 2006.

accounting policymakers and securities regulators with regard to the potential impact of legal reforms on firms' voluntary disclosure decisions. For example, the expansion of Safe Harbor provisions in the Private Securities Litigation Reform Act of 1995 was designed to encourage more frequent management forecasts (Skinner, 1995).

2.5 Conclusions

In sum, several unique aspects of cross-listed firms make my study relevant to the literature on management earnings forecasts. First, legal regimes and investor protection vary widely across countries. The disparity between local and U.S. legal institutions is particularly great for firms originating from civil law countries. It has been documented that the risk of class action securities litigation related to Rule 10b-5 may influence firms' decisions to issue management earnings forecasts (e.g., Skinner 1994; Field, Lowry, and Shu, 2005; Brown, Hillegeist, and Lo, 2005). Moreover, the law on Rule 10b-5 has developed merely in the traditional common law manner. Therefore, my sample firms afford me an opportunity to investigate how divergence between local and U.S. legal institutions influences a foreign firm's incentives for as well as consequences of issuing earnings forecasts in the U.S. Second, foreign firms entering the U.S. markets are typically controlled by concentrated shareholders (Doidge, 2001; Doidge et al., 2004a; Doidge et al. 2006). Information asymmetry exists in that controlling shareholders are typically better informed about expected future cash flows than minority shareholders. Ultimately, firms may choose to disclose only if their controlling shareholders benefit from doing so. Hence, I am able to examine how agency conflicts influence voluntary disclosure practices. Third, my

sample includes U.S. listings on major exchanges (NYSE, AMEX and Nasdaq), and over-the-counter (by means of OTC Bulletin Board or “Pink Sheet”), as well as private placements by means of the SEC’s Rule 144A. OTC and Rule 144A firms are not required to file Form 20-F with the SEC or reconcile their financial statements in accordance with U.S. GAAP; they also need not upgrade their disclosures or incur bonding consequences (Coffee, 2002). Therefore, OTC and Rule 144A firms do not entail significant legal implications. In contrast, foreign firms listing in a major U.S. exchange are reporting entities that must file Form 20-F with the SEC and reconcile their financial statements to U.S. GAAP. In addition, they are accountable in class action lawsuits, and thus become subject to enforcement by the SEC and U.S. Courts (Coffee, 1999; 2002). Current evidence shows that both class action lawsuits and settlements against foreign firms have increased greatly. However, the existing empirical literature provides little direct evidence on the role of litigation risk in cross-listing firms’ voluntary forward-looking disclosures. This range of U.S. listing choices allows me to isolate firms listing on a major exchange from OTC and Rule 144A firms, thereby testing how U.S. enforcement affects firms’ forecast behaviors, and how benefits of forecasting vary according to different listing types. Finally, cross-listing provides a special scenario to link management earnings forecasts to global product market interactions given a large percentage of cross-listed firms have global sales. Previous literature posits that both financial market and product market concerns influence firms’ voluntary disclosure practices (Dye, 1985; Evans and Sridhar, 2002; Khanna, Palepu, and Srinivasan, 2004). Therefore, I am able to extend

previous literature to an international setting by focusing on management earnings forecasts.

Chapter 3 – Why Do Cross-Listed Firms in the U.S. Voluntarily Release Management Earnings Forecasts?

3.1 Introduction

Cross listing is becoming an increasingly important strategy for companies as direct access to foreign capital markets yields great benefits. By the end of 2005, more than 2,000 foreign firms from 80 countries have migrated to the U.S. markets. In 2005 alone, 106 new offerings by foreign firms raised \$32.5 billion in the U.S. Correspondingly, the trading of these non-domestic firms reached \$1.2 trillion in 2005, representing 17 percent of the total trading in the U.S. local exchanges.¹³ Coffee (2002) suggests that cross-listing firms in the U.S. face increased enforcement by the Securities and Exchange Commission (SEC), a more rigorous legal exposure, and enhanced corporate disclosure and transparency, all of which may affect the financial reporting of cross-listing firms. There is a large literature on the characteristics of cross-listing firms' financial reporting, much of which either focuses on the accounting quality of these foreign firms or focuses on the disclosure changes resulting from the mandated reporting systems by U.S. exchanges and regulators.¹⁴ For example, Amir, Harris, and Venuti (1993) examine the value relevance of foreign issuers' reconciliation disclosures. Lang, Raedy and Yetman (2003) investigate whether U.S. listing is associated with differences in accounting data reported in local

¹³ Data source: Citigroup corporate and investment banking www.citigroup.com/adr, and Bank of New York Global Equity Investing Depositary Receipt Services (BNY) www.adrbny.com.

¹⁴ Papers related to the accounting quality of cross-listing firms include Alford et al. (1993), Lang, Raedy, and Yetman (2003), and Lang, Raedy, and Wilson (2005). Examples of the literature on the mandatory disclosure or reporting of foreign registrants in the U.S. include: Amir, Harris, and Venuti (1993), Frost and Pownall (1994), Cheung and Lee (1995), Chan and Seow (1996), Frost and Kinney (1996), Huddart, Hughes, and Brunnermeier (1999), Douthett et al. (2003), Blanco and Osma (2004), and Hope, Kang, and Zang (2006).

markets, and find that cross-listed firms have better accounting quality relative to non-cross-listed firms. Cross-listed firms may disclose more information than required under certain circumstances (Stulz, 1999; Bailey, Karolyi, and Salva, 2006).¹⁵ Also, firms may employ alternate mechanisms to supplant legal bonding, such as providing voluntary disclosures (Pinegar and Ravichandran, 2004). However, no prior studies attempt to measure the voluntary disclosure practices of these foreign registrants, though the level of voluntary disclosures may be associated with important economic consequences (Barry and Brown, 1985; Leuz and Verrecchia, 2000; Healy and Palepu, 2001; Verrecchia, 2001).

To address this void in the literature, this essay explores the incentives for voluntary disclosure, surrogated by management earnings forecasts, of non-U.S. firms listing in the U.S. I choose management earnings forecasts as my proxy for two major reasons. First, the timing, form and specificity of management earnings forecasts are precisely known (Healy and Palepu, 2001). This enables me to conduct powerful tests. Second, given that different countries have different disclosure practices (Hope, 2003), and that managers have considerable discretion to release earnings forecasts (Karamanou and Vafeas, 2005), an international study on the relation between management earnings forecasts and corporate governance mechanisms is warranted.

More specifically, using a sample of 2,050 cross-listed firms from 42 countries, I provide evidence on the relation between implicit or explicit governance mechanisms (legal institution, ownership structure, Reg FD, SEC enforcement and Auditor Type)

¹⁵ For example, cross-listed firms may choose to do so when they expect a potential upgrade in listing status (e.g., from OTC to primary exchanges). Another example is cross-listed firms would voluntarily forecast earnings in anticipation of subsequent fund raising.

and the likelihood to release earnings forecasts. I also look at the effect of global product market interaction and litigation risk on management earnings forecast. To this end, this is the first study that comprehensively examines the association between corporate governance and management earnings forecast in an international setting.

In my primary analysis, I first compare home-country legal institutions of forecasting firms with non-forecasting firms. Where possible, I also control for size, equity issuances, debt issuances, auditor, litigation risk, profitability, year and industry. Results from both the probit models and the country-weighted least square models suggest that forecasting firms are associated with stronger home-country legal regimes (as measured by legal origin, the level of investor protection, and judicial efficiency) compared to non-forecasting firms. Legal systems do seem to matter for understanding the world of cross-listings.

In addition to examining the differences in external corporate mechanisms, I also consider discrepancies in an internal corporate mechanism: ownership structure. Previous studies posit that controlling shareholders may exert excessive influence over management to withhold private information, thereby protecting the benefits of control (Chau and Gray, 2002; Ajinka et al., 2005). The evidence is mixed when I use country-level ownership data. Nonetheless, I test this prediction in a reduced sample using firm-level ownership data. I find that firms are less likely to release forecasts when ownership is concentrated, suggesting that ownership concentration is detrimental to voluntary disclosure. Additional analyses also reveal that cross-listed firms are more apt to disclose forward-looking earnings news when institutional

ownership is high. This intriguing finding implies that global institutional investors, largely originating from the United States, will compel cross-listed firms to adopt corporate reporting standards with which they are familiar.

I also explore the influence of listing status on the likelihood of management forecasts. My findings strongly support that foreign firms listing on major U.S. stock exchanges disclose more forecasts than OTC/Portal firms. In fact, 72 percent of the forecasts are released by firms listing on NYSE/Nasdaq/AMEX. In contrast, OTC/Portal firms exhibit less transparent corporate reporting. A possible explanation is that firms issuing OTC or Rule 144A equities do not require registration with or subsequent reporting to the SEC. Consistent with prior work (Doidge et al., 2004a; Lang et al., 2003b; Frost, Gordon, and Pownall, 2006), I provide evidence that the SEC has effective enforcement on foreign firms listing in the U.S.

Moreover, I examine the effect of global product market interaction on management earnings forecasts. Khanna, Palepu, and Srinivasan (2004) show that cross-border product market interaction is positively related to the overall disclosure level of a sample of international firms. Consistent with their finding, I also find that cross-listed firms having more foreign sales are more likely to release earnings forecasts.

My sample includes earnings forecasts issued from 1996 to 2005. In October 2000, a regime change arose in the voluntary disclosure regulation. More specifically, the SEC introduced Regulation FD (Reg FD) to forbid firms from releasing information to selected audiences. Several studies have investigated the effect of Reg

FD on U.S. firms (Bailey et al., 2003; Bushee, Matsumoto, and Miller, 2004; Ajinkya et al., 2005). Although cross-listed firms are exempted from Reg FD, many firms claim that they voluntarily adopt Reg FD. For instance, in a survey conducted by the Bank of New York in 2004, 54 percent of the ADR firms said that they voluntarily followed Reg FD and uniformly shared all communications with shareholders.¹⁶ In this paper, I compare the occurrence of management earnings forecasts for *pre*- Reg FD and *post*- Reg FD period. Prior studies (Bailey et al., 2003) find that U.S. firms have increased the number of earnings forecasts after Reg FD when the cost-benefit ratio of disclosure is marginally favorable. Therefore, I also expect that cross-listed firms would follow the same pattern. Surprisingly, cross-listed firms in the U.S. have significantly reduced the number of forecasts after Reg FD. My findings suggest that Reg FD in fact chills corporate disclosures for foreign firms listing in the U.S. These firms may restrict voluntary disclosures to avoid potential SEC legal actions after this regime shift.

In general, my findings contribute to our understanding in the following ways. First, cross-listed firms can voluntarily bond themselves not to expropriate minority shareholders by establishing their reputation. Siegel (2005) suggests that reputation building can induce foreign firms to voluntarily disclose relevant information and to refrain from expropriating minority shareholders. In this paper, I find that foreign firms create their own assurances of fair treatment by voluntarily disclosing information to the U.S. minority investors. When firms migrate into the U.S. markets,

¹⁶ For more details about the survey, please see the article "ADR issuers Complying with Sarbanes-Oxley Governance Standards," http://www.adrbny.com/dr_pub_survey.jsp?paramUserType=issuers.

they must not only provide extensive disclosure at the time of issuance, but also commit to furnish information on an ongoing basis. The stronger the commitment to provide information consistently, the less costly it is for minority investors to monitor management.

Furthermore, my findings shed light on the Corporate Governance Convergence Theory. This theory (Coffee, 1999; Gilson, 2001) states that convergence in corporate norms does not always require a formal legislative adjustment of corporate laws and codes in different countries. In a similar vein, John and Kedia (2003) predict that foreign firms migrating to the U.S. market should experience a rapid change in governance structures. Cross-listed firms opt into foreign governance standards, thus developing a functional substitute to formal convergence. My findings also suggest that cross-listed firms commit to more transparent corporate disclosure and governance systems, in the direction of the U.S. norm.¹⁷

Finally, this essay contributes to the literature that focuses on the influences of international institutional factors on accounting choices. Prior work shows that in an international setting, country-level enforcement has a great impact on firms' financial reporting (Ball, Kothari, and Robin, 2000; Bhattacharya, Daouk, and Welker, 2003; Hope, 2003; Leuz, Nanda, and Wysocki, 2003). For example, Ball et al. (2000) present that country institutional features affect the timeliness and conservatism of accounting incomes. In the context of voluntary disclosure, Baginski, Hassell, and Kimbrough (2002) provide evidence that differences in legal environments between

¹⁷ Management earnings forecasts is a normal U.S. financial reporting practice. For instance, Ajinka et al. (2005) show that 38 percent of U.S. firms release a forecast in the period from 1997 to 2002.

the U.S. and Canada affect management earnings forecasts. My study extends this line of research by evaluating the relation between institutional environments and management earnings forecasts for a broader set of international firms.

The rest of this essay is organized as follows. Section 2 outlines the research questions, and section 3 reviews related literature. Primary hypotheses are developed in section 4. Section 5 describes the method and variables adopted to test my hypotheses, and section 6 provides the results. Additional analyses and sensitivity checks are detailed in section 7. Finally, section 8 concludes the paper, and section 9 discusses potential limitations and future research direction.

3.2 Research Questions:

The objective of this essay is to investigate why some cross-listed firms voluntarily release management earnings forecasts, whereas others do not. Specifically, I seek to answer the following questions.

- 1) Do firm-level ownership structures (i.e., concentrated ownership and institutional ownership) have an impact on the choice of cross-listed firms to disclose management earnings forecasts?
- 2) How do legal institutions (common law vis-à-vis civil law, investor protection and judicial efficiency) of the country where cross-listed firms originate affect managers' decision to forecast?
- 3) How does listing status influence the voluntary disclosure practices of cross-listed firms?

- 4) Does the nature of the management earnings forecasts (good news vs. bad news) influence the answers of the above questions?
- 5) Are cross-listed firms more likely to make management earnings forecasts in the *post*-Reg FD period?

3.3 Theoretical Framework and Literature Review

This study extends two streams of literature. The first stream is the literature on cross-listed firms' information environment and corporate governance. From an information perspective, previous papers focus mainly on the value relevance of Form 20-F reconciliations or of voluntary reconciliations to IAS by cross-listed firms in the U.S. (Amir et al., 1993; Chan and Seow, 1996; Alford and Jones, 1998; Harris and Muller, 1999; Karamanou and Raeday, 2000; Douthett et al., 2003), on the quality of accounting data disclosed in overseas and local markets (Frost and Pownall, 1994; Lang et al., 2003b), on the relative informativeness of accounting disclosures in different countries (Alford et al., 1993; Leuz et al., 2003), and most recently on the effect of analyst following on firm valuation (Lang et al., 2003a; 2004). Surprisingly, no previous study measures the voluntary disclosure practices of these cross-listed firms, though the level of voluntary disclosure might be associated with important economic consequences (Barry and Brown, 1985; Leuz and Verrecchia, 2000; Healy and Palepu, 2001; Verrecchia, 2001). From a corporate governance perspective, there is a large literature on the governance implications of international cross listings. U.S. cross listings typically improve corporate transparency by imposing on firms stronger

disclosure requirements than those they face in their home country (Coffee, 1999; 2002; Stulz, 1999). In addition, by choosing to list in the U.S., controlling shareholders of these firms accept the consequences of being subject to monitoring by the U.S. market and the SEC. Existing evidence shows that cross-listed firms experience positive abnormal returns when they announce their intention to list in the U.S. (Foerster and Karolyi, 1999; Miller, 1999), that they subsequently raise more capital after listing (Reese and Weisbach, 2002; Lins, Strickland, and Zenner, 2005), that their cost of capital is lower (Hail and Leuz, 2005), that their estimates of private benefits of control are lower (Doidge, 2004), and that their auditors charge higher fees (Choi, Kim, Liu, and Simunic, 2006). Voluntary disclosure is a relevant issue because it indicates a voluntary governance convergence by individual firms rather than a systematic convergence by countries (Bushee, 2004). Cross-listed firms can improve corporate governance and transparency through voluntarily disclosing information. However, few studies attempt to explore the voluntary convergence in corporate governance resulting from cross listings. My study contributes to this line of research by examining how firm- and country-level corporate governance factors influence the voluntary disclosure practices of foreign firms listing in the U.S.

Another stream is the literature on the motivations for disclosure of management earnings forecasts. Previous research documents that managers make voluntary disclosures for different reasons: to reduce firms' cost of external financing (Healy and Palepu, 1993; Healy and Palepu, 1995), to reduce contracting costs associated with stock compensation (e.g., Aboody and Kasznik, 2000), to mitigate the cost of

litigation (Skinner, 1994), or to signal management talent (Trueman, 1986). Moel (1999) develops a two-country, two-security equilibrium model in which security prices increase as a function of the level of information disclosure. The model leads to testable hypotheses relating disclosure levels to firm- and country-specific volatility. This model posits that firms operating in a low disclosure quality and low information trading environment, and larger firms will optimally disclose more information. In terms of management earnings forecasts, Ruland, Tung, and George (1990) identify four motives: 1) ownership structure, 2) new capital offerings, 3) correcting or confirming analysts' forecasts, and 4) the nature of the news. In another study, Frankel, McNichols, and Wilson (1995) show that firms' tendencies to access capital markets are positively associated with their probabilities to disclose earnings forecasts. However, no prior studies have focused on the motivations of management earnings forecasts in an international setting. Moreover, Ruland et al. (1990) find that ownership structure is the most important variable to explain why firms release forecasts, but the issue of how managers use earnings forecasts to reduce agency costs is generally unexplored. Recent research has investigated how institutional ownership influences the properties of management earnings forecasts for U.S. firms (Ajinkya, Bhojraj, and Sengupta, 2005; Karamanou and Vafeas, 2005). Nevertheless, no previous research has examined this issue for international firms, though agency problems resulting from ownership concentration are more severe for non-U.S. firms (La Porta et al. 1999; 2000). As discussed, cross-listed firms offer a unique opportunity to link the issue of management earnings forecasts with factors such as

ownership structures, legal institutions, investor protection and fund raising. Toward this end, my paper enables me to examine the determinants of voluntary disclosures in a richer setting than previous studies.

3.4 Hypotheses Development

3.4.1 Management Earnings Forecasts and Legal Regime

It is well known that the risk of class action securities litigation related to Rule 10b-5 may influence firms' decisions to issue management earnings forecasts (e.g., Skinner 1994; Field, Lowry, and Shu, 2005; Brown, Hillegeist, and Lo, 2005). Moreover, the law on Rule 10b-5 has developed merely in the traditional common law manner. Therefore, it is possible that foreign firms from common law countries are more likely to make earnings forecasts. Further, country characteristics influence the costs that firms incur to bond themselves to good governance and the benefits they receive from doing so. Doidge et al. (2004b) find that it is costlier to implement good firm-level governance and to raise funds in countries with poor investor protection and low development. Since investor protection is generally poor in countries with low development, firm-level governance may be infeasible precisely when it is most needed. Also, a firm can have potentially valuable growth opportunities, yet it takes no step to have good governance because the tools required are too expensive or not even available in its country. In addition, previous literature reveals that cross-listed firms from stronger legal systems have better quality of accounting reporting (Bradshaw et al., 2004; Lang, Raedy and Wilson, 2006). This gives rise to my first

hypothesis:

H1: Other things being equal, cross-listed firms from countries with stronger legal regimes are more likely to release management earnings forecasts.

3.4.2 Management Earnings Forecasts and Ownership Structure

Previous studies have investigated how agency conflicts influence earnings quality (Fan and Wong, 2002; Haw et al., 2004). For example, Haw et al. (2004) find that firms with more divergence between ownership (cash flow rights) and control (voting rights) are associated with greater income management. Recent research begins to focus on how disclosure works as a mechanism to hide the private benefits that result from ownership concentration; the results generally show that agency conflicts are negatively associated with disclosure levels. Specifically, Chau and Gray (2002) find that disclosure is decreasing in concentrated ownership. Ali, Chen, and Radhakrishnan (2005) show that family-controlled firms are less transparent about their corporate governance practices. In addition, Ajinkya et al. (2005) find that concentrated ownership is negatively related to management forecast properties. Tinaikar (2006) provides evidence that the detachment of voting rights from cash flow rights in dual class share firms induces lower transparency in voluntary disclosure. This gives rise to my second hypothesis:

H2: Other things being equal, cross-listed firms with less ownership concentration are more likely to release management earnings forecasts.

3.4.3 Management Earnings Forecasts and Listing Type

Prior studies document that foreign firms listing on the OTC or Portal enjoy lower cross-listing premiums (Doidge et al., 2004a; Hope et al., 2005), exhibit poorer accounting quality (Lang et al., 2003b), and have less transparent corporate governance (Frost, Gordon, and Pownall, 2006) compared to foreign firms listing on the major U.S. exchanges (NYSE/AMEX/Nasdaq). Legal protection does not improve when firms issue Rule 144A equities because these issues do not require registration with or subsequent reporting to the SEC and because reports that are issued need to comply only with home-market, not US accounting standards. In this vein, foreign firms listing on the OTC or Portal might be less likely to make earnings forecasts since they do not completely bond themselves to the U.S. corporate governance practices. On the other hand, these firms do not incur legal consequences in the U.S. as they are not subject to the class action lawsuits according to SEC Rule 10b-5 (Baginski et al., 2002). Therefore, it is also possible that foreign firms listing on the OTC or Portal have greater tendencies to make a forecast. Due to ambiguity in the previous literature, I make a non-directional prediction on this issue. This gives rise to my third hypothesis:

H3: The listing types of cross-listed firms are associated with firms' likelihood to release management earnings forecasts.

3.4.4 Management Earnings Forecasts and Foreign Product Market

Previous research suggests that both financial market and product market factors

influence firms' voluntary disclosure practices (Dye, 1985; Evans and Sridhar, 2002; Khanna et al., 2004). In a theoretical work, Evans and Sridhar (2002) document that product market concerns can affect a firm's management earnings forecast choices. Specifically, product market competition can complement the capital market effect in inducing the manager to provide truthful disclosures. Additionally, Khanna et al. (2004) uncover that cross-border product market interaction encourages greater convergence to the U.S. disclosure regime. Cross-listed companies that wish to integrate themselves into the U.S. marketplace may find that the costs of doing business are greater if their disclosures do not conform to U.S. practices. Given that disclosure of management earnings forecasts is a common U.S. disclosure practice (Ajinkja et al., 2005), cross-border trade may promote cross-listed firms to disclose forward-looking information as customers need financial information to assess the performance of their suppliers.¹⁸ This gives rise to my fourth hypothesis:

H4: Other things being equal, cross-listed firms with greater foreign market interaction are more likely to release management earnings forecasts.

3.5 Research Design

3.5.1 Sample Selection and Data

To empirically test my research questions, I obtain a complete list of depositary receipts from the Bank of New York website.¹⁹ This list provides information about

¹⁸ On the other hand, proprietary cost may discourage management earnings forecasts (Verrecchia 1983). However, in many robustness tests, I include Market-to-Book Ratio (a proxy for proprietary cost) as a control variable. The results show that corporate convergence dominates proprietary cost.

¹⁹ For more details, please refer to <http://www.adrbny.com/>.

the names, listing dates, country of origin, and exchanges (i.e., NYSE, AMEX, Nasdaq, OTC or Portal) of every ADR and Global Depositary Receipt (GDR) as of 2005.²⁰ I obtain the information on direct-listing Canadian and Israeli firms from the NYSE, Nasdaq, AMEX, OTCBB and Pink sheets websites.²¹ To avoid survivorship bias, the sample includes securities that were later delisted. I classify firms that were both listed over-the-counter and on NYSE/AMEX/Nasdaq at different points as NYSE/AMEX/Nasdaq and consider the date that they listed there to be the cross-listing date. After these procedures, I get a data set of all firms that are cross-listed in the U.S. as of December 2005. This gives me 2,050 firms from 42 countries. Table 5 presents the summary of these cross-listed firms by country and by listing type.

I obtain management earnings forecasts data from the Corporate Investor Guidelines (CIG) database, maintained by First Call. I identify 2,771 earnings forecasts made by 647 cross-listed companies from 30 countries in the period 1996 to 2005, including point forecasts (651), range forecasts (1369), open-interval forecasts (209), and qualitative forecasts (542). The CIG database carries both annual and quarterly forecasts. In addition, 210 firms forecast only once in my sample periods; in contrast, 272 firms forecast more than five times. To check the validity of the CIG database, I also match a small sample of forecasts with those extracted from the Lexis/Nexis keywords search.²² Consistent with previous studies (Ajinkya, et al.,

²⁰ I do not distinguish ADR from GDR for the purposes of this study.

²¹ Sources to get the information on direct-listing Canadian and Israeli firms include: http://www.nyse.com/international/nonuslisted/int_listed.html, <http://www.nasdaq.com/asp/NonUsOutput.asp>, <http://www.amex.com/>, http://www.pinksheets.com/companysearch/ps_list.jsp, and <http://www.otcbb.com/>.

²² Keywords "expects earnings," "expects income," "expects losses," "expects profits," "expects results," and

2005; Karamanou and Vafeas, 2005), I find that the CIG database is a comprehensive source of management earnings forecast information.

Among the 2,050 cross-listed firms, there are 647 forecasting firms vis-à-vis 1,403 non-forecasting firms. As shown in Table 5, cross-listed firms from English Common Law countries are more likely to disclose earnings forecasts. For English Common Law firms, 533 firms made forecasts while 636 firms did not release any type of earnings forecast. In comparison, there are 52 (372), 53 (361), and 9 (34) forecasting (non-forecasting) firms for French Civil Law, German Civil Law, and Scandinavian Civil Law countries, respectively.

[INSERT TABLE 5 HERE]

My sample covers the period from 1996 to 2005, and contains 11,284 firm-year observations. After dropping observations with missing firm-level variables and deleting outliers, 7,348 firm-year observations remain. In defining forecasting years, a firm that issues a single forecast and one that releases multiple forecasts are treated the same. For firms issuing multiple forecasts, I select one forecast that is closest to the actual earnings announcement. This reduces the 2,771 forecast observations to 861 observations. Therefore, among the 7,348 firm-year observations, 861 observations are forecasting years, while 6,487 belong to non-forecasting years. Table 6 summarizes the sample construction process.

[INSERT TABLE 6 HERE]

three similar lists with first words “ forecasts,” “predicts” and “sees” were used to identify forecasts from Lexis/Nexis. My procedures are consistent with those used by previous studies (Baginski, Hassell, and Kimbrough, 2002; Ajinkya et al., 2005).

Moreover, I need data for country characteristics related to investor protection, judicial efficiency, and economic development. Country-level variables are primarily obtained from La Porta et al. (2006), and Bushman, Piotroski, and Smith (2004).

Securities Data Corporation (SDC) provides information on external financing transactions of these firms. SDC contains the date of issue, the country where the debt or equity was issued, and the proceeds from each issue. I compare the dates of management earnings forecasts with the issue dates of these debt/ equity securities to determine whether these financing transactions are subsequent to the voluntary disclosures.

Finally, I collect firm-specific information such as market value, and earnings per share from Worldscope, Compustat, CRSP, Mergent Online, and firms' Form 20-F and websites. Appendix 1 presents a summary of all variables used in this study and their relevant data sources.

3.5.2 Models and Variables

To test my research hypotheses, I estimate the following probit model:

$$Pro(MF) = f(LEGAL^{23}, OWNERSHIP^{24}, LISTTYPE, FORSALES \text{ or } FOROP, \\ BIG5, REGFD, LITIGATE, SIZE, LOSS, EXTERFIN, NEWS) \\ (2-1)$$

²³ I use three proxies for the legal regimes. The first one is a dummy variable, which takes on a value of 1 if a cross-listed firm is from an English common law country, 0 if from a civil law country. The second proxy is the anti-director index developed by La Porta et al. (1998). The third proxy for legal institution is the Judicial Efficiency index obtained from La Porta et al. (1998).

²⁴ Three variables are adopted as proxies for ownership. The first one is a country-level variable *OWNERSHIP*. To retain my sample size, I use this variable in my primary tests. However, I also use two firm-level ownership variables (*OWNCON* and *INST*) in my robust checks.

3.5.2.1 Dependent Variable

Pro(MF): the occurrence of a management earnings forecast, which takes 1 if a cross-listed firm issued an earnings forecast during the fiscal period, 0 otherwise.

3.5.2.2 Test Variables

LEGAL: legal institutions of cross-listed firms' home country. I use three proxies for this variable. 1) *COMMON*: takes on a value of 1 if a cross-listed firm is from an English common law country, and 0 if from a civil law country.²⁵ 2) *ANTI-DIRECTOR*: an index that aggregates six different shareholder rights and ranges from 0 to 6 with 6 as the highest level of investor protection. 3) *JUDICIAL*: an assessment of the efficiency and integrity of a country's legal environment and ranges from 0 to 10 with 10 as the highest standard. This set of variables is adopted to test H1. Following the reasoning for H1, I predict that the stronger the legal institution, the more likely a cross-listed firm releases a voluntary forecast.

OWNERSHIP: equals the average percentage of common shares owned by the top three shareholders in the ten largest non-financial, privately-owned domestic firms in a given country. This variable is employed to test H2. Following previous arguments, I predict a negative coefficient on *OWNERSHIP*.

OWNCON: ownership concentration of a cross-listed firm. I measure ownership concentration as the share of cash flow rights held by the largest shareholder in the forecast year as defined in Claessens, Djankov, Fan, and Lang (2002). This variable is

²⁵ As a robust check, in all models, I also use three dummies (English Common Law, French Civil Law, and German Civil Law) as proxies for legal origins. However, the results remain the same.

adopted to test H2, and following previous arguments, I predict a negative coefficient on *OWNCON*.

INST: percentage of the company's aggregate common stock held by institutions. This variable is also used to test H2. H2 states that institutional ownership is positively related to firms' likelihood to make a forecast. Therefore, I predict a positive coefficient on this variable.

LISTTYPE: this variable takes a value of 2 if a firm listed on the major U.S. exchanges (NYSE/ AMEX/Nasdaq), 1 if a firm listed on the OTC, and 0 if a firm listed on the Portal. This variable is used to test H3, and I make no prediction toward this variable.

FORSALES: log of the dollar values of foreign sales by cross-listed firms. This variable is adopted to test H4. Following the reasoning of H4, I predict a positive coefficient on this variable.

FOROP: this variable takes a value of 1 if a cross-listed firm has foreign operations, and 0 otherwise. I also use this variable as a proxy for product market interaction. Similar to *FORSALES* (foreign sales), I predict a positive coefficient on this variable.²⁶

3.5.2.3 Control Variables

BIG5: this variable takes a value of 1 if a cross-listed firm is audited by one of

²⁶ In my primary tests, I include *FORSALES* as a proxy for cross-border product market integration. However, I use *FOROP* as an alternative proxy in all models, and results are robust to this correction.

the Big 5 auditors, and 0 otherwise. Auditor reputation might also be a factor in disclosure decisions. Previous research indicates that firms using Big 5 auditors tend to have better disclosure (Lang and Lundholm, 1993). Thus, I predict a positive coefficient on this variable.

LITIGATE: a value of 1 is assigned if firms are in the biotechnology (2833-2836 and 8731-8734), computers (3570-3577 and 7370-7374), electronics (3600-3674), and retail (5200-5961) industries, and 0 otherwise (based on Francis, Philbrick and Schipper, 1994; Baginski et al., 2002). This variable captures litigation risk, and following prior studies (Ajinkya et al., 2005; Karamanou and Vafeas, 2005), I predict a positive coefficient on it.

SIZE: the variable represents the log of total sales in U.S. dollars. Previous literature illustrates mixed evidence about it. On the one hand, Kasznik and Lev (1995) prove that firm size is positively associated with the occurrence of management earnings forecasts. On the other hand, larger firms might be less likely to disclose as agency costs increase with firm size (Durnev and Kim, 2005). Similarly, larger firms may incur higher political cost (Watts and Zimmerman, 1990), which reduces their likelihood to forecast. Therefore, I make no prediction on this variable.

LOSS: takes a value of 1 if a firm reported losses in the current period, and 0 otherwise. Previous literature suggests that earnings are less value relevant for loss firms (Hayn, 1995; Ball, Kothari and Robin, 2000) and that analysts have greater problems forecasting earnings for loss firms (Brown, 2001). In a similar way, the ability of management to forecast earnings would also be hindered for firms making

losses. Therefore, I predict a negative coefficient on this variable.

NEWS: takes a value of 1 if the current-period EPS is greater than or equal to the previous-period EPS, and 0 otherwise. Skinner (1994) suggests that management is more likely to issue a forecast when faced with bad news. Baginski et al. (2002) find that the sign of random-walk differences in earnings is negatively associated with forecast occurrence. Thus, I predict a negative coefficient on this variable.

REGFD: takes a value of 1 if the observation is related to the post-Reg FD period (after October 2000), and 0 otherwise. Bailey et al. (2003) and Brown, Hillegeist, and Lo (2003) find that the number of forecast disclosures has increased after Reg FD. In a similar fashion, I predict a positive coefficient on this variable.

EXTERFIN: this variable represents external financing of cross-listed firms. Specifically, it takes a value of 1 if new debt or new capital is offered within the sample period, and 0 otherwise. Prior studies (Ruland et al., 1990; Frankel et al., 1995) show a positive association between firms' tendencies to access capital markets and to disclose earnings forecasts, suggesting that firms attempt to mitigate potential consequences of differential information through disclosure. Therefore, I predict that cross-listed firms raising capital or debt in the global market have greater tendencies to disclose more information, and I predict a positive coefficient on this variable.

YEAR: year dummies are included to account for differences across years. Moreover, I am able to detect whether my results are sensitive to the Reg FD (2000) or the Sarbanes-Oxley Act (2002).

INDUSTRY: industry dummies are included in the model to control for

differences in asset structure, accounting practice, government regulation, and competitiveness, all of which may affect disclosure and governance, as well as firm valuation.

3.6 Results

3.6.1 Descriptive Statistics

Table 7 reports descriptive statistics and compares firm-level and country-level variables for forecasting years versus non-forecasting years. As indicated in table 7, 52 percent of my sample firms are from English Common Law countries, and the average disclosure score is 88.96 out of 100. The average Tobin's Q for all cross-listed firms is 1.57, which is comparable to 1.54 in Doidge et al. (2004a). Likewise, 24 percent of my sample firms report a loss, 40 percent report good news earnings, and 21 percent raise capital or debt in the sample period. Foreign sales account for 28 percent of overall sales for all sample firms.

The results also indicate that forecasting and non-forecasting firms differ in many dimensions. Forecasting firms have stronger home-country legal regimes, are from more developed countries, and have higher home-country disclosure levels relative to non-forecasting firms.²⁷ In addition, the mean and median comparisons show that firms listing on the major U.S. exchanges (NYSE/Nasdaq/AMEX), operating in high-tech industries, and having larger proportion of foreign sales, have higher tendencies to release forward-looking earnings information. The mean *Size* score (i.e., log of total sales) for forecasting firms is 5.75 compared to 5.86 for non-forecasting

²⁷ Both mean and median are significantly different.

firms. 32 percent of forecasting firms raise external funds, but only 19 percent of non-forecasting firms issue either capital or debt. Finally, 52 (39) percent of forecasting (non-forecasting) firms are characterized by good news earnings, and the difference is significant at the 1 percent level.

[INSERT TABLE 7 HERE]

3.6.2 Multivariate Results

I estimate probit models to test my four hypotheses. Given the high correlation between the three legal regime measures (*Common, Anti-director, and Judicial*), I separately estimate three models. In addition, I also include year and industry dummies in three additional models. Hence, I estimate six models in total for my primary tests. Moreover, including a sample firm in multiple years raises the concern of serial correlation. Therefore, all results are corrected for serial-correlation.

$$\begin{aligned} Pro(MF) = f(LEGAL, OWNERSHIP, LISTTYPE, FORSALES \text{ or } FOROP, BIG5, \\ REGFD, LITIGATE, SIZE, LOSS, EXTERFIN, NEWS) \end{aligned} \quad (2-1)$$

The results from estimating equation (2-1) are presented in Table 8. Consistent with H1, the coefficients on *Legal* are positive and highly significant ($p < 0.01$) across all six specifications. This suggests that cross-listed firms from English Common Law countries, with higher investor protection level, and having more efficient home-country judicial systems, are more likely to forecast. The coefficients on *Ownership* are generally positive and significant, suggesting that cross-listed firms

from countries with high ownership concentration are more likely to disclose earnings forecasts. The evidence is in contrast to H2. To provide further analysis, I use firm-level ownership data and re-estimate the regressions in my sensitivity analysis, though this largely reduces my sample size. Moreover, I find that the coefficients on *Listtype* are positive and highly significant ($p < 0.01$). This demonstrates that foreign firms listing on major U.S. stock exchanges are more likely to make earnings forecasts since they bond themselves to a greater extent to U.S. corporate governance practices compared to OTC/Portal firms. It is worth noting that my evidence contrasts with Baginski et al. (2002), which explains that firms in less litigious environment are more likely to release earnings forecasts. Finally, in accordance with H4, I find that cross-listed firms are more likely to divulge management earnings forecasts when they have a greater proportion of foreign sales.

Additionally, findings on control variables are also intriguing. First, the coefficients on *Litigate* are largely positive and significant in all three specifications, suggesting that cross-listed firms with higher litigation risk are more likely to disclose forecasts (Skinner, 1994). The coefficients on *Size* are negative and significant in three out of the six models, supporting the arguments that larger firms are less likely to disclose due to agency cost and political costs (Durnev and Kim, 2005; Watts and Zimmerman, 1990). Further, evidence on external financing is mixed. The coefficients on *Exterfin* are positive and significant in two models, but negative and significant in one model. This suggests that raising capital or debt globally cannot explain cross-listed firms' tendency to release management earnings forecasts. The

result relating to *Loss* is interesting. The negative coefficients imply that a manager is less likely to have issued a forecast when the firm reports a loss. Finally, another provocative finding is that forecast occurrence has decreased after Reg FD. The coefficients on *REGFD* are negative and significant ($p < 0.01$) in all six specifications. This finding contrasts with Ajinkja et al (2005), who find that U.S. firms are more willing to forecast earnings when the cost-benefit ratio of disclosure is slightly favorable after Reg FD. Although this finding may be interpreted in various ways, I posit two possible explanations. First, the regime shift induced by Reg FD may not have an influence on foreign firms listing in the U.S. Alternatively, the stricter regulatory environment after the Sarbane-Oxley Act may in fact discourage cross-listed firms from disclosing information.

[INSERT TABLE 8 HERE]

3.7 Additional Analyses and Robustness Checks

3.7.1 Country-Weighted Least Squares (WLS)

As shown in Table 5, the number of observations for each country varies from 499 for Canada to 3 for Pakistan. Thus, the results of probit models might be influenced by the unequal sample size across countries. I alleviate this concern by carrying out country-weighted least squares (WLS). Following Choi et al. (2006) and Choi and Wong (forthcoming), I assign an equal weight to each country and re-estimate model (2-1).²⁸ Using WLS ensures that uneven country representation in

²⁸ The weight is inversely proportional to the number of observations per country in my WLS models.

my sample will not bias my results toward countries that are more heavily represented. Results of country-weighted least squares are reported in Table 9. Supporting H1, the coefficients on *Common*, *Anti-Director*, and *Judicial* are positive and significant. Similarly, findings on *Listtype* (H3) and *Forsales* (H4) are also consistent with those reported in my primary tests. Evidence on *Ownership* is puzzling after adjusting the concern of uneven country representation: the coefficients are negative in column (1) and (5), but positive in other columns. Again, this suggests further analysis on the influence of ownership concentration.

[INSERT TABLE 9 HERE]

3.7.2 Dropping Canadian Observations

To further alleviate the concern of uneven sample size, I repeat tests excluding Canadian observations given that Canada comprises a large proportion (25%) of the sample.²⁹ The results reported in Table 10 provide further evidence that my findings are not driven by Canadian observations. More specifically, findings on *Anti-director* and *Judicial* support H1, though the coefficient on *Common* is only significant at the 0.12 level. In addition, other findings are largely in accordance with those from the primary tests.

[INSERT TABLE 10 HERE]

3.7.3 Foreign Firms Listing on Major U.S. Stock Exchanges

²⁹ Another reason to perform a robust check excluding the Canadian samples is because Canada and the U.S have similar accounting standards and legal regimes, which may confound the focus on the cross-listing effects.

Among my sample firms, 861 out of 7348 (11.71%) firms make a forecast in a specific year. However, foreign firms listing on major U.S. exchanges account for the majority (72%) of forecasting years. In fact, 241 out of 3862 OTC/Portal firms released a forecast during the sample period, and forecasting OTC/Portal firms are mainly from Canada. Level I and Rule 144A ADRs do not require registration with and subsequent reporting to the SEC. Prior literature also documents that they do not completely bond themselves to the U.S. corporate governance practices (Lang et al., 2003; Frost et al., 2006). Accordingly, OTC and Rule 144A ADRs do not mimic the U.S. reporting norm for disclosure of earnings forecasts. Thus, I exclude OTC/Portal firms and check the robustness of my findings. Table 11 presents the results of multivariate tests for firms listing on major stock exchanges (NYSE/Nasdaq/AMEX). The explanatory power of the model ranges from 11.1% to 15.1%, marginally higher than that in primary tests that include all sample firms (9.5% to 13.5%). Findings from both probit and country-weighted least squares models are consistent with those from the primary tests.

[INSERT TABLE 11 HERE]

3.7.4 Time-Series Evidence

The firm-year observations cover a ten-year period (1996-2005). It is possible that the primary test results are driven by events in certain years. Moreover, including a sample firm in multiple years raises the concern of serial correlation.³⁰

³⁰ In fact, in my primary tests, all results are corrected for serial-correlation. However, I still run annual regressions to further check the sensitivity of my findings.

Country-weighted least squares correct for heteroskedasticity , but this procedure does not correct for cross-sectional correlations in the residuals. Hence, I also run yearly regressions and the results are summarized in Table 12.

Panel A of Table 12 shows results when *Common* is adopted as a proxy for country legal institutions, whereas Panel B and C report results for *Anti-Director* and *Judicial*. Results from annual regressions are generally consistent with pooled results. In Panel A, the coefficients on *Common*, *Listtype*, and *Forsales* are significant and positive in all 10 years. Panel B shows a similar pattern. In Panel C, although coefficients on *Listtype* and *Forsales* are significant for all annual regressions, coefficients on *Judicial* are insignificant in two years. However, evidence on *Ownership* is again perplexing. For instance, in Panel A, the coefficients are insignificant in nine years (negative in two years, and positive in seven years). It is possible that country-level ownership data may not provide enough explanatory power for firm-level disclosure incentives. To shed more light on this issue, I provide firm-level analysis on concentrated and institutional ownership in the following section.

[INSERT TABLE 12 HERE]

3.7.5 Firm-Level Concentrated and Institutional Ownership

I carry out further analysis to explore the association between ownership and forecasts disclosures. I choose two additional firm-level proxies vis-à-vis country-level ownership data. *OWNCON* is the share of cash flow rights held by the

largest shareholder in a forecast year.³¹ *INST* is the percentage of the company's aggregate common stock held by institutions. I gather data on ownership concentration for 3126 firm-year observations, and on institutional ownership for 2286 firm-years.³² Results are provided in Table 13.

Previous studies find that when ownership in a firm is concentrated, the controlling shareholders are likely to have an undue influence over management, whereby they secure self benefits that are unfavorable to minority capital providers (Classens et al., 2002; Doidge et al., 2006; Fan and Wong, 2002; Haw et al., 2004; Wysocki, 2004). These concentrated shareholders often have better access to private information and consequently may not press the firms for public disclosures. In such a case, some may favor fewer forecasts, thereby giving them an advantage relative to the market. Column (1)-(3) report probit regression results when firm-level concentrated ownership by the largest shareholder is employed to test H2. It is noticeable that in all three specifications, the coefficients on *OWNCON* turn out to be negative and significant at $p \leq 0.01$ level, suggesting that the probability of issuing a forecast is lower when ownership is highly concentrated in the hands of the largest shareholder.

Further, institutional ownerships may play a different role relative to concentrated owners. Prior work advocates that institutions are more likely to buy stocks in firms that have persistent disclosure improvement (Healy, Hutton, and Palepu, 1999;

³¹ I also collect data for *BLOCKHOLDERS*: percentage of a firm's common stock held by block holders (5% above). In all tests, I use *BLOCKHOLDERS* as a substitute for *OWNCON*, and find the results are generally unchanged.

³² The majority of firm-year observations with available ownership data is firms listing on major U.S. stock exchanges. Therefore, I am not able to test the hypothesis on listing type in this section.

Bushee and Noe, 2000). With regard to management forecasts, Ruland et al. (1990) conjecture that managers will provide voluntary disclosure to reduce monitoring costs by outside shareholders; they also find that firms that release earnings forecasts have a higher proportion of outside ownership than other firms. Recent studies have shown that institutional ownership is related to a firm's voluntary accounting choices (Bradshaw, Bushee, and Miller 2004; Covrig, Defond, and Hung, 2006). In addition, Ajinkya et al. (2005) document that the institutional ownership of U.S. firms is positively related to firms' forecast likelihood. Consequently, it is reasonable to posit that for cross-listed firms, their institutions would probe more information about future earnings. Column (4)-(6) of Table 13 present the findings on institutional ownership. The coefficients on INST in all specifications are positively significant at $p < 0.01$ level, indicating that institutions play a monitoring role for foreign firms listed in the U.S.

[INSERT TABLE 13 HERE]

3.8 Concluding Remarks

The focus of this essay is to examine what determines the incentives for management earnings forecasts by foreign firms opting into the U.S. stock markets. Specifically, I investigate whether forecast likelihood is associated with cross-listed firms' home-country legal systems, U.S. listing status, ownership structures, and foreign product market interactions. Using a sample of cross-listed firms from 42 countries across the world, I find that in the period spanning from 1996 to 2005, legal

institutions are favorably associated with the probability of forecast occurrence. In addition, listing status is positively associated with forecast likelihood. In other words, foreign firms listing on major U.S. stock exchanges are more likely to issue earnings forecasts relative to OTC/Portal firms. The results also indicate that the extent of global product market interaction is positively related to firms' likelihood to release earnings forecasts.

Additional analysis suggests that cross-listed firms with high institutional ownerships are more likely to forecast, suggesting the monitoring role played by institutions. By contrast, firms with highly concentrated ownership are less likely to disclose forecasts, indicating that voluntary disclosure may suffer when firms' ownership is concentrated in the hands of controlling shareholders.

This essay contributes to the growing literature on cross listings and on voluntary disclosures in the following ways. First, this study covers an issue novel to the literature by focusing on the discretionary information that cross-listed firms release, and addresses the heightened need for stronger governance and more transparent disclosure globally. Apparently, in showing the sequential convergence in voluntary disclosure practices by cross-listed firms in the U.S., this study has implications on whether globalization leads to convergence in corporate governance (Coffee 1999; Khanna et al., 2004; Doidge et al., 2004b; Durnev and Kim, 2005). Second, this study demonstrates that firms from industries with higher litigation risks are more likely to release a forecast. In this light, it adds to the debate on whether litigation risk is related to firm's voluntary management forecasts. Third, by taking into consideration

the differences in domestic legal regimes and enforcement, this study enhances our understanding of how financial reporting of cross-listed firms may differ depending on local institutional environments.

3.9 Discussion

There are several potential limitations that warrant attention. Given the limited theory underpinnings in this area, interpretations from this paper need caution. For example, it is possible that earnings are not so informative in civil law countries as those in common law countries, so providing a voluntary forecast in civil law countries may not be a good way to provide voluntary information. Also, without an investigation around cross listing, my study cannot capture whether the increase in voluntary disclosures stems from cross listings or from other reasons. However, the First Call CIG Database largely covers the forecasting data for cross-listed firms after they list in the U.S., and data for pre-cross-listing periods are hard to get at this stage. Therefore, data constraints plague further studies. Also, given my sample firms are cross-listing firms in the U.S., using U.S. sales (operation) as a proxy for global product market interaction may be more appropriate. However, due to the availability of data, I use foreign sales (operation) as a substitute. Finally, this paper focuses on the likelihood of management earnings forecasts while there are many dimensions of this discretionary disclosure practice. Future research may evaluate various properties (i.e., frequency, precision, credibility and bias) of voluntary earnings forecasts disclosed by cross-listed firms.

Chapter 4 –Does Management Earnings Forecast Lead to Enhanced Firm Valuations? Evidence from Cross-Listed Firms in the U.S.

4.1 Introduction

This essay attempts to evaluate the economic implications of management earnings forecasts that non-U.S. firms disclose after they list their shares on the U.S. markets. Management earnings forecasts serve as a good proxy for voluntary information since cross-listed firms are not mandated by the SEC to release forward-looking earnings information. Information plays an essential role in explaining the sources of cross-listing benefits (Lang et al., 2003a; Bailey et al., 2006). For instance, Lang et al. (2003a) examine the association among cross listing, analyst properties, and firm values, and underline that cross-listed firms with better information environment have higher valuation. However, they do not illustrate whether the sources of these information effects stem from disclosure or other listing characteristics (Leuz, 2003). Voluntary disclosure is related to important economic consequences (Barry and Brown, 1985; Leuz and Verrecchia, 2000; Healy and Palepu, 2001; Verrecchia, 2001); nevertheless, no prior research has investigated the effect of voluntary disclosure on firm valuation for cross-listed firms in the U.S.

Furthermore, using his model of capital market equilibrium with incomplete information, Merton (1987) posits that investors are more liable to invest in firms with high visibility (Investor Recognition Hypothesis). According to his theory, an increase in the visibility of a firm lowers investors' expected return by reducing the shadow

cost of the lack of awareness of a security, and thus enhances the market value of a firm. The Investor Recognition Hypothesis also suggests that international listing should be associated with a reduction in a firm's cost of capital. Prior tests of the Investor Recognition Hypothesis either focus on the number of shareholders (Foerster and Karolyi, 1999) or on the number of analysts following and media coverage (Baker, Nofsinger and Weaver, 2002). For example, Baker et al. (2002) illustrate that international listing enhances firms' visibility (as measured by analyst coverage and media attention), and accordingly results in a decline in the cost of capital. By providing voluntary disclosure, cross-listed firms will instinctively convey information to investors and improve their visibility. Healy and Palepu (2001) also conclude that voluntary disclosure is an essential part of a firm's overall information environment. Therefore, voluntary disclosure is viewed as a new visibility measure here. In its examination of the relation between voluntary disclosure (as proxied by management earnings forecast) and firm valuation for a sample of cross-listed firms, this essay extends Merton's Investor Recognition Hypothesis and helps to explain the sources of cross-listing benefits.

Additionally, unlike other studies in this area (e.g., Lang et al., 2003a; Doidge et al., 2004a; Hail and Leuz, 2006), which focus on the dichotomy of cross listing versus non-cross-listing, my study only focus on cross-listed firms.³³ By listing their shares in the U.S., these firms already legally bond themselves to improved disclosure and governance practices (Coffee, 1999, 2002; Stulz, 1999). However, some cross-listed

³³ Similarly, King and Segal (2004) argue that cross listing might not provide benefits for all firms, but only for the group of firms that develop active trading in the U.S.

firms exhibit further commitment to more transparent corporate reporting to supplement legal bonding. Prior work suggests that cross-listed firms may voluntarily release information to build their reputation and benefit minority shareholders (Coffee, 1999; Siegel, 2005). This essay, therefore, answers an appealing question: does the market value the reputational bonding mechanism of cross-listed firms?

Specifically, I test whether cross-listed firms that disclose earnings forecasts enjoy higher valuation compared to firms that do not. Also, I seek to answer whether this voluntary commitment is valued differently for firms from different legal institutions. My goal is to understand how firm-level and country-level governance factors interact with voluntary disclosure in affecting the values of cross-listed firms.

I first explore the effects of management earnings forecasts on firm valuations, after controlling for listing status, profitability, liability, firm size, past sales growth and home-country liquidity. Voluntary disclosure may enhance firm values through three channels: reducing information asymmetry (Healy and Palepu, 2001), improving firms' visibility (Merton, 1987), and diminishing agency cost (Coffee, 2002). Consistent with my prediction, I find that cross-listed firms disclosing voluntary forecasts have higher Tobin's Q relative to non-forecasting firms.

I also examine the effect of home-country legal institutions on the relation between management earnings forecasts and firm valuations. The bonding hypothesis posits that cross-listing benefits are greater for firms from weak legal regimes (Stulz, 1999; Coffee, 2002). In the same vein, the benefits of disclosing voluntary information may be greater for firms with weaker home-country legal systems, as

measured by legal origin, investor protection and judicial efficiency. Supporting my conjectures, my results indicate that cross-listed firms from weaker legal regimes enjoy higher valuation premiums for their voluntary commitment to transparent financial reporting.

In addition to testing the impact of legal regimes, I also consider the effects of forecast precision. Prior work (Kim and Verrecchia, 1991) implies that price reaction is positively associated with information precision. Consistent with this line of research, my findings indicate that firms releasing more precise information benefit from higher valuation premiums.

Further, I provide additional checks using Heckman two-stage procedure to control for the self-selection problem related to the likelihood of management earnings forecasts. The results are largely in accordance with the OLS regression results, and sometimes appear even stronger. Taken as a whole, the evidence demonstrates that management earnings forecasts are valued by the market, especially for cross-listed firms from weaker legal regimes.

Finally, I decompose the sample into firms from high-GDP countries versus firms from low-GDP countries. The results suggest that home-country economic development plays a vital role in explaining the relationship between forecast disclosures and firm valuations. For instance, management earnings forecasts are valued significantly for cross-listed firms from countries with low economic development, but not for firms in high-GDP countries. My findings further substantiate the view of Doidge et al. (2004b) that country characteristics do matter to

understand corporate governance in an international setting.

In essence, this paper contributes to two streams of literature. The first stream is the literature on international corporate governance. Recent studies have emphasized how country-level institutional variables and firm characteristics interact with each other to influence economic performance (Bushman and Smith, 2001). However, evidence from prior studies is ambiguous. For instance, Durnev and Kim (2005), by using international firm-level governance and transparency data released by CLSA and Standard&Poor's, reveal that firms with better governance enjoy higher valuation.³⁴ They also suggest that with the increasing globalization, national boundaries and legal jurisdictions are becoming less effective in defining corporate behaviors. By contrast, Doidge et al. (2004b) posit that country characteristics such as investor protection and economic development matter more for firms to choose corporate governance practices. This essay, in analyzing how firm- and country-level governance factors interact with voluntary disclosure in affecting firm values, yields some insight into the debate in this area.

Another stream is the literature on cross-listing information effects and cross-listing benefits. Previous papers on cross-listing information effects mainly focus on the value relevance of Form 20-F reconciliations or of voluntary reconciliations to International Accounting Standard (IAS) by cross-listed firms in the U.S. (Amir et al. 1993; Chan and Seow, 1996; Alford and Jones, 1998; Harris and Muller, 1999; Karamanou and Raeday, 2000; Douthett et al., 2003), on the quality of

³⁴ Other studies using the CLSA and S&P governance scores include Klapper and Love (2004), Khanna, Palepu, and Srinivasan (2004), Doidge, Karolyi, and Stulz (2004b), and Frost, Gordon, and Pownall (2006).

accounting data disclosed in overseas and local markets (Frost and Pownall, 1994; Lang, Raedy, and Yetman, 2003b), and on the relative informativeness of accounting disclosures in different countries (Alford et al., 1993; Leuz, Nanda and Wysocki, 2003). Nevertheless, no prior research has investigated the voluntary information disclosure of these firms. Further, previous research documents that non-U.S. firms may choose to list shares in the U.S. to raise capital, increase liquidity, lower cost of capital, enhance visibility, protect minority shareholders or bond themselves to increased disclosures (Merton 1987; Karolyi, 1998; Coffee 2002; Pagano, Roell, and Zehner, 2002; Reese and Weisbach, 2002). Despite the considerable evidence on positive cross-listing economic implications, few studies attempt to demonstrate where these benefits originate from. Most recently, Lang et al. (2003a; 2004) have explored the effect of analyst properties on firm valuation. Hope et al. (2006) indicate that the interaction between listing type and legal regime can help explain the sources of high valuation premiums that cross-listed firms receive. However, puzzles remain on whether the sources of these cross-listing benefits are from disclosure or other listing functions (Leuz, 2003). In addition, Doidge et al. (2004a) suggest that besides cross listing, other mechanisms such as disclosure might explain the higher values of cross-listed firms in the U.S. This paper, in linking voluntary disclosure with valuation for foreign firms listing in the U.S. addresses the suggestions by Leuz (2003) and Doidge et al. (2004a), and contributes to the literature by helping identify the sources of cross-listing benefits.

This essay proceeds as follows. Research questions are outlined in the next section. Section 3 develops hypotheses, and section 4 details research methodologies to test the hypotheses. Univariate and multivariate results are presented in section 5. Section 6 carries on additional analyses and robustness checks. Finally, section 7 concludes and section 8 discusses limitations and future research avenues.

4.2 Research Questions

The objective of this essay is to explore the economic implications of voluntary disclosures for cross-listed firms in the U.S. Here, I use management earnings forecasts as a surrogate for voluntary disclosure. In this light, I seek to answer the following questions.

- 1) Are forecasting firms associated with higher firm valuation than non-forecasting firms?
- 2) What are the effects of forecast precision and forecast frequency on the changes in firm values?
- 3) How do home-country legal institutions (common law vis-à-vis civil law, investor protection and judicial efficiency) of cross-listed firms affect their valuation?

4.3 Theory and Hypotheses

4.3.1 Voluntary Disclosure and Firm Value

Barry and Brown (1985, 1986) argue that when managers have more information than do outsiders, investors demand an information risk premium. Firms can reduce their cost of capital by reducing estimation risk through increased voluntary disclosure. In a similar vein, Merton's (1987) Investor Recognition Hypothesis posits that cross listing in the U.S. improves disclosures, thereby reducing the cost of capital and enhancing firm values. Diamond and Verrecchia (1991) and Kim and Verrecchia (1994) suggest that voluntary disclosure reduces information asymmetry between uninformed and informed investors, and thus increases the liquidity of a firm's stock. Along this line of reasoning, Lang and Lundholm (1996) argue that voluntary disclosure lowers the cost of information acquisition for analysts, and thus increases analyst coverage and accuracy. Lang, Lins, Miller (2003) find that cross-listed firms in the U.S. have higher valuation than non-cross-listed firms due to the enhancement in the information environment. In addition, Graham, Harvey, and Rajgopal (2005) interview more than 400 executives and document that four in five respondents strongly agree that information risk concern or the cost of capital is an important motivation for voluntary disclosure. Furthermore, voluntary disclosure may enhance firm value by reducing the agency cost associated with corporate transparency (Doidge et al., 2004b; Klapper and Love, 2004; Durnev and Kim, 2005). Taken

together, previous studies suggest that voluntary disclosure plays an essential role in determining a firm's cost of capital, thus boosting its firm value.

Prior research has shown that managers disclose forward-looking information of earnings to reduce information asymmetry (e.g., Ajinkya and Gift, 1984; Kasznik and Lev, 1995; Frankel, McNichols, and Wilson, 1995; Lennox and Park, 2006). Specifically, Ajinkya and Gift (1984) show that investors view management earnings forecasts as unbiased corrective signals of market expectations pertinent to the valuation of firms' securities. Lev and Penman (1990) suggest that firms that release voluntary disclosure of forward-looking information have more positive stock market consequences as investors may interpret silence as withholding the worst possible information. The recent study by Clement, Frankel, and Miller (2003) documents a negative relation between confirming management earnings forecasts and the cost of capital. This reasoning leads to the following hypothesis:

H5: Other things being equal, cross-listed firms in the U.S. that voluntarily disclose earnings forecasts have higher firm valuation than firms that do not disclose earnings forecasts.

4.3.2 Impact of Legal Regimes

The bonding hypothesis of Coffee (2002) posits that cross listing in the U.S. commits firms to respect minority shareholders and to upgrade their corporate governance standards. Recent research has suggested that legal institutions affect both the protection of minority shareholder rights and firm values (La Porta et al., 1997,

1998, 2000). If a cross-listing changes the level of legal protection of minority shareholders, then this change should be associated with the cross-listed firm's home country legal protection. In this vein, the controlling shareholders of a cross-listed firm from a weak (strong) legal regime may give up more (less) private control benefits. Overall, the bonding hypothesis suggests that cross-listing benefits are greater for firms from weak legal regimes (Stulz, 1999; Coffee, 2002). Other empirical work generally supports this hypothesis (Reese and Weisbach, 2002; Doidge et al., 2004a; Durnev and Kim, 2005; Choi et al., 2006; Lel and Miller, 2006). For example, Reese and Weisbach (2002) find that the increase in equity offering subsequent to cross listing is larger for firms from weaker protection. Durnev and Kim (2005) find that the positive relation between corporate governance and firm value is stronger in weaker legal environment. Moreover, Choi et al. (2006) report that cross-listing auditing fee premium is larger for firms from weak legal regimes. Releasing more forward looking earnings information will affect the ability of majority shareholders of cross-listed firms to extract private benefits, especially for those from countries with weak shareholder protection. This reasoning leads to the following hypothesis:

H6: The association between management earnings forecasts and firm valuation is greater for cross-listed firms from weak legal regimes than for firms from strong legal regimes.

4.3.3 Impact of Forecast Precision

Management earnings forecasts are not limited to point forecasts, but include range (i.e., closed-interval), open-interval (i.e., minimums and maximums), and qualitative forecasts of general impressions about firms' earnings prospects (Baginski and Hassell, 1997).³⁵ Analytical work shows that a signal's precision is important in belief development (Kim and Verrecchia, 1991; Morse, Stephan, and Stice, 1991). Specifically, Kim and Verrecchia (1991) examine a two-period rational expectations model where traders are assumed to be diversely informed and differ in the precision of their private prior information. They find that the price reaction to the unexpected portion of a disclosure is an increasing function of its relative importance across the posterior beliefs of traders. The relative importance is positively related to the precision of the announcement and inversely related to the precision of preannouncement information. The study by Kim and Verrecchia (1991) implies that the price reaction to the public information is a positive function of the information's precision. Further, empirical studies also provide evidence that management forecast precision affects the beliefs of investors and financial analysts. Ajinkya and Gift (1984) posit that managers will credibly label their forecasts as to precision (expectation adjustment hypothesis). Additionally, Baginski, Conrad, and Hassell (1993) examine the effects of information precision on equity pricing, and they

³⁵ Points estimates are those where a specific estimate is disclosed such as "Earnings will be X this period." Range estimates are closed-interval forecasts of the form "Earnings will be between X1 and X2 this period." Open-interval estimates are lower and upper bound forecasts of earnings. A minimum estimate is in the form "Earnings will be greater than X1 this period" whereas a maximum estimate is disclosed such as "Earnings will be no more than X2 this period." Qualitative estimates are general impressions in the form "Earnings will be good this year compared with last year."

support a positive relation between forecast precision and the importance of forecasts on security prices. This reasoning leads to the following hypothesis:

H7: The association between firm valuation and voluntary disclosure is greater for cross-listed firms that release more precise earnings forecasts.

4.4 Research Design

4.4.1 Sample Selection and Data

A complete list of depositary receipts is obtained from the Bank of New York website. Information on direct-listing of Canadian and Israeli firms is gathered from the NYSE, Nasdaq, AMEX, OTCBB and pink sheets websites. I follow the same sample selection procedure as described in Essay 2 (see Table 6). In sum, my sample covers 7,348 firm-year observations spanning from 1996 to 2005. These firm-year observations include 861 observations where firms provided earnings forecasts, and 6,487 observations where firms did not.

In addition, I need data for firm values as well as country characteristics related to investor protection, judicial efficiency, and economic development. Here, I use Tobin's Q as a proxy for firm value. Tobin's Q is computed as total assets less the book value of equity plus the market value of equity in the numerator and book value of assets in the denominator. Data are obtained from Worldscope. More specifically, I calculate Tobin's Q at three months after the fiscal period for each firm-year observation.³⁶

³⁶ Here, I use three months after the fiscal period for each firm year observation in that most firms release the

I collect firm-specific information such as market value, operating income, liability, sales growth, and size from Worldscope, IBES, Compustat, CRSP, Mergent Online, and firms' Form 20-F and websites.

4.4.2 Models and Variables

To examine the effect of management earnings forecasts on firm values, I estimate an ordinary least squares (OLS) regression (firm and time subscripts have been suppressed) with Tobin's Q as the dependent variable. Independent variables are the probability of voluntary disclosure, legal regime, an interaction term of legal regime with voluntary disclosure, interaction terms of voluntary disclosure with forecast frequency and forecast precision, past sales growth, and firm size. Sales growth is added to control for a plausible spurious relation between voluntary disclosure and firm value in that this variable is related to both valuation and voluntary disclosure. Specifically, I estimate the model as follows:

$$Q = f (MF, LEGAL, MF*LEGAL, MF*PRECISION, MF*FREQUENCY, LIQUIDITY, LISTTYPE, PROFIT, LIABILITY, SIZE, GROWTH, YEAR, INDUSTRY)^{37}$$

(3-1)

4.4.2.1 Dependent Variable

Q: the firm-year Tobin's Q.³⁸ It is computed as the sum of total assets plus the market value of common stock less the book value of equity over the book value of

earnings announcement at that time, and the market value of equity should capture the combined effects of management forecasts and earnings announcement.

³⁷ Here, I follow the typical cross-country regression suggested by Bushman and Smith (2001), which include test variables, enforcement variables, interaction effects, and control variables.

³⁸ Another method is to calculate the average of Tobin's Q for all sample years.

assets. The market value of equity is the number of common shares outstanding times the share price three-months after the fiscal year end.

4.4.2.2 Test Variables

MF: the occurrence of a management earnings forecast, which takes a value of 1 if a cross-listed firm issued an earnings forecast during the fiscal period, 0 otherwise. It is used to test H5. As stated earlier, I predict a positive coefficient on this variable.

MF*LEGAL: the interaction term between legal regime and management earnings forecast. It is used to test H6, and I predict a negative sign on this variable.

MF*PRECISION: the interaction between management earnings forecast and forecast precision. Here, *Precision* is an ordinal variable that takes a value of 3 for point forecast, 2 for range forecast, 1 for open-interval forecast, and 0 for qualitative forecast. This interaction term is used to test H7, and I predict that it is positively associated with firm value.

4.4.2.3 Control Variables

MF*Frequency: an interaction term between management earnings forecast and forecast frequency. Here, *Frequency* is measured as the total number of forecasts issued by a firm in my sample period. Sporadic forecasts might be related to management opportunism, rather than consistent disclosure policy induced by voluntary bonding to U.S. governance practice. Thus, I predict that this variable is positively associated with firm values.

LEGAL: legal institutions of cross-listed firms' home country. I have three options for this variable. 1) **COMMON:** which takes on a value of 1 if a cross-listed

firm is from an English common law country, and 0 otherwise. 2) **ANTI-DIRECTOR**: an index that aggregates six different shareholder rights and ranges from 0 to 6 with 6 as the highest level of investor protection. 3) **JUDICIAL**: an assessment of the efficiency and integrity of a country's legal environment and ranges from 0 to 100 with 100 as the highest standard. La Porta et al. (2002) find that firms located in better legal environments enjoy higher valuation. This relation is also substantiated by Doidge et al. (2004a), and Durnev and Kim (2005). Hence, I predict a positive sign on this variable.

SIZE: the log of total sales in U.S. dollars. I use sales as they are less sensitive to differences in accounting standards across countries. Size may influence a firm's choice of voluntary disclosure as larger firms tend to have higher political cost and incur greater monitoring by the public (Healy and Palepu, 2001). Previous studies find that larger firms are associated with lower firm values (Lang et al., 2003a, Durnev and Kim, 2005). Here, size is viewed as a proxy for firm age; older firms normally have higher book-to-market ratio. Thus, I predict a negative sign on this variable.

GROWTH: sales growth over the past two years. It is adopted to measure investment opportunities. Previous literature documents that firms with greater investment opportunities enjoy higher firm values (Lang et al., 2003a; Durnev and Kim, 2005). Thus, I predict a positive coefficient on this variable.

PROFIT: operating income deflated by total assets. Following prior studies (Lang et al., 2003a; Hope, Kang, and Zang, 2005), I predict a positive coefficient on this variable.

LIQUIDITY: a country-level variable which represents the average ratio of dollar value of shares traded as a percentage of GDP for the period 1996 to 2000. The information is collected from La Porta et al. (2006).³⁹ Following previous studies (Doidge et al., 2004a; Hope et al., 2005), I predict a positive sign on this variable.

LIABILITY: the ratio of total liabilities to total assets. Prior studies (e.g., Lang, Lins and Miller, 2004) find that this ratio is negatively related to firm value. Thus, I predict a negative coefficient on this variable.

4.5 Results

4.5.1 Univariate Statistics

Table 14 presents Pearson (Spearman) correlations above (below) the diagonal among the variables and firm valuation. Results between Pearson and Spearman correlations are generally similar. Consistent with Doidge et al. (2004a), I find that Tobin's Q is generally positively related to proxies for legal regimes (Common, Anti-Director, and Judicial), suggesting that firms from strong legal countries enjoy higher firm values. The management forecast likelihood dummy is positively related to Tobin's Q, consistent with my major hypothesis. In addition, profitability, listing status, and sales growth in past years are positively associated with firm valuation. By contrast, liability and size are negatively associated with firm value. The other correlations coefficients are generally significant, but the majority is below 0.3, indicating that each measure captures a distinct dimension of the country- and firm-attributes.

³⁹ While prior studies (Lang et al., 2003a; Doidge et al., 2004a; Hope et al. 2005) use the country-level liquidity ratios for year 1997, my study use more recent data. Also, LLS (2006) covers 49 countries, and adopting measures from their study enlarges my sample size.

[INSERT TABLE 14 HERE]

4.5.2 Multivariate Results

Table 15 presents results of OLS regressions addressing the link between management forecasts and firm values. The legal regime has three proxies: common/civil law, anti-director rights, and judicial efficiency, so I separately estimate models for these proxies. The coefficients on the management forecasts (*MF*) are significantly positive in both the anti-director model and the judicial efficiency model, suggesting that cross-listed firms releasing earnings forecasts enjoy higher firm valuations (H5).

LEGAL has positive and significant coefficients in column (1), (2), and (5), in accordance with prior findings that firms located in stronger legal environments have higher valuation premiums (Doidge et al., 2004a).

Also, consistent with H6, the interaction term between management forecasts likelihood and judicial efficiency is significantly negative at the 0.01 level. This implies that the positive relation between management earnings forecasts and valuation is weaker for cross-listed firms from stronger regimes.

Further, the coefficients on *MF*PRECISION* are significantly positive at all six models, providing strong support for my prediction that cross-listed firms providing more precise forecast disclosures benefit from higher firm valuations (H7).

Finally, findings on control variables are also thought-provoking. The coefficients on *Liquidity* are positive and significant in four out of the six models. This result is consistent with Doidge et al. (2004a) that the more active the home market trading

environment, the more valuable cross-listed firms are. Supporting Hope et al. (2006), I also find that foreign firms in the U.S. are more valuable when they list on major U.S. stock exchanges. Further, firms with higher profitability are more valuable as are firms with higher liabilities, and greater growth opportunities. Finally, it is worth noting that the coefficients on *Size* are negative and significant in all six specifications. This finding suggests that in an international setting, firms of smaller size are valued more as large firms are subject to more severe agency cost problems (Lang et al., 2003a; Durnev and Kim, 2005).

[INSERT TABLE 15 HERE]

4.6 Sensitivity Analyses

4.6.1 Self-Selection Problem

Cross-listed firms making earnings forecasts are characterized by certain individual firm attributes and country institutional factors. This makes my research design subject to a sample selection problem. I address this problem by repeating regressions in this study using the Heckman (1979) two-step selection model. Following Leuz (2003), and Choi et al. (2006), I estimate a probit model of management earnings forecasts first and obtain Inverse Mills Ratios (IMR). In the second stage, I estimate the valuation model by adding the IMR obtained from the first stage.

$$Pro(MF) = f(LEGAL, OWNERSHIP, LISTTYPE, FORSALES \text{ or } FOROP, BIG5, \\ REGFD, LITIGATE, SIZE, LOSS, EXTERFIN, NEWS)$$

(2-1)

$$Q = f (MF, LEGAL, MF*LEGAL, MF*PRECISION, MF*FREQUENCY, LIQUIDITY, LISTTYPE, PROFIT, LIABILITY, SIZE, GROWTH, YEAR, INDUSTRY)^{40}$$

(3-1)

Table 16 summarizes the results for the Heckman two-stage test. The results are even stronger than those of the OLS regressions. In all models, the coefficients on *MF* are positively significant at $p < 0.01$ level, supporting the hypothesis that cross-listed firms are more valuable when they provide forecast disclosures. Additionally, the coefficients on *MF*COM*, *MF*ANTI-DIRECTOR*, and *MF*JUDICIAL* are all negative and significant at $p < 0.01$ level, indicating that cross-listed firms from weaker legal regimes are valued more for their voluntary forecasts. Lastly, the results on *MF*PRECISION* are consistent with OLS regressions, showing that firms are more valuable when they provide precise earnings forecast information.

[INSERT TABLE 16 HERE]

4.6.2 Impact of Uneven Samples across Countries

The current sample is heavily weighted towards observations from five dominant countries: Canada, Japan, Australia, United Kingdom, and Hong Kong. To alleviate concerns that the results are driven by variation across these five countries, I also estimate my models using country-weighted least squares (WLS). I assign an equal weight to every country. Results using WLS are presented in Table 17. Supporting H5, the coefficients on *MF* are positive and significant in all six models. Similarly,

⁴⁰ Here, I follow the typical cross-country regression suggested by Bushman and Smith (2001), which include test variables, enforcement variables, interaction effects, and control variables.

findings on *MF*LEGAL* (H6) are also consistent with those reported in my primary tests. Findings on *MF*PRECISION* are not so strong as those reported in OLS regressions, but the coefficients are positive and significant in two out of the six specifications. Overall, my primary findings are not driven by uneven sample representation.

[INSERT TABLE 17 HERE]

4.6.3 Impact of Economic Development

Doidge et al. (2004b) conclude that the financial and economic development of the country in which a firm is domiciled play an overwhelming role in determining its corporate governance; they also suggest that this relation is affected by financial globalization (for example, cross listing). In a similar fashion, Reese and Weisbach (2002) suggest that the economic development of cross-listed firms' home country influences their equity offerings subsequent to cross listings, while Bailey et al. (2006) find that cross-listed firms from developed economies experience a greater increase in volatility reactions to earnings upon listing in the U.S. In this light, it might be difficult for firms from developing countries to credibly commit to voluntary earnings forecasts. On the other hand, by borrowing the disclosure practices of the U.S., cross listing should reduce the importance of the home country economic development. Therefore, I split the sample according to GDP to test how the firm's home country development affects my results⁴¹.

⁴¹ I also decompose my sample according to disclosure level, CIFAR score and law enforcement. The country-level data are obtained from La Porta et al. (2006). The index of disclosure equals the arithmetic mean of: (1) Prospect; (2) Compensation; (3) Shareholders; (4) Inside ownership; (5) Contracts Irregular; (6) and Transactions. Law enforcement is measured as the sum of enforcement of private security laws and the

Table 18 provides the regression results on firm valuation, decomposing the sample according to the economic development of cross-listed firms' home country. Panel A presents the results for firms from high-GDP countries, whereas Panel B reports the results for cross-listed firms from low-GDP countries. In Panel A, the coefficients on *MF* are insignificant in two models and significantly negative in one model. Conversely, Panel B indicates that coefficients on *MF* are positive and significant in all three models. This suggests that voluntary disclosure plays a more vital role for cross-listed firms from countries with low economic development. However, Panel A and B show similar results on the interaction between management earnings forecasts and legal regimes. The coefficients on *MF*LEGAL* are negative and significant in all three specifications of Panel A. Likewise, Panel B details that the coefficients on *MF*COM* and *MF*JUDICIAL* are negative and significant at $p < 0.01$ level. These findings indicate that the valuation premiums of management earnings forecasts are larger for cross-listed firms from countries with weaker legal regimes, despite of the home-country economic development of these foreign firms in the U.S. Findings on *MF*PRECISION* are also intriguing. Although the coefficients of this variable are strongly significant and positive in Panel A, they are significantly negative in two out of three specifications in Panel B. This implies that precise information has more values for firms from high-GDP countries, but not for firms from low-GDP countries. A possible explanation is that the latter is more likely to

enforcement of public security laws. The index of public enforcement of securities laws is measured as the arithmetic mean of four underlying indices: Supervisor Characteristics index, Investigative Powers index, Orders index and Criminal index. The index of private enforcement of securities laws is measured as the arithmetic mean of two underlying indices: Disclosure index and Burden of Proof Index. For brevity, I do not present the results. However, findings are similar to the tests reported in this section.

release a precise forecast disclosure when the earnings news is negative. Finally, the results are marginally different for control variables. Firms from low-GDP countries are valued for high profitability and high sales growth to a greater extent relative to firms from high-GDP countries. Overall, findings in the section support the view of Doidge et al. (2004b) that country matters for corporate governance and firm valuation.

[INSERT TABLE 18 HERE]

4.7 Concluding Remarks

This essay explores the association between voluntary disclosure of forward-looking information and firm valuation for foreign firms migrating into the U.S. markets. Fundamentally, I intend to measure how management earnings forecasts, firm characteristics, and country institutional factors interact with each other to affect firm value. I find evidence that forecasting cross-listed firms have higher valuation premiums compared to non-forecasting firms. I also document that cross-listed firms from weaker legal regimes are valued more for their management forecasts, and that firms releasing more precise and more frequent forecasts are associated with higher firm valuation. Overall, consistent with Merton's Investor Recognition Hypothesis, the evidence suggests that cross-listed firms in the U.S. are rewarded for their voluntary bonding to more transparent corporate governance practice. This study also substantiates prior work (Siegel, 2004; King and Segal, 2004) that reputational bonding mechanism matters in the valuation of cross-listed firms.

This study contributes to the growing literature on cross listings and on international corporate governance. First of all, it has implications on the debate of international corporate governance convergence (Coffee 1999; Khanna et al., 2004; Doidge et al., 2004b; Durnev and Kim, 2005). Previous studies provide mixed evidence on this topic. Some researchers argue that individual firm attributes matter more in shaping corporate governance (Durnev and Kim, 2005), while others posit that country characteristics are more relevant (Doidge et al., 2004b). By examining voluntary disclosure, an important corporate governance mechanism, this study helps in advancing our knowledge in this area. Furthermore, in its examination of whether forecasting firms are worth more relative to non-forecasting firms, this study can help explain some long standing questions: why do cross-listed firms in the U.S. enjoy higher firm valuation? And does firm-level voluntary commitment to U.S. governance practices matter? In this way, it enhances our understanding of the sources of cross-listing benefits.

4.8 Discussion

My work leaves some issues unsolved. First, it is possible that firms change their voluntary disclosure practices gradually after their cross listing. Therefore, it would be relevant to investigate changes in management forecasts around cross listing, and their subsequent influences on firm valuation. However, my sample largely covers forecasts released after foreign firms list in the U.S., so data constraints limit further study. Also, although there is no direct theoretical evidence about the relation between forecast credibility and firm valuation, it is possible that disclosure veracity may

influence firm valuation through its effect on stock prices. For example, Pownall and Waymire (1989) suggest disclosures of lower credibility contain less information content, and thus, will be discounted by market participants. Future work may examine the association between disclosure fidelity and the cost of capital either theoretically or empirically. Lastly, my study relies on an inherent assumption: the cost of capital is inversely related to firm value. Although this link is well supported by previous research, this relation might not hold under certain circumstances. For example, Hail and Leuz (2005) suggest that in addition to the effect of cost of capital, the cash flow effect also explains for the higher valuation of cross-listed firms. Hence, future research can evaluate the direct relation between the cost of capital⁴² and voluntary disclosure for foreign firms listing in the U.S.

⁴² For future research, I am interested in examining the effect of management earnings forecasts on both cost of debt and cost of equity capital.

Chapter 5 – Conclusion and Discussion

This dissertation explores a novel issue to the literature: what are the incentives for and economic consequences of management earnings forecasts released by foreign firms opting into the U.S. markets. I also measure how country-level governance mechanisms (e.g., legal institutions, and the SEC enforcement) and firm-level governance mechanisms (e.g., ownership and auditor) interact to influence the answers. In effect, I am not aware of any prior work linking management earnings forecasts, corporate governance and firm valuation in an international setting. In this way, this dissertation contributes to the literature that focuses on the effects of international institutional factors on accounting choices (Ball et al., 2000; Hope, 2003; Leuz et al., 2003). Additionally, prior work posits that cross-listed firms may voluntarily release information to enhance visibility and build reputation, thereby benefiting minority shareholders (Coffee, 1999, 2002; Merton, 1987; Stulz, 1999; Siegel, 2005). By probing issues on voluntary information that cross-listed firms sequentially provide, this dissertation extends the Investor Recognition Hypothesis by Merton (1987), and adds to our understanding about reputational bonding mechanisms (Coffee, 1999; Siegel, 2005).

In Essay 1 (Chapter 2), I provide a primer of the institutional background of cross-listed firms, and show that these firms are unique in regulatory, economic and legal schemes. Explicitly, foreign firms listing in the U.S. are characterized by various home-country legal institutional environments as well as economic development, different listing statuses (ADR Level I, II, III, and direct listing), active global product

market interactions and firm-level ownership concentration. These distinctive aspects of cross-listed firms make my study relevant to the literature on management earnings forecasts as well as firm valuation.

Essay 2 (Chapter 3) focuses on the incentives of management earnings forecasts released by foreign firms listing in the U.S. Using a sample of cross-listed firms from 42 countries across the world, I provide evidence that in the period spanning from 1996 to 2005, legal institutions, as measured by legal origin, investor protection and judicial efficiency, are positively associated with the likelihood of forecast occurrence. In addition, cross-listed firms listing on major U.S. stock exchanges (NYSE/Nasdaq/AMEX) are more apt to release forecast disclosures compared to OTC/Portal firms. I also document that the extent of international product market interaction is favorably related to firms' probability to disclose earnings forecasts. Finally, I indicate that cross-listed firms are more likely to forecast when institutional ownership is higher, but less likely to release forecasts when ownership is highly concentrated.

Essay 3 (Chapter 4) investigates how management earnings forecasts, firm attributes, and country institutional factors interact with each other to affect firm values. I find that forecasting cross-listed firms enjoy higher valuation premiums relative to non-forecasting firms. I also find that the association between voluntary disclosure and firm value is stronger for cross-listed firms originated from weaker legal regimes, indicating that firms from weaker legal institutions benefit more from providing more financial information. Moreover, I provide evidence that firms

disclosing more precise and more frequent forecasts have higher values. Overall, this essay suggests that cross-listed firms are rewarded for their voluntary bonding to transparent financial reporting practice, and supports that visibility and reputational bonding matter in the valuation of cross-listed firms (Merton, 1987; Siegel, 2005; King and Segal, 2004).

Although this dissertation is one of the earliest endeavors to observe issues on management earnings forecasts globally, it leaves some questions unsolved. First of all, without an exploration on changes around cross listings, I cannot fully capture whether increases in voluntary disclosures and changes in firm valuation originate from cross listings or from other mechanisms, so some results need to be interpreted with caution. However, the First Call CIG database mainly covers forecasts by cross-listed firms after they list their shares in the U.S., so data constraints plague relevant studies. In future research, I intend to compare the voluntary disclosure practices of cross-listed firms with those of U.S. domestic firms or non-cross-listed firms. I believe further insights can be obtained in understanding the voluntary information these firms provide.

Also, there are many dimensions of management forecast properties. While this dissertation largely focuses on forecast likelihood, forecast precision, and forecast frequency, future studies can investigate other properties, such as forecast error and forecast bias. For instance, future work may investigate the association between disclosure veracity and the cost of capital either theoretically or empirically. Another possible future direction is to compare forecast properties of foreign firms listing in

the U.S. vis-à-vis U.S. domestic firms. In so doing, practitioners and academics may gain insights into the International Corporate Governance Convergence Hypothesis.

Furthermore, my dissertation examines the association between voluntary disclosure and firm value, and relies on an innate assumption that the cost of capital is inversely related to firm value. However, Hail and Leuz (2005) suggest that except for the effect of cost of capital, the cash flow effect also explains the higher valuation of cross-listed firms. Thus, it would be intriguing to build up a direct link between the cost of capital and voluntary disclosure for cross-listed firms. Future research can either focus on cost of debt capital or cost of equity capital to gather further evidence.

Finally, Lang and Lundholm (1996) posit that discretionary disclosure lowers the information acquisition cost of analysts, and thus improves analyst coverage and forecast accuracy. Therefore, it would be stimulating to investigate how voluntary disclosure of forward-looking information influences analyst properties of cross-listed firms. In a similar vein, a short-term event study on returns and trading volumes around management earnings forecasts would shed light on how voluntary disclosures affect market behavior globally. I leave these unsolved questions and areas for future research.

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Table 1

Regulatory Standards for Cross Listing Programs

There are four levels of American Depositary Receipt (ADR) programs with different requirements on registration, financial reporting, and trading. Canadian and Israeli Firms normally choose to list their shares directly on the major U.S. exchanges. Data are obtained from the Bank of New York, *Depository Receipts Information Guide* by Citibank's Global Transaction Services Department, *Electronic Form Types* by SEC, and Foerster and Karolyi (1999).

Item	ADR Firms				Direct Listing		
	U.S. Firms	Level I	Level II	Level III	Canadian Firms	Israeli Firms	
Description	Various types	Unlisted	Listed on primary U.S. Exchanges	Offered and Listed on primary U.S. Exchanges	Private placement to Qualified Institutional Buyers (QIBs)	Various Types	Normally Listed
Trading	Various locations	OTC Pink Sheet	NYSE, Nasdaq, or AMEX	NYSE, Nasdaq, or AMEX	Private placement using PORTAL	NYSE, Nasdaq, AMEX, or OTC	NYSE, Nasdaq, or AMEX
Capital Raising	May or may not	No	No	Yes	Yes	May or May not	Normally Yes
SEC Registration	Form S-1	Form F-6	Form F-6	Form F-6 and F-1	None	Form F-8 and/or F-10	Form F-6
GAAP Requirement	U.S. GAAP	Home GAAP	Reconciliations with U.S. GAAP	Reconciliations with U.S. GAAP	Home GAAP	Canadian GAAP allowed	Reconciliations with U.S. GAAP
Annual Report	Form 10-K	Exemption under Rule 12g3-2(b)	Form 20-F	Form 20-F	Exemption under Rule 12g3-2(b)	Canadian Reports after 1991	Form 20-F
Quarterly Report	Form 10-Q	Exempt	Exempt	Exempt	Exempt	Canadian Reports after 1991	Exempt
Current Report	Form 8-K	Exempt	Form 6-K	Form 6-K	Exempt	Form 6-K	Form 6-K
Proxy Statement	Yes	No	No	No	No	Yes	No

Table 2**Cross-Listed Firms by Country and Listing Type**

This table shows the distribution of firms that cross listed in the U.S. as of June 30, 2006. Information on ADRs is obtained from the Bank of New York. Information on direct-listing Canadian and Israeli firms is obtained from the websites of NYSE, AMEX, and Nasdaq. The National Quotation Bureau's Pink Sheets are used to identify Canadian firms that directly listed on the OTC market. Anti-director rights is an index that aggregates six different shareholder rights and ranges from 0 to 6 with 6 as the highest level of investor protection. Judicial efficiency is an assessment of the efficiency and integrity of a country's legal environment and ranges from 0 to 10 with 10 as the highest standard. Ownership concentration is the average percentage of common shares not owned by the top three shareholders in the ten largest non-financial, privately-owned domestic firms in a given country. Information on anti-director rights, judicial efficiency, and ownership concentration is taken from La Porta et al. (2006). Data on China are identified from Allen, Qian, and Qian (2005).

Country	Exchange Listed (NYSE/AM EX/Nasdaq)	OTC	Rule 144A	Total	Anti Director Rights	Judicial Efficiency	Ownership Concentration
Argentina	17	2	5	24	4	6	0.53
Australia	21	103	3	127	4	10	0.28
Austria	1	14		15	2	9.5	0.58
Belgium	1	2	1	4	0	9.5	0.54
Bolivia		1		1			
Brazil	39	25	16	80	3	5.75	0.57
Canada	215	284		499	5	9.25	0.4
Chile	16	2	4	22	5	7.25	0.45
China	40	25	7	72	3		
Columbia	1	3	2	6	3	7.25	0.63
Croatia			2	2			
Czech Republic		1	1	2			
Denmark	3	5	1	9	2	10	0.45
Dominican Rep.		1		1			
Ecuador		1	1	2	2	6.25	0.54
Egypt		3	8	11	2	6.5	0.62
Estonia			2	2			
Finland	4	1	1	6	3	10	0.37
France	34	18	3	55	3	8	0.34
Germany	25	24	2	51	1	9	0.48
Greece	3	3	5	11	2	7	0.67
Hong Kong	14	96	1	111	5	10	0.54
Hungary	1	4	5	10			
India	16	2	70	88	5	8	0.4
Indonesia	2	6	3	11	2	2.5	0.58

Table 2. (Continued)

Country	Exchange Listed (NYSE/AM EX/Nasdaq)	OTC	Rule 144A	Total	Anti Director Rights	Judicial Efficiency	Ownership Concentration
Ireland	12	8	1	21	4	8.75	0.39
Israel	83	10	2	95	3	10	0.51
Italy	12	6	8	26	1	6.75	0.58
Jamaica		3		3			
Japan	31	119	3	153	4	10	0.18
Jersey	2			2			
Jordan		2	1	3	1	8.66	0.52
Kazakhstan		1	1	2			
Korea	15	2	22	39	2	6	0.23
Latvia			1	1			
Lebanon			3	3			
Lithuania			2	2			
Luxemburg	1	2	1	4			
Malaysia		14		14	4	9	0.54
Malta			1	1			
Mexico	22	29	10	61	1	6	0.64
Netherlands	23	12	2	37	2	10	0.39
New Zealand	2	3		5	4	10	0.48
Nigeria			1	1	3	7.25	0.4
Norway	6	5	3	14	4	10	0.36
Oman			1	1			
Pakistan			3	3	5	5	0.37
Panama		2		2			
Peru	1	4	2	7	3	6.75	0.56
Philippines	2	6	3	11	3	4.75	0.57
Poland	1		5	6			
Portugal	3	2	2	7	3	5.5	0.52
Qatar			1	1			
Russia	6	37	16	59			
Singapore	2	26		28	4	10	0.49
South Africa	10	40	3	53	5	6	0.52
Spain	8	4	2	14	4	6.25	0.51
Sri Lanka			1	1	3	7	0.6
Sweden	3	10	1	14	3	10	0.28
Switzerland	12	7	1	20	2	10	0.41
Taiwan	18		46	64	3	6.75	0.18
Thailand		14		14	2	3.25	0.47
Tunisia			2	2			

Table 2. (Continued)

Country	Exchange Listed (NYSE/AM EX/Nasdaq)	OTC	Rule 144A	Total	Anti Director Rights	Judicial Efficiency	Ownership Concentration
Turkey	1	4	17	22	2	4	0.59
Ukraine		10		10			
United Kingdom	63	48		111	5	10	0.19
Venezuela	1	10	1	12	1	6.5	0.51
Virgin Islands			1	1			
Zambia		2		2			
Total	793	1,068	313	2,174			

Table 3**Class Action Lawsuits of Cross-Listed Firms**

This table presents the number of class action lawsuits against cross-listed firms from 1999 to 2005. Data are obtained from the 2004-2005 Securities Litigation Study, and 2004-2005 Foreign Securities Litigation Study by PriceWaterhouseCoopers LLP: www.10b5.com.

Year	Europe	Other Regions	Total	Accounting Related	Non-Accounting Related
1999	3	8	11	37%	63%
2000	5	9	14	76%	24%
2001	3	13	16	73%	27%
2002	9	14	23	92%	8%
2003	7	8	15	60%	40%
2004	8	21	29	43%	57%
2005	4	15	19	61%	39%

Table 4**Top 10b-5 Settlements For Foreign Companies**

This table provides details of the top class action settlements for foreign companies in recent years. Data are obtained from the 2005 Securities Litigation Study by PriceWaterhouseCoopers LLP: www.10b5.com, the Lexis/Nexis, and Proquest. The amount is expressed in millions.

Firm	Home Country	Year in which the settlement took place	Amount	Brief Summary
Royal Ahold NV.	Netherlands	2005	\$1,100	Ahold inflated earnings by at least \$500 million based on conduct at Ahold's wholly-owned U.S. Foodservice, Inc. subsidiary, thus artificially inflating the price of Ahold's common stock and ADRs during the period from July 30, 1999 through February 23, 2003.
Global Crossing Ltd.	Bermuda	2004	\$345	Understate cost, inflate earnings, and internal control issues.
DaimlerChrysler AG	Germany	2003	\$300	Daimler-Benz AG misrepresented the acquisition of Chrysler as a "merger of equals" to avoid paying Chrysler shareholders a takeover premium.
Deutsche Telekom AG	Germany	2005	\$120	For overstating the likelihood of a major acquisition and the value of Deutsche Telekom's real estate assets.
Lernout&Hauspie Speech Products NV	Belgium	2004	\$115	Artificially inflated the company's reported revenues by an astounding 64 percent - or a total of \$377 million - over a two-and-a-half-year period.
Alcatel	France	2001	\$75	For material misrepresentations and omissions in the registration statement and prospectus that Alcatel provided to DSC shareholders in connection with a merger.
Elan Corporation PLC	Ireland	2004	\$75	Misled investors for failing to disclose material information about the company's financial results filed with the SEC and in the quarterly press releases disseminated to the U.S. investors.

Table 5**Cross-Listed Firms by Management Forecasts**

This table shows the number of management earnings forecasts released by cross-listed firms, the number of forecasting cross-listed firms, and the number of non-forecasting cross-listed firms between 1996 and 2005. Data are collected from the Corporate Investor Guidelines (CIG) database, which is maintained by First Call. Information on legal systems is obtained from La Porta et al. (2006).

COUNTRY	Exchange Listed (NYSE/AMEX /Nasdaq)		Rule		Number of non-forecasting firms	Number of forecasting firms	Number of Management Earnings Forecasts
	OTC	144A	TOTAL				
Panel A: English Common Law Countries							
Australia	21	103	3	127	124	3	3
Canada	215	284		499	120	379	1904
Hong Kong	14	96	1	111	105	6	9
India	16	2	70	88	83	5	19
Ireland	12	8	1	21	9	12	88
Israel	83	10	2	95	29	66	230
Malaysia		14		14	14	0	0
New Zealand	2	3		5	5	0	0
Pakistan			3	3	2	1	19
Singapore	2	26		28	17	11	70
South Africa	10	40	3	53	53	0	0
Thailand		14		14	14	0	0
United Kingdom	63	48		111	61	50	104
Sub-Total	438	648	83	1169	636	533	2446
Panel B: French Civil Law Countries							
Argentina	17	2	5	24	22	2	2
Belgium	1	2	1	4	2	2	4
Brazil	39	25	16	80	78	2	2
Chile	16	2	4	22	19	3	7
Colombia	1	3	2	6	6	0	0
Egypt		3	8	11	11	0	0
France	34	18	3	55	42	13	72
Greece	3	3	5	11	11	0	0
Indonesia	2	6	3	11	11	0	0
Italy	12	6	8	26	22	4	6
Jordan		2	1	3	3	0	0
Mexico	22	29	10	61	54	7	9
Netherlands	23	12	2	37	20	17	50
Peru	1	4	2	7	6	1	1
Philippines	2	6	3	11	10	1	6
Portugal	3	2	2	7	7	0	0

Table 5 (continued)

Spain	8	4	2	14	14	0	0
Turkey	1	4	17	22	22	0	0
Venezuela	1	10	1	12	12	0	0
Sub-Total	186	143	95	424	372	52	159
Panel C: German Civil Law Countries							
Austria	1	14		15	14	1	2
China	40	25	7	72	58	14	61
Germany	25	24	2	51	34	17	37
Japan	31	119	3	153	150	3	3
Korea	15	2	22	39	38	1	1
Switzerland	12	7	1	20	9	11	14
Taiwan	18		46	64	58	6	7
Sub-Total	142	191	81	414	361	53	125
Panel D: Scandinavian Civil Law Countries							
Denmark	3	5	1	9	8	1	2
Finland	4	1	1	6	5	1	1
Norway	6	5	3	14	9	5	30
Sweden	3	10	1	14	12	2	8
Sub-Total	16	21	6	43	34	9	41
Totals	782	1003	265	2050	1403	647	2771

Table 6
Sample Construction Process

Cross listed firms in the U.S. as of 2005	<u>2,050</u>
Firm-year observations of cross-listed firms from 1996 to 2005	11,284
Less:	
Firm-level variables are unavailable	3,564
Observations with extreme values	<u>372</u>
Number of total observations	<u>7,348</u>
Forecasting firm-year observations	861
Nonforecasting firm-year observations	<u>6,487</u>
Number of total observations	<u>7,348</u>

Table 7
Descriptive Statistics and Univariate Comparisons between Management
Forecast Years and Non-forecast Years

All variables are defined in Appendix 1. The mean (median) value for each variable is provided in the top (bottom) row. *, **, *** indicate significance at the 10%, 5%, and 1% levels (2-tailed test).

	All Years	Forecast Years	Nonforecast Years	t-test	Wilcoxon z-test
Sample Size	7348	861	6487		
Country-level variables					
<i>Common/Civil laws</i>	0.52 1	0.85 1	0.5 1	14.56***	14.4***
<i>Anti-Director</i>	3.81 4	4.34 5	3.79 4	8.96***	10.18***
<i>Judicial Efficiency</i>	8.62 9.25	9.27 9.25	8.59 9.25	8.28***	2.21**
<i>Liquidity</i>	0.71 0.55	0.58 0.57	0.72 0.55	-4.24***	-3.27***
<i>Log GDP</i>	9.51 10	9.91 10.04	9.49 10.04	7.56***	2.10**
<i>Disclosure</i>	88.96 100	95.34 100	88.46 100	13.23***	14.64***
<i>Ownership</i>	0.39 0.40	0.40 0.40	0.38 0.40	2.06***	0.51
Firm-Level Variables					
<i>Tobin's Q</i>	1.57 1.20	2.26 1.64	1.53 1.19	13.24***	12.55***
<i>List Type</i>	1.21 1	1.87 2	1.18 1	21.10***	21.43***
<i>Litigate</i>	0.17 0	0.47 0	0.15 0	18.26***	17.95***
<i>ForSales</i>	0.28 0.07	0.56 0.70	0.20 0.04	17.30***	15.06***
<i>Profit</i>	0.03 0.04	0.04 0.05	0.02 0.04	0.531	1.89*
<i>Liability</i>	0.58 0.57	0.45 0.43	0.58 0.57	-8.25***	-9.98***
<i>Size</i>	5.86 5.98	5.75 5.76	5.86 5.98	-1.85*	-3.79***
<i>Loss</i>	0.24 0	0.31 0	0.23 0	3.83***	3.82***
<i>Growth</i>	0.23 0.08	0.21 0.15	0.25 0.08	-0.50	5.50***
<i>News</i>	0.40 0	0.52 1	0.39 0	5.47***	5.46***
<i>Exterfin</i>	0.21 0	0.32 0	0.19 0	6.89***	6.87***

Table 8

The Probability of Management Earnings Forecast

This table reports the probit regression results of the determinants of management earnings forecasts. The dependent variable is MF, with a value of 1 for forecasting firms, and 0 otherwise. All other variables are defined in Appendix 1. Coefficients estimates (*p*-values) are provided in the top (bottom) row. *, **, *** indicate significance at the 10%, 5%, and 1% levels (2-tailed test), respectively.

	Sign	(1)	(2)	(3)	(4)	(5)	(6)
Intercept	±	-6.004*** (0.00)	-6.562*** (0.00)	-8.295*** (0.00)	-9.083*** (0.00)	-6.206*** (0.00)	-6.473*** (0.00)
Common (H1)	+	1.877*** (0.00)	2.016*** (0.00)				
Anti-Director (H1)	+			.774*** (0.00)	.805*** (0.00)		
Judicial (H1)	+					.304*** (0.00)	.314*** (0.00)
Ownership (H2)	-	1.004*** (0.01)	1.431*** (0.00)	2.747*** (0.00)	3.584*** (0.01)	1.727*** (0.00)	2.208*** (0.00)
REGFD	+	-.536*** (0.00)		-.495*** (0.00)		-.497*** (0.00)	
Listtype (H3)	±	1.248*** (0.00)	1.22*** (0.00)	1.334*** (0.00)	1.314*** (0.00)	1.314*** (0.00)	1.276*** (0.00)
Litigate	+	1.261*** (0.00)		1.432*** (0.00)		1.098*** (0.00)	
Forsales (H4)	+	.012*** (0.00)	.011*** (0.00)	.015*** (0.00)	.014*** (0.00)	.013*** (0.00)	.012*** (0.00)
Big 5	+	.049*** (0.01)	.33** (0.05)	.384** (0.02)	.355** (0.04)	.267* (0.10)	.229 (0.158)
Size	±	-.063 (0.283)	.126* (0.06)	-.133** (0.02)	-.037 (0.561)	-.342*** (0.00)	-.221*** (0.00)
Loss	-	-.89*** (0.00)	-.886*** (0.00)	-.855*** (0.00)	-.85*** (0.00)	-.972*** (0.00)	-.995*** (0.00)
News	-	.447*** (0.00)	.40*** (0.00)	.395*** (0.00)	.355*** (0.00)	.471*** (0.00)	.413*** (0.00)
Exterfin	+	.089 (0.375)	.11 (0.283)	-.235** (0.02)	.208** (0.05)	.144 (0.144)	.172* (0.08)
SIC&Year Dummies		No	Yes	No	Yes	No	Yes
Pseudo R ²		0.13	0.135	0.128	0.132	0.108	0.112
No. of Observations		7348	7348	7348	7348	7215	7215

Table 9
Multivariate Tests Using Country-Weighted Least Squares

This table reports regression results of the determinants of management earnings forecasts, using country-weighted least squares. Equal weight is assigned to each country. The dependent variable is MF, with a value of 1 for forecasting firms, and 0 otherwise. All other variables are defined in Appendix 1. Coefficients estimates (*p*-values) are provided in the top (bottom) row. *, **, *** indicate significance at the 10%, 5%, and 1% levels (2-tailed test), respectively.

	Sign	(1)	(2)	(3)	(4)	(5)	(6)
Intercept	±	.023 (0.15)	-.025 (0.38)	.018 (0.42)	-.029 (0.33)	.068*** (0.00)	-.032 (0.28)
Common (H1)	+	.052*** (0.00)	.050*** (0.00)				
Anti-Director (H1)	+			.013*** (0.00)	.012*** (0.00)		
Judicial (H1)	+					.004*** (0.00)	.003** (0.02)
Ownership (H2)	-	-.006 (0.75)	.013 (0.45)	.017 (0.34)	.035* (0.07)	-.007 (0.73)	.005 (0.80)
REGFD	+	-.021*** (0.00)		-.021*** (0.00)		-.021*** (0.00)	
Listtype (H3)	±	.047*** (0.00)	.042*** (0.00)	.049*** (0.00)	.044*** (0.00)	.049*** (0.00)	.044*** (0.00)
Litigate	+	.087*** (0.00)		.090*** (0.00)		.086*** (0.00)	
Forsales (H4)	+	.001*** (0.00)	.002*** (0.00)	.001*** (0.00)	.002*** (0.00)	.001*** (0.00)	.001*** (0.00)
Big 5	+	.013* (0.06)	.012** (0.07)	.007 (0.32)	.006 (0.34)	.002 (0.81)	.002 (0.73)
Size	±	-.012*** (0.00)	-.004 (0.16)	-.016*** (0.00)	-.008*** (0.01)	-.020*** (0.00)	-.012*** (0.00)
Loss	-	-.029*** (0.00)	-.032*** (0.00)	-.030*** (0.00)	-.034*** (0.00)	-.033*** (0.00)	-.036*** (0.00)
News	-	.017*** (0.00)	.017*** (0.00)	.017*** (0.00)	.017*** (0.00)	.018*** (0.00)	.018*** (0.00)
Exterfin	+	.017*** (0.01)	.020*** (0.00)	-.009 (0.16)	.013* (0.06)	.015** (0.02)	.019*** (0.00)
SIC&Year Dummies		No	Yes	No	Yes	No	Yes
Pseudo R ²		0.106	0.114	0.101	0.132	0.095	0.105
No. of Observations		7348	7348	7348	7348	7215	7215

Table 10
Multivariate Tests Excluding Canadian Observations

This table reports the probit regression results of the determinants of management earnings forecasts, after excluding Canadian observations. The dependent variable is MF, with a value of 1 for forecasting firms, and 0 otherwise. All other variables are defined in Appendix 1. Coefficients estimates (*p*-values) are provided in the top (bottom) row. *, **, *** indicate significance at the 10%, 5%, and 1% levels (2-tailed test), respectively.

	Sign	(1)	(2)	(3)
Intercept	±	-7.326*** (0.00)	-5.639*** (0.00)	-9.445*** (0.00)
Common (H1)	+	.275 (0.12)		
Anti-Director (H1)	+		.126* (0.09)	
Judicial (H1)	+			.231*** (0.00)
Ownership (H2)	-	.666 (0.28)	-.194 (0.79)	1.36** (0.00)
REGFD	+	-.791*** (0.00)	-.786*** (0.00)	-.768*** (0.00)
Listtype (H3)	±	2.799*** (0.00)	2.723*** (0.00)	2.852*** (0.00)
Litigate	+	1.372*** (0.00)	1.333*** (0.00)	1.31*** (0.00)
Forsales (H4)	+	.016*** (0.00)	.017*** (0.00)	.014*** (0.00)
Big 5	+	.182 (0.586)	.117 (0.72)	.127 (0.70)
Size	±	-.275* (0.10)	-.383*** (0.00)	-.277*** (0.00)
Loss	-	-.409* (0.07)	-.456** (0.04)	-.443** (0.05)
News	-	.407*** (0.01)	.424*** (0.01)	.426*** (0.01)
Exterfin	+	-.292 (0.185)	.321 (0.142)	-.368* (0.10)
Pseudo R ²		0.077	0.078	0.078
No. of Observations		5732	5732	5599

Table 11

Multivariate Tests for Foreign Firms listing on Major U.S. Stock Exchanges

This table reports results of the probability of management earnings forecasts, using cross-listed firms listing on major U.S. stock exchanges (NYSE/Nasdaq/AMEX) as the sample. Both probit models and country-weighted least square models are estimated. Coefficients (*p*-values) are provided in the top (bottom) row. *, **, *** indicate significance at the 10%, 5%, and 1% levels (2-tailed test), respectively.

	Sign	Probit	WLS	Probit	WLS	Probit	WLS
Intercept	±	-6.037*** (0.00)	.033 (0.55)	-7.613*** (0.00)	.013 (0.21)	-5.581*** (0.00)	.076 (0.25)
Common (H1)	+	1.82*** (0.00)	.112*** (0.00)				
Anti-Director (H1)	+			.668*** (0.00)	.031*** (0.00)		
Judicial (H1)	+					.336*** (0.00)	.017** (0.02)
Ownership (H2)	-	3.172*** (0.00)	.154*** (0.00)	4.88*** (0.00)	.205*** (0.00)	2.904*** (0.00)	.133*** (0.01)
REGFD	+	-.475*** (0.00)	-.044 *** (0.00)	-.432*** (0.00)	-.042 *** (0.00)	-.436*** (0.00)	-.043 *** (0.00)
Litigate	+	1.495*** (0.00)	.134*** (0.00)	1.714*** (0.00)	.149*** (0.00)	1.175*** (0.00)	.124*** (0.00)
Forsales (H4)	+	.012*** (0.00)	.003*** (0.00)	.015*** (0.00)	.002*** (0.00)	.013*** (0.00)	.002*** (0.00)
Big 5	+	.339 (0.12)	.034 (0.11)	.264 (0.23)	.019 (0.39)	.105 (0.62)	.018 (0.42)
Size	±	.101 (0.183)	-.017** (0.02)	-.004 (0.96)	-.029*** (0.00)	-.203** (0.00)	-.037*** (0.00)
Loss	-	-.393*** (0.01)	-.033** (0.02)	-.403*** (0.01)	-.032** (0.03)	-.493*** (0.00)	-.042*** (0.00)
News	-	.321*** (0.01)	.032*** (0.00)	.275** (0.02)	.030*** (0.01)	.362*** (0.00)	.033*** (0.00)
Exterfin	+	.308*** (0.01)	.023* (0.06)	.082 (0.48)	.012 (0.31)	.420*** (0.00)	.026** (0.04)
Pseudo R ²		0.151	0.127	0.146	0.117	0.119	0.111
No. of Observations		3486	3486	3486	3486	3299	3299

Table 12

Time-Series Analysis on the Probability of Management Earnings Forecasts

This table reports results of yearly regressions (1996-2005) on the probability of management earnings forecasts. Panel A employs *Common* (legal origin) as the proxy for country legal institutions, while Panel B uses *Anti-director Index* (investor protection), and Panel C applies *Judicial* (legal efficiency). Coefficients (*p*-values) are provided in the top (bottom) row. *, **, *** indicate significance at the 10%, 5%, and 1% levels (2-tailed test), respectively.

Panel A: Common (Legal Origin) is adopted as the proxy for country legal institutions

	Sign	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
Intercept	±	.298 (0.91)	-2.612 (0.20)	-5.472*** (0.00)	-4.089*** (0.00)	-6.892*** (0.00)	-6.908*** (0.00)	-10.49*** (0.00)	-9.007*** (0.00)	-5.423*** (0.00)	-9.116*** (0.00)
Common (H1)	+	1.714** (0.02)	1.545*** (0.00)	1.783*** (0.00)	1.349*** (0.00)	1.862*** (0.00)	1.624*** (0.00)	2.58*** (0.00)	2.793*** (0.00)	1.726*** (0.00)	2.682*** (0.00)
Ownership (H2)	-	-2.271 (0.34)	.897 (0.61)	2.029 (0.14)	.832 (0.47)	-0.99 (0.94)	1.433 (0.24)	2.113 (0.11)	1.937 (0.14)	0.34 (0.75)	2.743* (0.06)
Listtype (H3)	±	1.987*** (0.00)	1.254*** (0.00)	1.010*** (0.00)	1.348*** (0.00)	1.140*** (0.00)	1.158*** (0.00)	1.504*** (0.00)	1.409*** (0.00)	1.217*** (0.00)	1.605*** (0.00)
Forsales (H4)	+	.013* (0.07)	.019*** (0.00)	.013*** (0.00)	.010*** (0.00)	.013*** (0.00)	.014*** (0.00)	.013*** (0.00)	.012*** (0.00)	.010*** (0.00)	.010*** (0.01)
Control Variables		Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Pseudo R ²		0.149	0.149	0.150	0.148	0.168	0.151	0.165	0.148	0.112	0.108

Panel B: Anti-Director Index (Investor Protection) is adopted as the proxy for country legal institutions

	Sign	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
Intercept	±	-5.071 (0.12)	-4.554** (0.05)	-7.978*** (0.00)	-5.025*** (0.00)	-9.201*** (0.00)	-9.244*** (0.00)	-14.38*** (0.00)	-11.47*** (0.00)	-7.444*** (0.00)	-11.26*** (0.00)
Anti-Director (H1)	+	1.441*** (0.00)	.583*** (0.00)	.749*** (0.00)	.479*** (0.00)	.756*** (0.00)	.675*** (0.00)	1.18*** (0.00)	1.037*** (0.00)	.720*** (0.00)	.978*** (0.00)
Ownership (H2)	-	-0.684 (0.79)	2.196 (0.21)	3.765*** (0.00)	1.748 (0.15)	1.611 (0.25)	3.254*** (0.01)	4.915*** (0.00)	4.252*** (0.01)	2.073* (0.07)	3.779*** (0.01)
Listtype (H3)	±	1.971*** (0.00)	1.286*** (0.00)	1.054*** (0.00)	1.405*** (0.00)	1.239*** (0.00)	1.246*** (0.00)	1.684*** (0.00)	1.564*** (0.00)	1.331*** (0.00)	1.610*** (0.00)
Forsales (H4)	+	.013* (0.08)	.021*** (0.00)	.016*** (0.00)	.011*** (0.00)	.015*** (0.00)	.017*** (0.00)	.018*** (0.00)	.017*** (0.00)	.013*** (0.00)	.014*** (0.00)

Control Variables	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Pseudo R ²	0.163	0.146	0.149	0.143	0.165	0.151	0.17	0.145	0.113	0.145	0.113	0.102	0.102

Panel C: Judicial Efficiency (Legal Efficiency and Integrity) is adopted as the proxy for country legal institutions

	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
Intercept	± -1.100 (0.76)	-7.452*** (0.00)	-5.662*** (0.01)	-5.733*** (0.00)	-8.267*** (0.00)	-5.968*** (0.00)	-7.936*** (0.00)	-7.94*** (0.00)	-5.085*** (0.00)	-10.07*** (0.00)
Judicial (H1)	+ .314 (0.24)	.618*** (0.00)	.327** (0.05)	.368*** (0.01)	.421*** (0.01)	.166 (0.21)	.237* (0.08)	.353*** (0.01)	.229** (0.03)	.501*** (0.00)
Ownership (H2)	- .685 (0.79)	3.897** (0.05)	2.886* (0.06)	2.298* (0.09)	.971 (0.50)	1.528 (0.22)	1.763 (0.17)	2.014* (0.10)	.781 (0.46)	3.509** (0.02)
Listtype (H3)	± 2.131*** (0.00)	1.288*** (0.00)	1.096*** (0.00)	1.431*** (0.00)	1.197*** (0.00)	1.173*** (0.00)	1.514*** (0.00)	1.508*** (0.00)	1.199*** (0.00)	1.582*** (0.00)
Forsales (H4)	+ .013* (0.09)	.018*** (0.00)	.011** (0.02)	.009*** (0.01)	.012*** (0.00)	.015*** (0.00)	.016*** (0.00)	.013*** (0.00)	.011*** (0.00)	.009*** (0.02)
Control Variables	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Pseudo R ²	0.136	0.147	0.125	0.138	0.149	0.132	0.131	0.117	0.095	0.086

Table 13**Analysis on Firm-Level Concentrated and Institutional Ownership**

This table reports probit regression results of the determinants of management earnings forecasts on firm-level ownership data. The dependent variable is MF, with a value of 1 for forecasting firms, and 0 otherwise. *OWNCON* is defined as the share of cash flow rights held by the largest shareholders in the forecast year. *INST* is the percentage of a company's aggregate common stock held by institutions. Coefficients estimates (*p*-values) are provided in the top (bottom) row. *, **, *** indicate significance at the 10%, 5%, and 1% levels (2-tailed test), respectively.

	Sign	(1)	(2)	(3)	(4)	(5)	(6)
Intercept	±	-4.67*** (0.00)	-4.05*** (0.00)	-3.801*** (0.00)	-5.723*** (0.00)	-4.818*** (0.00)	-4.497*** (0.00)
Common (H1)	+	.874*** (0.00)			.888*** (0.00)		
Anti-Director (H1)	+		.439*** (0.00)			.409*** (0.00)	
Judicial (H1)	+			.201*** (0.00)			.159** (0.02)
OWNCON (H2)	-	-.009*** (0.00)	-.008*** (0.01)	-.009*** (0.00)			
INST (H2)	+				.034*** (0.00)	.033*** (0.00)	.037*** (0.00)
Forsales (H4)	+	.011*** (0.00)	.013*** (0.00)	.012*** (0.00)	.009*** (0.00)	.010*** (0.00)	.010*** (0.00)
Control Variables		Yes	Yes	Yes	Yes	Yes	Yes
Pseudo R ²		0.142	0.132	0.116	0.21	0.201	0.188
No. of Observations		3126	3126	3126	2286	2286	2286

Table 14
Correlation Matrix

Pearson (Spearman) correlations are above (below) the diagonal. All variables are defined in the Appendix 1. *, **, *** indicate significance at the 10%, 5%, 1% levels, respectively (two-tailed).

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1. MF	1.000	.130***	.144***	.105***	.023***	.034***	.005	.221***	.185***	.155***	.020*	-.103***	-.039***	.040***	.057***	.056***
2. Tobin's Q	.135***	1.000	.101***	.080***	.058***	.049***	-.100***	.209***	.184***	.152***	.292***	-.137***	-.002	-.078***	.202***	-.122***
3. Common	.137***	.131***	1.000	.691***	.094***	.297***	.277***	.097***	-.016	.062***	.004	-.140***	-.400***	.114***	.066***	.011
4. Anti-Director	.092***	.095***	.566***	1.000	.286***	.369***	-.121***	.040***	-.041***	.054***	.023**	-.104***	-.239***	.081***	-.020**	.022**
5. Judicial	.086***	.084***	.084***	.414***	1.000	.276***	-.427***	.138***	.038***	.339***	-.075***	-.016	.080***	.025**	-.206***	.002
6. Liquidity	-.044***	-.013	-.044***	.103***	.094***	1.000	-.154***	-.100***	.040***	.160***	-.029***	-.068***	-.057***	.019*	.010	.001
7. Ownership	.022***	-.053***	.321***	-.249***	-.416***	-.166***	1.000	.036***	-.100***	-.143***	.001	-.079***	-.290***	.003	.097***	-.005
8. List Type	.213***	.147***	.109***	.047***	.213***	-.230***	.052***	1.000	.028***	.243***	-.004	-.059***	.125***	.061***	.007	.012
9. Litigate	.185***	.182***	-.026**	-.032***	.047***	.107***	-.100***	.019*	1.000	.114***	-.023**	-.157***	-.043***	.074***	.050***	.008
10. Forsales	.176***	.115***	.068***	.038***	.315***	.044***	-.088***	.254***	.120***	1.000	.034***	.007	.208***	-.013	-.072***	.001
11. Profit	.005	.098***	-.050***	-.043***	-.064***	-.006	.011	-.004	-.048***	.003	1.000	-.162***	.230***	-.566***	.229***	-.167***
12. Liability	-.085***	-.012	-.065***	-.050***	-.029***	-.061***	-.053***	-.061***	-.125***	-.022**	-.134***	1.000	.449***	.020**	-.101***	-.016
13. Size	-.022***	-.200***	-.382***	-.220***	.005	.007	-.246***	.097***	-.037***	.133***	.204***	.268***	1.000	-.326***	-.057***	-.066***
14. Loss	.040***	.038***	.112***	.075***	.056***	-.037***	.006	.066***	.074***	.011	-.239***	.068***	-.377***	1.000	-.154***	.243***
15. Growth	-.005	.089***	.065***	.035***	-.020*	.005	.015	.014	-.002	-.026**	-.032***	-.064***	-.127***	.048***	1.000	-.100***
16. News	.056***	-.062***	.008	.020	.004	-.002	-.004	.011	.008	.007	-.064***	-.017*	-.060***	.243***	-.011	1.000

Table 15

Firm Valuation Analysis-OLS Regressions

This table reports the OLS regression results of the effects of management earnings forecasts and legal regimes on firm valuation. The dependent variable is Tobin's Q. All variables are defined in Appendix 1. Coefficients estimates (*p*-values) are provided in the top (bottom) row. *, **, *** indicate significance at the 10%, 5%, and 1% levels (2-tailed test), respectively.

	Sign	(1)	(2)	(3)	(4)	(5)	(6)
Intercept	±	2.661*** (0.00)	2.34*** (0.00)	2.232*** (0.00)	2.47*** (0.00)	3.168*** (0.00)	2.715*** (0.00)
MF (H5)	+	-.075 (0.761)	-.185 (0.447)	.392* (0.00)	.395* (0.07)	4.055*** (0.00)	3.676*** (0.00)
Common	+	.105*** (0.00)	.047*** (0.00)				
MF*COM (H6)	-	-.055 (0.538)	.018 (0.83)				
Anti-Director	+			.006 (0.56)	-.015 (0.11)		
MF* (H6) Anti-Director	-			-.051 (0.32)	-.069 (0.16)		
Judicial	+					-.017** (0.03)	-.011 (0.171)
MF*Judicial (H6)	-					-.460*** (0.00)	-.412*** (0.00)
MF*Precision (H7)	+	.130** (0.02)	.094* (0.07)	.118** (0.03)	.091* (0.08)	.135*** (0.01)	.108** (0.04)
MF*Frequency	+	.018*** (0.00)	.020*** (0.00)	.018*** (0.00)	.020*** (0.00)	.018*** (0.00)	.020*** (0.00)
Liquidity	+	.002 (0.40)	.002** (0.05)	.001 (0.52)	.000** (0.03)	.003*** (0.00)	.001** (0.03)
Listtype	+	.252*** (0.00)	.225*** (0.00)	.261*** (0.00)	.235*** (0.00)	.267*** (0.00)	.237*** (0.00)
Profit	+	.122*** (0.00)	.131*** (0.00)	.098*** (0.00)	.104*** (0.00)	.126*** (0.00)	.119*** (0.00)
Liability	-	.358*** (0.00)	.442*** (0.00)	.368*** (0.00)	.453*** (0.00)	.367*** (0.00)	.448*** (0.00)
Size	-	-.288*** (0.00)	-.26*** (0.00)	-.307*** (0.00)	-.284*** (0.00)	-.309*** (0.00)	-.281*** (0.00)
Growth	+	.001*** (0.00)	.001*** (0.00)	.001*** (0.00)	.001*** (0.00)	.001*** (0.00)	.001*** (0.00)
SIC and Year Dummies		No	Yes	No	Yes	No	Yes
Adjusted R ²		14.8%	16.7%	14.6%	16.6%	15%	16.9%
No. of Observations		7348	7348	7348	7348	7215	7215

Table 16

Testing for the Effect of Self-Selection Bias of Management Earnings Forecasts

The Probit regressions estimate the probability that a cross-listed firm make an earnings forecast. The dependent variable is MF, with a value of 1 if a firm makes a forecast in a specific year. The regressions estimate the valuation impact of management earnings forecast using Heckman two-stage test. The dependent variable in each regression is Tobin's Q. All other variables are defined in the Appendix 1. Coefficients estimates (*p*-values) are provided in the top (bottom) row. *, **, *** indicate significance at the 10%, 5%, and 1% levels (2-tailed test), respectively.

	Sign	Probit	Heckman	Probit	Heckman	Probit	Heckman
Intercept	±	-4.89*** (0.00)	3.04*** (0.00)	-5.598*** (0.00)	3.231*** (0.00)	-4.967*** (0.00)	3.132*** (0.00)
MF (H5)	+		4.744*** (0.00)		4.512*** (0.00)		5.953*** (0.00)
Common	+	.986*** (0.00)	.036** (0.02)				
MF*COM (H6)	-		-1.254*** (0.00)				
Anti-Director	+			.33*** (0.00)	-.013 (0.18)		
MF* Anti-Director (H6)	-				-.190*** (0.00)		
Judicial	+					.208*** (0.00)	.019** (0.02)
MF*Judicial (H6)	-						-.737*** (0.00)
MF*Frequency	+		0.015*** (0.00)		.009*** (0.00)		.013*** (0.00)
MF*Precision (H7)	+		.185*** (0.00)		.133** (0.02)		.157*** (0.01)
Ownership	-	1.13*** (0.00)		1.912*** (0.00)		1.328*** (0.00)	
Liquidity	+		-.000 (0.67)		-.000 (0.94)		-.000 (0.98)
REGFD	+	-.050 (0.78)		-.040* (0.1)		-.009 (0.89)	
Listtype	+	1.31*** (0.00)	.174*** (0.00)	1.327*** (0.00)	.187*** (0.00)	1.248*** (0.00)	.201*** (0.00)
Litigate	+	.74*** (0.00)		.828*** (0.00)		.619*** (0.00)	
Forsales	+	.006*** (0.00)		.006*** (0.00)		.005*** (0.00)	
Profit	+		.123 (0.22)		.119** (0.03)		.127*** (0.00)
Liability	-		.301*** (0.00)		.341*** (0.00)		.333*** (0.00)
Size	-	.165** (0.01)	-.248*** (0.00)	.105* (0.10)	-.255*** (0.00)	.010 (0.76)	-.246*** (0.00)
Loss	-	-0.073*** (0.00)		-0.074*** (0.00)			
Growth	+		.001*** (0.00)		.001*** (0.00)		.002*** (0.00)
News	-	.249*** (0.00)		.242*** (0.00)		.252*** (0.00)	
Adjusted or Pseudo R ²		11.2%	21.8%	12.3%	20.7%	10.7%	22.4%
No of Observations		7348	7348	7348	7348	7215	7215

Table 17

Firm Valuation Analysis -Country Weighted Least Squares

This table reports the regression results of the effects of management earnings forecasts and legal regimes on firm valuations, using country-weighted least squares. Equal weight is assigned to each country. The dependent variable is Tobin's Q. All variables are defined in Appendix 1. Coefficients estimates (*p*-values) are provided in the top (bottom) row. *, **, *** indicate significance at the 10%, 5%, and 1% levels (2-tailed test), respectively.

	Sign	(1)	(2)	(3)	(4)	(5)	(6)
Intercept	±	2.275*** (0.00)	1.84*** (0.00)	2.297*** (0.00)	1.91*** (0.00)	2.126*** (0.00)	1.782*** (0.00)
MF (H5)	+	.949*** (0.00)	.971*** (0.00)	1.266*** (0.00)	1.005*** (0.00)	4.228*** (0.00)	3.825*** (0.00)
Common	+	.071*** (0.01)	.078*** (0.00)				
MF*COM (H6)	-	-.915*** (0.00)	-.86*** (0.835)				
Anti-Director	+			.014 (0.15)	.008 (0.41)		
MF* (H6) Anti-Director	-			-.237*** (0.00)	-.207*** (0.00)		
Judicial	+					.030*** (0.00)	.022*** (0.00)
MF*Judicial (H6)	-					-.427*** (0.00)	-.398*** (0.00)
MF*Precision (H7)	+	.020 (0.62)	.003 (0.94)	.035 (0.39)	.018 (0.64)	.069* (0.09)	.058** (0.05)
MF*Frequency	+	.031*** (0.00)	.028*** (0.00)	.031*** (0.00)	.028*** (0.00)	.030*** (0.00)	.027*** (0.00)
Liquidity	+	.001** (0.02)	.001*** (0.00)	.001*** (0.00)	.001*** (0.00)	.001** (0.02)	.001*** (0.00)
Listtype	+	.254*** (0.00)	.229*** (0.00)	.257*** (0.00)	.235*** (0.00)	.247*** (0.00)	.227*** (0.00)
Profit	+	.312*** (0.00)	.355*** (0.00)	.336*** (0.00)	.377*** (0.00)	.369*** (0.00)	.395*** (0.00)
Liability	-	.133*** (0.00)	.303*** (0.00)	.143*** (0.00)	.314*** (0.00)	.145*** (0.00)	.314*** (0.00)
Size	-	-.206*** (0.00)	-.18*** (0.00)	-.215*** (0.00)	-.191*** (0.00)	-.219*** (0.00)	-.194*** (0.00)
Growth	+	.001 (0.16)	.001 (0.20)	.000 (0.17)	.001 (0.22)	.000 (0.23)	.000 (0.29)
SIC and Year Dummies		No	Yes	No	Yes	No	Yes
Adjusted R ²		8.6%	14%	8.44%	13.8%	8.64%	13.9%
No. of Observations		7348	7348	7348	7348	7215	7215

Table 18**Decomposing the Valuation Effect According to Economic Development**

This table presents the regression results of the effects of management earnings forecasts and legal regimes on firm valuation, decomposing according to the economic development of cross-listed firms' home country. Panel A lists the results for firms from countries with high economic development, while Panel B for firm from countries with low economic development. The dependent variable is Tobin's Q. All variables are defined in Appendix 1. Coefficients estimates (*p*-values) are provided in the top (bottom) row. *, **, *** indicate significance at the 10%, 5%, and 1% levels (2-tailed test), respectively.

Panel A: Valuation Effect for Cross-listed Firms from Countries with High Economic Development

	Sign	(1)	(2)	(3)
Intercept	±	2.725*** (0.00)	2.845*** (0.00)	2.873*** (0.00)
MF (H5)	+	.208 (0.28)	.309 (0.36)	-2.809* (0.10)
Common	+	-.052 (0.18)		
MF*COM (H6)	-	-.344* (0.07)		
Anti-Director	+		-.035* (0.07)	
MF* Anti-Director (H6)	-		-.085 (0.22)	
Judicial	+			.025 (0.64)
MF*Judicial (H6)	-			-.286* (0.10)
MF*Precision (H7)	+	.148*** (0.00)	.118** (0.04)	.126*** (0.01)
MF*Frequency	+	.031*** (0.00)	.031*** (0.00)	.031*** (0.00)
Listtype	+	.410*** (0.00)	.405*** (0.00)	.398*** (0.00)
Profit	+	.074 (0.49)	.070 (0.65)	.052 (0.63)
Liability	-	.279*** (0.00)	.277*** (0.00)	.271*** (0.00)
Size	-	-.307*** (0.00)	-.306*** (0.00)	-.292*** (0.00)
Growth	+	.000 (0.36)	.000 (0.36)	.000 (0.36)
Adjusted R ²		12%	12.2%	11.9%
No. of Observations		4007	4007	4007

Table 18 (continued)

Panel B: Valuation Effect for Cross-Listed Firms from Countries with Low Economic Development

	Sign	(1)	(2)	(3)
Intercept	±	1.67*** (0.00)	1.729*** (0.00)	1.281*** (0.00)
MF (H5)	+	1.732*** (0.00)	.692** (0.02)	4.411*** (0.00)
Common	+	.105*** (0.01)		
MF*COM (H6)	-	-.586*** (0.00)		
Anti-Director	+		.009 (0.46)	
MF* (H6) Anti-Director	-		.399*** (0.00)	
Judicial	+			.071*** (0.00)
MF*Judicial (H6)	-			-.343*** (0.00)
MF*Precision (H7)	+	-.114 (0.22)	-.292*** (0.00)	-.162** (0.07)
MF*Frequency	+	.014 (0.17)	.009 (0.37)	.019* (0.06)
Listtype	+	.159*** (0.00)	.155*** (0.00)	.142*** (0.00)
Profit	+	1.195*** (0.00)	1.20*** (0.00)	1.436*** (0.00)
Liability	-	-.042 (0.48)	-.028 (0.65)	.003 (0.96)
Size	-	-.081*** (0.00)	-.089*** (0.00)	-.099*** (0.00)
Growth	+	.001*** (0.00)	.001*** (0.00)	.001*** (0.00)
Adjusted R ²		9.1%	8.9%	10%
No. of Observations		3341	3341	3218

Appendix 1
Variables Definition and Data Sources

Variables	Definition	Data Sources
Management Earnings Forecast Variables		
MF	The occurrence of a management earnings forecast, which takes 1 if a firm issued a forecast during the fiscal period, and 0 otherwise.	First Call Corporate Investor Guideline (CIG) database
PRECISION	An ordinal variable that takes a value of 3 for point forecast, 2 for range forecast, 1 for open-interval forecast, and 0 for qualitative forecast.	First Call Corporate Investor Guideline (CIG) database
FREQUENCY	The total number of forecasts issued by a firm in the sample period.	First Call CIG database
CREDIBILITY	The absolute value of the difference between management earnings forecast and actual EPS, deflated by the share price at the beginning of the fiscal period.	First Call CIG database
BIAS	1 if management forecast is greater than the actual earning (optimistic), and 0 otherwise (pessimistic).	First Call CIG database
Country-Level Variables		
COMMON	Takes on a value of 1 if a cross-listed firm is from an English common law country, 0 if from a civil law country.	La Porta et al. (2006)
ANTI-DIRECTOR	An index that aggregates six different shareholder rights and ranges from 0 to 6 with 6 as the highest level of investor protection.	La Porta et al. (2006), and Allen, Qian and Qian (2004)
JUDICIAL	An assessment of the efficiency and integrity of a country's legal environment and ranges from 0 to 10 with 10 as the highest standard.	La Porta et al. (2006)
LIQUIDITY	Represents the average ratio of dollar value of shares traded as a percentage of GDP for the period 1996 to 2000.	La Porta et al. (2006)
LOG_GDP	Represents the economic development, and is measured as the log of a country's GDP	La Porta et al. (2006)
DISCLOSURE	Average ranking of the answers to the following questions: A6g (R&D), B3f (capital expenditure), Ca (subsidiaries), Cb (segment-product), Cc (segment-geographic), and D1 (accounting policy).	Bushman and Piotroski (forthcoming), and La Porta et al. (2006)
OWNERSHIP	Equals the average percentage of common shares owned by the top three shareholders in the ten largest non-financial, privately-owned domestic firms in a given country.	Bushman and Piotroski (forthcoming), and La Porta et al. (2006)

Appendix 1 (Continued)

LAW_ENFORCE

It is measured as the sum of enforcement of private security laws and the enforcement of public security laws. The index of public enforcement of securities laws is measured as the arithmetic mean of four underlying indices: Supervisor Characteristics index, Investigative Powers index, Orders index and Criminal index. The variable is ranked between 0 (weak public enforcement) and 1 (strong public enforcement). The index of private enforcement of securities laws is measured as the arithmetic mean of two underlying indices: Disclosure index and Burden of Proof Index. The variable is ranked between 0 (weak private enforcement) and 1 (strong private enforcement).

Bushman and Piotroski (forthcoming), and La Porta et al. (2006)

Firm-Level Variables

Q	The firm-year Tobin's Q, which is computed as the sum of the book value of total assets plus the market value of common stock less the book value of equity over the book value of assets.	Worldscope
NEWS	Equals 1 if the current-period EPS is greater or equal to the previous-period EPS, and 0 otherwise.	IBES
OWNCON	Ownership concentration of a cross-listed firm. 1 measure ownership concentration as the share of cash flow rights held by the largest shareholder in the forecast year.	Worldscope, Mergent Online, Form 20-F, and the company's website.
INST	Percentage of the company's aggregate common stock held by institutions.	Worldscope, Compact Disclosure, Mergent Online, and Form 20-F.
LISTTYPE	Equals 2 if firms listing on the major U.S. exchanges (NYSE/ AMEX/Nasdaq), 1 if firms listing on the OTC, and 0 if firms listing on the Portal.	Bank of New York, and the website of NYSE, AMEX, Nasdaq, and Pink Sheet.
EXTERFIN	Long-run external financing, which takes a value of 1 if new debt or new capital is offered within the sample period, and 0 otherwise.	Securities Data Corporation (SDC)
BIG 5	Equals 1 if a cross-listed firm is audited by one of the Big 5 auditors, and 0 otherwise.	Worldscope, and annual reports
FORSALES	Log of the dollar values of foreign sales by cross-listed firms.	Worldscope
FOROP	Equals 1 if a cross-listed firm has foreign operations, and 0 otherwise.	Worldscope
SIZE	Log of the total sales of a firm at the beginning of the fiscal period.	Worldscope and Compustat.
LITIGATE	Equals 1 for firms in the biotechnology (SIC 2833-2836 and 8731-8734), computers (SIC 3570-3577 and 7370-7374), electronics (SIC 3600-3674), and retail (SIC 5200-5961) industries, and 0 otherwise.	Worldscope and firms' annual reports.
LOSS	Equals 1 if the firm reported loss in the current period, and 0 otherwise.	Worldscope and Compustat.
GROWTH	Sales growth over the past two years.	Worldscope

Appendix 1 (Continued)

PROFIT	Operating income deflated by total assets.	Worldscope
LIABILITY	The ratio of total liabilities to total assets	Worldscope

Other Variables

REGFD Equals 1 if the observation is related to the post-Reg FD period (after October 2000), and 0 otherwise.

YEAR Year dummies

INDUSTRY Industry dummies. Here industries are as defined in Durnev and Kim (2004): petroleum (SIC 13, 29), consumer durables (SIC 30, 36, 37, 50, 55, 57), basic industry (SIC 8, 10, 12, 14, 24, 26, 28, 33), food and tobacco (SIC 20, 21, 54), construction (SIC 15, 16, 17, 32), capital goods (SIC 34, 35, 38, 39), transportation (SIC 40, 41, 42, 44, 45, 47), textiles and trade (SIC 22, 23, 51, 53, 56, 59), services (SIC 7, 73, 75, 80, 82, 83, 87, 96), leisure (SIC 27, 58, 70, 79), unregulated utilities (SIC 48), regulated utilities (SIC 49), and financials (SIC 60, 61, 62, 63, 65, 67).

Worldscope and firms' annual reports.

Appendix 2 Country Level Variable

This table summarizes variables for: legal origin, shareholder protection, and the domestic stock markets and economies. The variables are taken from La Porta et al. (2006), and Bushman and Piotroski (forthcoming). English law, French law, German law, and Scandinavian law describe the origin of the legal system. Anti-director rights is an index that aggregates six different shareholder rights. Efficiency of the judicial system is an assessment of the efficiency and integrity of the legal environment as it affects business. Liquidity ratio is the dollar value of shares traded divided by the average market capitalization in the period 1996 to 2000 (from the *IFC Emerging Stock Markets Factbook*). Log_GDP is measured as the log of a country's GDP in 2000. Average ranking of the answers to the following questions: A6g (R&D), B3f (capital expenditure), Ca (subsidiaries), Cb (segment-product), Cc (segment-geographic), and D1 (accounting policy). Ownership concentration is the average percentage of common shares not owned by the top three shareholders in the ten largest non-financial, privately-owned domestic firms in a given country.

Country	English Law	French Law	German Law	Scandinavian Law	Anti-Director Rights	Judicial Efficiency	Liquidity Ratio	LOG_GDP	Disclosure	CIFAR	Ownership Concentration
Argentina	0	1	0	0	4	6	5.83	8.95	70.65	68	0.53
Australia	0	0	1	0	2	9.5	6.71	10.05	70.29	62	0.58
Austria	0	0	1	0	2	9.5	6.71	10.05	70.29	62	0.58
Belgium	0	1	0	0	0	9.5	16.83	10.02	92.75	68	0.54
Brazil	0	1	0	0	3	5.75	18.29	8.14	57.25	56	0.57
Canada	1	0	0	0	5	9.25	57.86	10.05	100	75	0.4
Chile	0	1	0	0	5	7.25	9.14	8.44	92.75	78	0.45
China	0	0	1	0	3						
Columbia	0	1	0	0	3	7.25	1.19	7.56	14.49	58	0.63
Denmark	0	0	0	1	2	10	36.27	10.31	86.96	75	0.45
Egypt	0	1	0	0	2	6.5	7.76	7.28			0.62
Finland	0	0	0	1	3	10	70.97	10.06	100	83	0.37

Appendix 2 (Continued)

Country	English Law	French Law	German Law	Scandinavian Law	Anti-Director Rights	Judicial Efficiency	Liquidity Ratio	LOG_GDP	Disclosure	CIFAR	Ownership Concentration
France	0	1	0	0	3	8	44.90	9.99	100	78	0.34
Germany	0	0	1	0	1	9	37.79	10.03	100	67	0.48
Greece	0	1	0	0	2	7	60.84	9.27	44.57	61	0.67
Hong Kong	1	0	0	0	5	10	179.05	10.10	79.71	73	0.54
India	0	1	0	0	2	2.5	13.78	6.59			0.58
Indonesia	0	1	0	0	2	2.5	13.78	6.59			0.58
Ireland	1	0	0	0	4	8.75	30.79	10.14	100	81	0.39
Israel	1	0	0	0	3	10	12.93	9.79	100	74	0.51
Italy	0	1	0	0	1	6.75	36.58	9.84	100	66	0.58
Japan	0	0	1	0	4	10	35.50	10.54	100	71	0.18
Jordan	0	1	0	0	1	8.66	6.22	7.13			0.52
Korea	0	0	1	0	2	6	110.16	9.18	65.22	68	0.23
Malaysia	1	0	0	0	4	9	98.54	8.25	100	79	0.54
Mexico	0	1	0	0	1	6	9.89	8.67	68.12	71	0.64
Netherlands	0	1	0	0	2	10	113.49	10.06	100	74	0.39
New Zealand	1	0	0	0	4	10	17.82	9.48	100	80	0.48
Norway	0	0	0	1	4	10	30.15	10.49	76.45	75	0.36
Pakistan	1	0	0	0	5	5	26.50	6.10	68.48	73	0.37
Peru	0	1	0	0	3	6.75	5.19	7.64	53.99		0.56
Philippines	0	1	0	0	3	4.75	21.45	6.83	80.07	64	0.57
Portugal	0	1	0	0	3	5.5	30.98	9.27	81.16	56	0.52

Appendix 2 (Continued)

Country	English Law	French Law	German Law	Scandinavian Law	Anti-Director Rights	Judicial Efficiency	Liquidity Ratio	LOG_GDP	Disclosure	CIFAR	Ownership Concentration
Singapore	1	0	0	0	4	10	79.15	10.05	100	79	0.49
South Africa	1	0	0	0	5	6	41.77	7.98	88.41	79	0.52
Spain	0	1	0	0	4	6.25	107.98	9.56	92.75	72	0.51
Sweden	0	0	0	1	3	10	92.22	10.15	100	83	0.28
Switzerland	0	0	1	0	2	10	206.27	10.41	100	80	0.41
Taiwan	0	0	1	0	3	6.75	320.69	9.54	59.78	58	0.18
Thailand	1	0	0	0	2	3.25	22.55	7.58	51.07	66	0.47
Turkey	0	1	0	0	2	4	43.68	8.02	59.06	58	0.59
United Kingdom	1	0	0	0	5	10	83.02	10.08	100	85	0.19
Venezuela	0	1	0	0	1	6.5	1.81	8.52	36.23		0.51