

**The Influence of Group Affiliation and Ownership Structure  
on Emerging Market IPOs: The Case of the Philippines**

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### **Abstract**

In this paper we report initial returns and long-run performance of IPOs in the Philippines over the period 1987-1997. Within this context we investigate the differential effects on IPO returns of offer size, firm age, industry, market timing, ownership structure, and company affiliation. We find average initial returns of 22.69% for a sample of 104 company IPOs over an 11-year period, 1987 through 1997, and three-year aftermarket adjusted returns of -5.44% for a subset of 65 of these companies. Factors commonly found to affect the level of IPO underpricing are not found significant in the Philippines. Instead, we find that firms affiliated with a corporate group are subject to greater IPO underpricing than unaffiliated firms. We attribute this to affiliated firms issuing IPOs accompanied by a lower degree of information disclosure.

**The Influence of Group Affiliation and Ownership Structure**

## on Emerging Market IPOs: The Case of the Philippines

### 1. Introduction

There has been much research in recent years documenting returns earned by shareholders investing in initial public offerings (IPOs) across a wide variety of countries. This paper adds to that literature by documenting the initial returns and long-run performance of IPOs in the Philippines over the period 1987-1997. In addition, we investigate the differential effects of this emerging market country's system of corporate governance, specifically the effects of corporate affiliations, ownership structure, and quality of public information.

We find average initial returns of 22.69% for a sample of 104 company IPOs over an 11-year period, 1987 through 1997, and three-year aftermarket raw returns of 48.33% and three-year aftermarket adjusted returns of -5.44% for a subset of 65 of these companies. Factors commonly found to affect the level of IPO underpricing are not found significant in the Philippines. Instead, the quality of public information appears to be an important consideration of market participants. We find that firms affiliated with a strong corporate group are subject to greater underpricing relative to other firms. We attribute this to these group affiliated firms issuing IPOs with a lower degree of information disclosure. We hypothesize that group affiliated firms have greater incentive to withhold certain financial information and regulators do not satisfactorily compel disclosure.

In section 2 we present theory and evidence for initial IPO returns, findings from other countries, and unique features of the Philippines that may effect IPO returns. In section 3 we discuss our sample construction and preliminary findings. Section 4 presents our results for

Philippine IPOs and we discuss how these results fit within the current body of literature. We present our conclusions in Section 5.

## **2. Theory and Evidence**

### **2.a. Underpricing**

In a comprehensive study of 10,616 IPOs of United States companies over the years 1960 through 1992, Ibbotson, Sindelar, and Ritter (1994) report initial returns averaging 15.3%.

These results are consistent across other studies of U.S. IPOs [for example see Ibbotson and Jaffe (1975) and Ritter (1984)]. It is widely accepted that these initial returns are from underpricing the IPO when it is brought to market, where a variety of suppositions have been made for this underpricing. For example, Allen and Faulhaber (1989) present a signaling model in which the reputation of the offering firm is enhanced by initial underpricing. This theorized signal allows the firm to successfully return to the market in the future to raise funds. A similar signaling model employed by Baron and Holmstrom (1980) relates the underpricing of new offers as a means for investment bankers to enhance their reputation. Based on an asymmetric informational model, Rock (1986) surmises that new issues are underpriced due to a “Winner’s Curse”. In this model, information asymmetry causes uninformed investors to demand sufficient underpricing for any new offer, since these investors cannot discern the value of an offer based on information. As applied by Beatty and Ritter (1986) this model implies that riskier issues will be subject to great underpricing.

These information asymmetry theories are supported by evidence that demonstrate smaller and younger companies are subject to greater underpricing [Ritter (1984); Chalk and Peavy (1987); Ibbotson, Sindelar, and Ritter (1994)].<sup>1</sup> Ritter (1984) uncovers that companies

involved primarily in natural resource industries account for much of this small-large company difference. Initial returns are also shown to vary by firm age in terms of whether the firm is an established business or a new start-up company [Ibbotson, Sindelar, and Ritter (1994)]. Newer firms display higher initial returns than older, more mature company IPOs. In addition, IPO underpricing and volume are also shown to be cyclical. Periods of high average initial returns and high IPO volume are referred to as 'hot issue' markets. These 'hot issue' markets were first documented by Ibbotson and Jaffe (1975) and more recently have been confirmed by Ibbotson, Sindelar, and Ritter (1994).

IPO underpricing has also been documented in many other countries, excluding to date, the Philippines. Initial IPO returns of 25 countries are summarized by Loughran, Ritter, and Rydqvist (1994) and for 33 countries by Ritter (1998). Based on articles surveyed by these authors, initial returns are shown to range from 4.2% in France to 388.0% in China. For emerging Pacific-Rim markets, IPO underpricing is relatively high. Datar and Mao (1997) report average initial returns of 388.0% for 226 Chinese firms going public over the 1990-96 period, Dhatt, Kim, and Lim (1993) find average initial returns of 78.1% for 347 Korean firms from 1980-90, Isa (1993) finds average initial returns of 80.3% for 132 Malaysian firms from 1980-1991, and Wethyavivom and Koo-smith (1991) find average initial returns of 58.1% for 32 Thai firms from 1988-89. Documented differences in IPO underpricing across these countries may be due to sample construction and time period studied, or may have to do with differences in firm characteristics, market regulations, and the degree of economic openness.

Loughran, Ritter, and Rydqvist (1994) surmise that greater initial returns are found in countries where institutional constraints are binding, firms are relatively smaller, firms have

short operating histories, and the environment in which equity is distributed has relatively less auction-like features.<sup>2</sup> Based on findings from other countries, Philippine IPOs are expected to have a high degree of underpricing when offered. Similar to IPOs issued in other emerging Pacific-Rim markets, Philippine IPOs may be considered relatively risky because of both the inherent economic and political risks. However, the degree of underpricing of Philippine IPOs is expected to decline through the 1990s due to the economic liberalization occurring over this period [Kim, Krinsky, and Lee (1993)].<sup>3</sup>

## **2.b. Aftermarket Performance**

Loughran and Ritter (1994) report findings of long-run IPO performance for a sample of 4,753 United States companies going public during the years 1970-1990. For the 3 years subsequent to the initial offer of shares they find average aftermarket returns of 8.4%, approximately 20.0% less than a matched set of non-IPO firms over the same period. Younger, smaller companies are found to suffer significant aftermarket under performance, while older, larger company IPOs appear to conform to market averages [Ibbotson, Sindelar, and Ritter (1994)]. There is also some evidence that the long-run performance of IPOs are affected by the 'hot issue' market phenomenon. Ritter (1984) surmises that issuing companies time their new equity issues for periods when the cost of equity is low, corresponding to times management believes the company stock is overvalued.

Results from investigating long-run performance of IPOs internationally is mixed. While adjusted long-run performance for IPOs in the US are overwhelmingly negative, this is not always the case in other countries. For the ten country IPO studies summarized in Loughran, Ritter, and Rydqvist (1994), seven show negative and three positive long-run performance.

However, in half the countries studied the difference between IPO performance and the comparison sample is less than 10% for the 3-year period. Varying results across countries may be due to small sample sizes, the period chosen for study, and economic and regulatory differences between countries.

### **2.c. The Philippines**

There are considerable differences between the economies and public equity markets of the United States and the Philippines, that may correspondingly lead to considerable differences in IPO pricing and the subsequent market reaction. For example, the Gross National Product (GNP) for the year 1996 was \$7.6 trillion in the United States, compared to \$82.7 billion in the Philippines [Hoover's Business Press (1997)]. Differences in public equity markets are even more pronounced. In the United States, there are over 8,400 publicly-traded companies with a market capitalization over \$11.8 trillion. In comparison the entire Philippine public equity market, represented by the Philippine Stock Exchange (PSE), had 216 listed companies with a market capitalization of \$80.6 billion, where the ten largest stock make up 35% of market capitalization [Philippine Stock Exchange (1997)]. Equity ownership is widespread in the United States where in 1991, 53.5% of all households owned stock in publicly listed companies [Kester (1992)]. In contrast, less than 1% of all Filipino households own public-traded equity [de los Angeles (1995)].

Another important consideration when analyzing the IPO pricing of a country is its system of corporate governance. The system of corporate governance present in the Philippines may be categorized as the Entrepreneurial Corporate Model, compared to the Capital Market System found in the United States, United Kingdom, and Canada, and the Industrial Group

Model found in Japan and South Korea [Prowse (1992), Garvey and Swan (1994), and Megginson (1997)]. Typically, corporations of an Entrepreneurial Corporate system feature a concentrated ownership structure where control is oftentimes in the hands of the entrepreneurial founder [Leff (1978); Caves (1989)].<sup>4</sup> In addition, information disclosure is limited, due to a combination of incomplete regulation and low compliance, resulting in little reliance on formal legal contracting and regulations causing corporations to rely heavily upon long-term, informal business relationships.<sup>5</sup> Intermediaries are the natural corporate monitors, such that corporate financing is dominated by a small number of relatively large commercial banks and capital markets are less developed.

Regulation of the equity markets is modeled after the United States, but without commensurate enforcement, disclosure, market liquidity, and implementation of accounting standards [Saudagaran and Diga (1997)]. Security regulation, including that pertaining to stock issuance, is under the auspice of the Security and Exchange Commission (SEC) and the Philippine Stock Exchange (PSE), and to lesser degrees the Central Bank and the Bureau of Internal Revenue. The SEC reviews all IPO prospectus' while listing approval comes from the PSE.<sup>6</sup> Regulatory reform began in 1986 as part of a tax policy change and subsequently accelerated during the administration of President Fidel Ramos starting in 1992 [Lamberte and Llanto (1995)]. Regulation regarding ownership disclosure requires that owners of 10% or more of a corporation's common stock must disclose this information to the SEC.

The effectiveness of market regulation is suspect due to the lack of effective enforcement. For example, in a study of 41 developed and emerging markets, the Philippines has been shown to rank comparatively low in financial disclosure [Saudagaran and Diga (1997)].

Saudagaran and Diga (1997) conclude that financial information availability, defined as information being adequate, timely, and conveniently accessible is inferior in many emerging market countries (including the Philippines) compared to developed market countries. These weak legal protections will keep small investors out of the equity markets. Conversely, large investors have greater incentives to enter the equity market since they can more easily gain control rights.

A basic question is why independent minority investors purchase the share that are offered through an IPO by a Philippine company. In general, a corporate governance system is effective if it assures investors a return on their investment through a combination of legal protections and ownership control [Shleifer and Vishny (1997)]. Since legal protections are largely inadequate in the Philippines, high ownership concentration is expected and present. However, since minority shareholders are subject to expropriation costs by large controlling owners, we expect the level of IPO underpricing to be directly related to ownership concentration. We also expect expropriation costs to be greater for minority shareholders of affiliated group companies, and therefore, underpricing is expected greater for the IPOs of affiliated companies.

### **3. Sample Description and Preliminary Results**

Our sample of initial public offerings is taken from the complete set that occurs in the time period beginning with 1987 and extending through 1997. We start with 1987 since this is the first full calendar year following the end of the Ferdinand Marcos regime, and consequently, the beginning of a more open, stable economy and improved investment climate. To determine whether a particular IPO will be included in our final sample we use the following criteria: (1)

necessary data on offer prices and market prices for calculation of initial returns and long-run returns are available (we allow a window of up to five trading days for prices), (2) the issue was for only common stock, and (3) the issuing firm used an investment banker. We collected our price data directly from Philippine Stock Exchange (PSE) archives to ensure accuracy. In addition, we scanned IPO prospectus' and PSE records to validate each observation. We include cases where part or all of the offer is referred to as secondary offerings in the primary market. These particular types of offers are defined as being shares offered to the public for the first time by a large or controlling shareholder. In addition, in cases where a company undertakes an IPO for both Class A and B shares, we consider this as one observation.<sup>7</sup>

We calculate the initial return over the period from the offer price to the closing price at the end of the first trading day [see Ritter (1984) and Ibbotson, Sindelar, and Ritter (1994)]. Long-run aftermarket performance is calculated as the return over the holding period for the three years beginning with the first day's closing price. To adjust for normal market returns, we calculate an adjusted aftermarket return as the difference between the IPOs' three-year return and the corresponding three-year return on a matched set of firms also traded on the Philippine Stock Exchange [see Ritter (1991); Ranan and Servaes (1993)].<sup>8</sup> Criteria used for inclusion in the matched sample includes matching by size, measured by market capitalization, and that the firm is not delisted over the 3-year measurement period. We do not match by industry group in an effort to avoid any potential bias that may occur if firms time their stock issuance to take advantage of industry-wide pricing distortions and because many industries have an inadequate number of firms to complete independent matches to our sample [Loughran and Ritter (1995)].

Table 1 presents gross proceeds and the initial returns for our entire sample of the 104 IPOs and aftermarket returns for the 65 IPOs with available data that occurred in the Philippines between 1987 and 1997. IPO activity is shown to steadily increase from 1987 and peaks during the years 1994 to 1996. There were no IPOs in the prior two years, 1985-86, due to the political uncertainty and restrictive economic measures present. The year 1987 marked a transition in political power from the 23 year reign of Ferdinand Marcos to the more open democratic government led by Corazon Aquino. As such, much of the increase in IPO activity can be attributed to the expanding economy bolstered by the market liberalization introduced by the Aquino government (1986-92) and Ramos government (1992-98). IPO activity stalled in 1997 in conjunction with a regional economic crisis.<sup>9</sup>

The level of IPO underpricing does not clearly follow the pattern of IPO frequency. The greatest underpricing occurs in the years 1987, 1989, and 1993. In addition, measures of aftermarket performance indicate that IPOs in the Philippines underperform comparable publicly-traded firms over the three-year period immediately subsequent to the initial offer. We find that relative to a set of matched firms IPO sample returns are on average 5.44% lower. However, due to high variability this difference is insignificant.<sup>10</sup>

To determine if IPO underpricing in the Philippines is related to the offer size, firm age, industry, or market timing as found in other countries, we investigate the relationship between IPO underpricing and these variables. The size of the offer is calculated as log of gross proceeds raised with the issue [Kim, Krinsky, and Lee (1993)]. Firm age is calculated as the log of the number of years the firm has been in operation from incorporation date to IPO offer date [Kim, Krinsky, and Lee (1993)]. We look at the differential effect of whether a firm is involved in a

natural resources industry [Ritter (1991)]. Market timing is measured by the variable which proxies for whether a firm went public in a 'hot issue' market and is calculated as the number of IPOs in year the firm went public divided by total IPOs in the sample [Ritter (1991)].

Due to differences in the Philippines and United States markets we include additional variables measuring the effect of group affiliation and ownership structure. Group affiliation may be an important determinant of the degree of IPO underpricing if affiliation results in varying degrees of information quality. Corporate groups in the Philippines are often controlled by the founding family that have incentives to keep financial information private from rival corporations, political interests, regulators, and tax collectors [see Shleifer and Vishny (1993; 1994)]. If this aspect results in less information disclosure by IPOs of affiliated firms, we expect an accompanying greater degree of IPO underpricing. We consider a firm as affiliated to a corporate group if a domestic corporate group or international conglomerate owns at least 50% of the firm's common stock or if a firm's officers have a direct relationship with a corporate group.

We also investigate the effects of ownership concentration and foreign ownership on IPO underpricing. High levels of ownership concentration indicates that a few, well-informed investors are taking significant positions in the company. Therefore, we surmise that if ownership concentration is high the need of information disclosure is low, and therefore, we expect greater underpricing associated with greater ownership concentration. We measure ownership concentration as the percent of total common stock owned by the top five owners.

The level of foreign ownership may also depend on information disclosure. If higher quality information attracts foreign investors, we expect greater foreign ownership will

correspond to less underpricing. Foreign ownership is calculated as the percent of common stock held by foreign-based banks, insurance companies, brokerage houses, and nonfinancial corporations, and international development banks, plus 50% of mutual fund holdings.

#### 4. Results

Studies of United States IPOs have shown underpricing is greater for smaller and younger firms, and is concentrated in the IPOs of companies in natural resource industries. This size and age phenomenon may be more pronounced in other countries. For example, Pagnano, Panetta, and Zingales (1994) find that firms seem to need a much longer track record before going public in Italy than firms in the United States. As a possible explanation, they surmise that less effective enforcement of minority rights make smaller, younger firms ex-ante riskier. Likewise, aftermarket performance has also generally been shown to be significantly worse for smaller, younger companies. Based on this information, Philippine IPOs are expected to have a greater degree of underpricing at offer and demonstrate relatively poorer aftermarket performance. However, the degree of underpricing of Philippine IPOs is expected to decline through the 1990s due to economic liberalization over this period [Kim, Krinsky, and Lee (1993)].

##### **4.a. Offer Size**

We start by analyzing whether the price reaction for Philippine IPOs is affected by offer size as shown in the United States by Beatty and Ritter (1986), Chalk and Peavy (1987), and Loughran (1993) and other countries by McGuinness (1992). The size of the offer may proxy for risk, where smaller offers are equated to being riskier offers. Beatty and Ritter (1986) and McGuinness (1992) argue that smaller issues are subject to greater ex-ante uncertainty. This

greater uncertainty is expected to equate to greater underpricing [Tinic (1988); Hughes and Thacker (1992)]. We found that when segmenting our IPO sample by offer size there is some evidence that smaller offers are subject to greater underpricing (Table 2). For 43 small offers raising less than PhP500 million underpricing is 26.88%, while for 42 large offers raising more than PhP780 million underpricing is 18.46%.<sup>11</sup>

International comparisons highlight differences between countries based on the firm size. In the United States and the United Kingdom, IPOs tend to be start-up ventures in risky new industries, while in many other countries the IPO market is primarily composed of older, larger, well-established companies. These differences result in the offer size of IPOs in the U.S. and U.K. to be relatively smaller. Jenkinson and Ljungqvist (1996) report that, on average, the gross proceeds raised through an IPO in the United States is US\$11 million and in the United Kingdom US\$10.5 million, while in Germany it is US\$37 million and in Italy US\$77 million. These size differences are particularly telling when considering the comparative size of the US economy with that of other nations. In the Philippines we find that the average IPO size is a relatively large PhP1,283,497,578 or approximately US\$47.5 million.<sup>12</sup> Although most Philippine IPOs are from newer companies they cannot generally be considered start-up ventures. Instead, the offering firms are oftentimes affiliated with a large, established domestic or foreign conglomerates.<sup>13</sup> Therefore, the effect of size on initial returns may be less pronounced in the Philippines if the affiliation between the offering firms and the conglomerate acts to reduce firm risk or makes IPOs easier to price.

#### **4.b. Age of Firm**

Segmenting our sample by company age highlights that there is only minimal support for the hypothesis that younger firms are subject to greater IPO underpricing (Table 3). A possible reason why our findings do not strongly corroborate with those of U.S. studies is the differences in the type of firms that raise funds by issuing equity. In the U.S. the average age of a firm raising funds through an IPO is approximately 6 years, while the average age is closer to 50 years in Europe [Jenkinson and Ljungqvist (1996)]. We find that the average age of Philippine companies raising money through initial public offering is 16.59 years.

These findings highlight two differences between the type of firms that go public in the U.S. and the Philippines. First, a longer track record may be required for the Philippine firm prior to going public due to the lack of the enforcement of minority shareholder rights [Pagano, Panetta, and Zingales (1998)]. Secondly, while IPOs are typically stand-alone, start-up companies in the U.S., most IPOs in the Philippines by start-up companies, may actually be new corporate endeavors sponsored by large, established conglomerate groups.<sup>14</sup>

#### **4.c. Industry**

As shown by Ritter (1984) companies involved in natural resource industries are subject to relatively greater IPO underpricing than companies in other industries. To investigate the relationship between industry and IPO returns, we segment our sample by NEDA industry classification.<sup>15</sup> Our results show that the 104 IPOs in our sample come from 8 different broad industry classifications, with 96 coming from 4 industries (see Table 4).<sup>16</sup> We find 18 firms, composed of Mining and Quarrying (17 firms) and Agriculture, Fishery and Forestry (1 firm), considered to be natural resource industries. We find that initial returns are slightly lower (21.23%) for natural resource firms than the remaining 86 firms in our sample (22.99%).

However, it is important to note that for the 18 firms in the natural resource industry the average gross proceeds raised by the issue is \$7.58 million and the average age is 6.95 years, both quite different than the overall sample. Therefore, although industry effects do not appear present, size and age variables may instead conceal a relationship. We control for confounding effects with multiple regression models and report these results in section 4.e.

#### **4.d. Firm Groups and Ownership**

Due to high concentration of wealth and market illiquidity, corporate groups and ownership structure may significantly affect the degree of IPO underpricing. Table 5 shows differences between affiliated and unaffiliated firm subsamples based on IPO offer size, firm age, initial returns, and aftermarket returns [see Appendix 1 for a list of corporate groups]. IPO underpricing is shown to be much greater for issuing firms affiliated to a corporate group (36.17%) than the unaffiliated issuing firms (10.68%). This difference reverses to some extent in the following three years as affiliated firms underperform unaffiliated firms with total returns of 41.50% compared to 55.82%, respectively. Affiliated firms are also shown to be larger, but of similar age. Affiliated issuers average raising proceeds exceeding PhP2 billion, while those not affiliated raise less than one-third that amount at PhP622 million. These results support the view that IPOs are not used to finance start-up ventures, regardless of the firm's affiliation.

Though ownership structure is greatly concentrated for most Philippine firms, the extent of that concentration is greater for affiliated firms, especially when considering the single highest ownership position (Table 6). We find that, on average, the top owner possesses a 49.54%

interest in an affiliated firm and a 29.87% interest in a unaffiliated firm. The high ownership concentration with affiliated firms supports our contention that these affiliated groups typically retain effective control over the issuing firm and are motivated to release less quality information with the IPO. This is also consistent with to past studies of IPOs surmising that high retention by issuing firms signals high ex-ante uncertainty and low marketability which results in greater underpricing [Keasey and Short (1992)]. We test these alternative hypotheses in the next section.

Segmenting ownership by type indicates further differences between affiliated and unaffiliated firms. Not surprisingly, group ownership is drastically higher for affiliated IPO companies (53.81%) than unaffiliated IPO companies (21.46%).<sup>17</sup> Meanwhile, institutional and foreign ownership is higher for unaffiliated firms.<sup>18</sup> Since, these institutional and foreign investors are more likely to rely on professional investment advisors, we view this as support that these ownership trends reflect that management of unaffiliated IPO firms are motivated to release higher quality information regarding the financial position of the company.

#### **4.e. Multiple regression results**

The preceding cross-sectional analysis that investigate IPO returns independently by size, age, industry classification, group affiliation, and ownership structure may misrepresent certain relationships since these variables are not independent of one another. For example, when compared to the overall IPO sample, the 29 manufacturing companies are older (27.3 years compared to 12.45 years) and earn higher initial returns (30.4% compared to 19.7%). Therefore, to better account for the complex relationships among this set of variables we model alternative multiple regressions using either the IPO initial underpricing or the three-year adjusted

aftermarket performance as the dependent variable. In addition, we include variables designating firms in financial services industries and IPO issuance volume. We isolate financial firms since initial returns are shown to be lower for financial firms than for nonfinancial firms and because financial firms are subject to a different regulatory environment [Michaely and Shaw (1994) and Ritter (1984)]. IPO issuance volume, measured as the annual volume of IPO issuance for a particular IPO divided by total IPO volume in our sample, proxies for the occurrence of ‘hot issue’ markets [Ritter (1991)].

The complete form of the regression equation using initial IPO returns as the dependent variable is as follows.

$$IR_i = f [ SIZE_i, AGE_i, VOL_i, NAT_i, FINC_i, GROUP_i, OWN_i, FOR_i ]$$

where,

- $IR_i$  = the initial return from the offer price to the closing price the first day of IPO i.
- $SIZE_i$  =  $\log$  (gross proceeds)<sup>19</sup>.
- $AGE_i$  =  $\log$  (1+age in years)<sup>20</sup>
- $VOL_i$  = the annual volume of IPO issuance by year divided by total IPO volume in sample<sup>21</sup>
- $NAT_i$  = dummy equal to 1 if the IPO firm is in the agriculture, fishing and forestry industries mining and quarrying, and the oil and gas industry, and 0 otherwise.<sup>22</sup>
- $FINC_i$  = dummy equal to 1 if the IPO firm is in the finance, insurance, real estate or business services industries and 0 otherwise.<sup>23</sup>
- $GROUP_i$  = dummy equal to 1 if greater than 50% of outstanding stock is held by a corporate group or its affiliates, or if a company officer has a direct relationship to a corporate group.
- $OWN_i$  =  $\log$  of percentage of stock owned by the largest five shareholders divided by 1 minus this same percentage ownership.<sup>24</sup>
- $FOR_i$  =  $\log$  of percentage of stock owned by the foreign investor divided by 1 minus this same percentage ownership.<sup>25</sup>

The complete form of the regression equation using IPO adjusted aftermarket returns as the dependent variable is as follows.

$$AFTER_i = f [ IR_i, SIZE_i, AGE_i, VOL_i, NAT_i, FINC_i, GROUP_i, OWN_i, FOR_i ]$$

where,

$AFTER_i$  = the 3-year adjusted aftermarket returns for IPO  $i$ .

Confirming earlier findings we find no evidence that offer size, firm age, industry categorization, or market timing affect the level of IPO underpricing. Offer size and firm age may not appropriately proxy for ex ante uncertainty in the Philippines, as theorized in studies of United States IPOs [Beatty and Ritter (1986)]. Our findings indicate that the preponderance of group affiliation and the high levels of ownership concentration diminish any differences in uncertainty that may occur based on firm size. Likewise, industry effects may be muted because of the high degree of ownership concentration and affiliate relationships.

Our results do reveal that group affiliation significantly affects the level of IPO underpricing in the Philippines. The IPOs of firms affiliated to corporate groups are subject to significantly more underpricing than unaffiliated firms. This finding supports the view that the quality of information disclosure is inferior for affiliated firms. We surmise that raising funds is not the priority use of an IPO of an affiliated firm, since these firms do not maximize the offer price. Instead, the IPO may be used as the means of listing an affiliated firm, thereby enhancing recognition of a corporate group holding company or providing future opportunities to raise funds. This view is strengthened by our findings that levels of ownership concentration and foreign ownership do not cause differential IPO pricing. Although ownership concentration is found higher with affiliated firms, and unaffiliated firms attract higher foreign ownership, the level of underpricing is not affected. Perhaps a threshold level of ownership concentration has been reached by enough firms to negate any differential effect based on ownership structure.

Aftermarket returns are not strongly related to any of our independent variables. These findings are consistent whether we use raw aftermarket returns or adjusted aftermarket returns. Differential underpricing due to affiliate relationships is not found to reverse, nor continue over the subsequent three year period. However, the illiquidity of the Philippine equity market makes it especially difficult to uncover relationships and draw conclusions based on long-run returns.

## **5. Conclusions**

There are three general explanations for IPO underpricing [Jenkinson and Ljungqvist (1996)]. First, there are corporate ownership and control considerations that prompt the issuer to underprice the issue, so that high interest will result in highly disperse ownership. Secondly, there are institutional explanations that firms underprice issues to reduce the probability of future lawsuits. Finally, the presence of informational asymmetries between the issuing firm, their investment banker, and investors may necessitate underpricing to raise investor interest.

The argument that issuing firms utilize underpricing an IPO as a means to attract a wide array of investors to create a diffuse ownership structure does not appear valid in the Philippines. Since the Philippine equity market is comparatively illiquid and most firms consequently have a narrow ownership structure, no degree of reasonable underpricing is likely to attract enough investors to provide a level of ownership diffusion that enable effective control at less than 50% ownership. Likewise, since disclosure regulations are inadequately enforced and legal remedies are difficult to obtain through the courts, issuers in the Philippines have little fear of lawsuit and therefore probably do not feel compelled to underprice to avoid legal action.

Therefore, we believe IPO underpricing is derived from fundamental differences in information disclosure between affiliated and unaffiliated firms. We find that affiliated firms are subject to greater underpricing than unaffiliated firms, highlighting that informational asymmetry problems are greater for affiliated companies. These findings lead us to conclude that the primary purpose affiliated firms use IPOs is to gain public listing while maintaining control, and not to raise funds. Affiliated firms do not appear motivated to share the information necessary to attract widespread interest. It is also important to note that affiliated firms often have access to funds through group banking relationships, thereby diminishing the need to raise funds in the equity market. Affiliated firms appear to be motivated instead to disclose little important financial information in order to conceal wealth, minimize taxes, and to keep information from competitors. Since unaffiliated firms are less likely to have banking relationships that come as a member of a corporate group, these firms may more often use IPOs for the purpose of raising funds. Therefore, unaffiliated firms may have motivation to relinquish better quality information when going public.

## References

Allen, F. and Faulhaber, G., 1989, "Signaling by underpricing in the IPO market," Journal of Financial Economics 23, 303-323.

Baron, D. and Holmstrom, B., 1980, "The investment banking contract for new issues under asymmetric information: Delegation and the incentive problem," Journal of Finance 35, 1115-1138.

Beatty, R. and Ritter, J., 1986, "Investment banking, reputation, and the underpricing of initial public offerings," Journal of Financial Economics 15, 213-232.

Breusch, T. and Pagan, A. , 1979, "A simple test for heteroscedasticity and random coefficient variation," Econometrica 4.

Business World, 1994, Philippines, Inc.: Who Owns the Philippines, 7<sup>th</sup> Anniversary Report, Business World Publishing Corporation, Manila.

Caves, R., 1989, International differences in industrial organization, in *Handbook of Industrial Organization*, Vol. 2, R. Schmalensee and R. Willig (eds.), Amsterdam: North Holland.

Chalk, A. and Peavy, J., 1987, "Initial public offerings: Daily returns, offering types, and the price effect," Financial Analysts Journal 43, 65-69.

Datar, V. and Mao, 1997, "Initial public offerings in China: Why is underpricing so severe?," Working Paper, Seattle University.

Demsetz, H. and Lehn, K., 1985, "The structure of corporate ownership: Causes and consequences," Journal of Political Economy 93, 1155-1177.

de los Angeles, E., 1995, "Philippine Stock Exchange: After the Unification," 7th Annual Conference of the Pacific Basin Capital Markets: Manila, Philippines.

Dhatt, M.S., Kim, Y. H., and Lim, U., 1993, "The short-run and long-run performance of Korean IPOs: 1980-90," unpublished working paper, University of Cincinnati and Yonsei University.

Garvey, G. T. and Swan, P. L., 1994, "The economics of corporate governance: Beyond the Marshallian firm," Journal of Corporate Finance 1, 139-174.

Godfrey, L., 1978, "Testing for multiplicative heteroskedasticity," Journal of Econometrics 8, 227-236.

Goergen, M., 1997, "The transfer of control in British and German IPOs," UMIST mimeo, University of Manchester.

Hoover's Business Press, 1997, Statistical Abstract of the United States, United States Bureau of the Census, 117<sup>th</sup> Edition, Washington, D.C.

Hughes, P. and A. Thakor, 1992, "Litigation risk, intermediation, and the underpricing of initial public offerings," Review of Financial Studies 5, 709-742.

Ibbotson, R. and Jaffe, J., 1975, "'Hot issue' markets," Journal of Finance 30, 1027-1042.

Ibbotson, R., Sindelar, J., and Ritter, J., 1994, "The market's problems with the pricing of initial public offerings," Journal of Applied Corporate Finance 7, 66-74.

Isa, M. Md., 1993, List of Malaysian IPOs, Working Paper, University of Malaysia.

Jenkinson, T. and Ljungqvist, A., 1996, *Going Public: The Theory and Evidence on How Companies Raise Equity Finance*, Oxford: Clarendon Press.

Keasey, K. and Short, H., 1992, "The underpricing of initial public offerings: Some UK evidence," OMEGA International Journal of Management Science 20, 457-466.

Kester, W. C., 1992, "The industrial groups as systems of contractual governance," Oxford Review of Economic Policy 8, 24-44.

- Kim, J., Krinsky, I., and Lee, J., 1993, "Motives for going public and underpricing: New findings from Korea," Journal of Business, Finance, and Accounting 20, 195-211.
- Lamberte, M. and Llanto, G., 1995, "A study of financial sector policies: The Philippine case," in *Financial Sector Development in Asia*, S. N. Sahid (ed.), Manila: Asian Development Bank, 235-301.
- Leff, N., 1978, "Industrial organization and entrepreneurship in the developing countries: The economic groups," Economic Development and Cultural Change 26, 661-75.
- Loughran, T., (1993), "NYSE vs NASDAQ Returns: Market microstructure or the poor performance of IPOs?" Journal of Financial Economics 33:2, 241-260.
- Loughran, T., Ritter, J., and Rydqvist, K., 1994, "Initial public offerings: International insights," Pacific-Basin Finance Journal 2, 165-199.
- Loughran, T. and Ritter, J., 1994, "The new issue puzzle," Journal of Finance 50, 23-51.
- Mahal Kong Pilipinas Charitable Foundation, Inc., VIP's of Philippine Business, 1987 Edition, St. Mary's Publishing: Manila.
- McGuinness, P., 1992, "An examination of the underpricing of initial public offerings in Hong Kong: 1980-1990," Journal of Business, Finance, and Accounting 19, 165-186.
- Megginson, W. L., 1992, Corporate Finance Theory, Addison-Wesley, New York.
- Michaely, R., and Shaw, W., 1994, "Initial public offerings: Tests of adverse selection and signaling theories," Review of Financial Studies 7:2, 279-317.
- Pagano, M., Panetta, F. and Zingales, L., 1998, "Why do firms go public? An empirical analysis," Journal of Finance 53, 27-64.
- Philippine Stock Exchange, 1997, Fact Book 1996.
- Philippine Stock Exchange, 1997, Corporate Review, Issues 1-19.
- Prowse, S. D., 1992, "The structure of corporate ownership in Japan," Journal of Finance 47, 1121-1140.
- Rajan, R. and Servaes, H., 1997, "Analyst following of initial public offerings," Journal of Finance 52:2, 507-529.
- Ritter, J., 1984, "The 'hot issue' market of 1980," Journal of Business 57:2, 215-240.

Ritter, J., 1991, "The long-run performance of initial public offerings," Journal of Finance 46, 3-27.

Ritter, J., 1998, Initial Public Offerings, Contemporary Finance Digest 2, 5-30.

Rock, K., 1986, "Why are new issues underpriced?," Journal of Financial Economics 15, 187-212.

Saudagaran, S. M. and Diga, J., 1997, "Financial reporting in emerging capital markets: Characteristics and policy issues," Accounting Horizons 11, 41-69.

Shleifer, A. and Vishny, R., 1993, "Corruption," Quarterly Journal of Economics 108, 599-618.

Shleifer, A. and Vishny, R., 1994, "Politicians and firms," Quarterly Journal of Economics, 995-1025.

Shleifer, A. and Vishny, R., 1997, "A survey of corporate governance," Journal of Finance 52, 737-783.

Tinic, S., 1988, "Anatomy of initial public offerings of common stock," Journal of Finance 43, 789-822.

Wethyavivorn, K. and Koo-Smith K., 1991, Initial public offerings in Thailand, 1988-89: Price and return patterns, in S.G. Rhee and R.P Chang, eds., *Pacific-Basin Capital Markets Research*, Vol. 11 (North-Holland, Amsterdam).

Table 1  
 Number of Philippine IPOs, Gross Proceeds, and Initial Returns  
 for Initial Public Offerings in the Philippines by Year  
 for the Period 1987 through 1997<sup>a</sup>

Year	N	Gross Proceeds (PhP) <sup>b</sup>	Initial Returns (%) <sup>c</sup>	N	Aftermarket Returns (%) <sup>d</sup>	Adjusted Aftermarket Returns (%) <sup>e</sup>
1987	2	156,500,000	66.67	1	198.57	-1,603.93
1988	3	952,265,892	7.96	3	28.10	-49.67
1989	6	3,702,241,172	57.01	2	82.44	-189.78
1990	9	4,076,292,224	3.79	9	-3.04	14.45
1991	9	4,878,348,204	-1.69	6	74.30	43.55
1992	8	5,444,631,579	14.89	7	238.33	228.94
1993	11	8,713,873,500	77.42	11	52.40	-10.56
1994	21	37,415,026,196	25.09	21	10.64	-14.46
1995	16	31,016,281,308	13.36	5	-38.64	0.69
1996	13	27,049,473,204	8.43			
<u>1997</u>	<u>6</u>	<u>10,073,614,806</u>	<u>3.38</u>			
Total	104	133,478,548,085	22.69*	65	48.33*	-5.44

- a Represents the number of firms that issued IPOs. Issues with “A” and ”B” share classification are counted as one IPO.
- b Gross proceeds are calculated as the total number of shares sold through the offer times the offer price.
- c Initial returns are the average across IPOs for each given year and calculated as the return from the IPO offer price to the price at the end of the first day of trading.
- d Aftermarket returns is measured as the average 3-year return starting the end of the first day of trading.
- e Adjusted aftermarket returns adjusts the 3-year returns for each firm to a matched firm

and is calculated as 
$$R_{T,I} - R_{T,M}$$
 where  $R_{T,I}$  is the 3-year holding period return beginning the closing price at the end of the first day of trading for the IPO and  $R_{T,M}$  is the 3-year holding period return for the corresponding matched firm over the same period.

\* significant at the 5% level

Table 2  
Average Initial Returns and Three-Year After Market Returns  
for Initial Public Offerings in the Philippines  
Categorized by Size (Gross Proceeds) Over the Period 1987 to 1997<sup>a</sup>

Size <sup>b</sup> (in millions PhP)	Number of IPOs (N)	Average Initial Returns (%) <sup>c</sup> (t-statistic)	Number of IPOs (N)	3-Year After Market Returns(%) <sup>d</sup> (t-statistic)
25-200	23	20.06 (2.81)**	17	42.06 (1.88)***
200-500	20	34.73 (2.95)*	14	102.06 (1.77)***
500-780	19	22.56 (2.91)*	12	12.17 (0.34)
780-1,500	21	19.90 (2.04)***	13	4.23 (0.13)
1,500-9,000	21	17.02 (2.44)**	9	88.48 (1.28)
Total	104	22.69 (5.82)*	65	48.33 (2.53)**

a Based on IPO data of Class A shares and Class B shares.

b Gross proceeds are calculated as the total number of shares sold through the offer times the offer price.

c Initial returns are calculated as the return from the IPO offer price to the price at the end of the first day of trading.

d Three-year after market returns are calculated for the three year period starting from the end of the first day of trading.

\* Significant at the 0.01 level.

\*\* Significant at the 0.05 level.

\*\*\* Significant at the 0.10 level.

Table 3  
Average Initial Returns and Three-Year After Market Returns  
for Initial Public Offerings in the Philippines  
Categorized by the Age of the Issuing Firm Over the Period 1987 to 1997<sup>a</sup>

Age <sup>b</sup> (in years)	Number of IPOs (N)	Average Initial Returns (%) <sup>c</sup> (t-statistic)	Number of IPOs (N)	3-Year After Market Returns(%) <sup>d</sup> (t-statistic)
0.00-0.90	21	29.46 (2.68)**	17	39.35 (1.59)
0.91-3.90	21	19.51 (2.03)***	11	-5.56 (-0.30)
3.91-13.00	20	20.22 (3.31)*	11	78.76 (1.72)
13.01-31.00	21	24.12 (2.75)**	13	16.27 (0.62)
31.01-up	21	20.02 (2.56)**	13	111.96 (1.51)
Total	104	22.69 (5.82)*	65	48.33 (2.53)**

a Based on IPO data of Class A shares and Class B shares.

b Age is calculated as the number of years from the year of incorporation to the IPO offer year.

c Initial returns are calculated as the return from the IPO offer price to the price at the end of the first day of trading.

d Three-year after market returns are calculated for the three year period starting from the end of the first day of trading.

\* Significant at the 0.01 level.

\*\* Significant at the 0.05 level.

\*\*\* Significant at the 0.10 level.

Table 4  
Average Initial Returns for Initial Public Offerings in the Philippines  
by Industry Grouping over the period 1987 to 1997<sup>a</sup>

Industry <sup>b</sup>	Number of IPOs (N)	Average Initial Returns (%) <sup>c</sup> (t-statistic)	Number of IPOs (N)	3-Year After Market Returns (%) <sup>d</sup> (t-statistic)
Agriculture	1	15.00 (na)	0	---
Mining	17	21.60 (2.62)**	13	34.08 (1.45)
Manufacturing	29	30.42 (3.29)*	17	-1.80 (-0.09)
Utilities	1	8.47 (na)	1	573.92 (na)
Trade	2	-2.38 (-0.26)	2	-17.03 (1.10)
Transportation	10	9.62 (2.47)**	5	42.11 (0.51)
Finance	40	20.86 (3.27)***	25	40.92 (1.64)
Services	4	40.27 (2.29)	2	477.61 (2.09)
Total	104	22.69 (5.82)*	65	48.33 (2.53)***
Natural Resources	18	21.23 (2.73)**	13	34.08 (1.45)
Other Firms	86	22.99 (5.17)*	52	51.89 (2.24)**

a Based on IPO data of Class A shares and Class B shares.

b Industry designation is by NEDA Industry Code.

c Initial returns are calculated as the return from the IPO offer price to the price at the end of the first day of trading.

d Three-year after market returns are calculated for the three year period starting from the end of the first day of trading.

e Includes agricultural and mining companies.

\* Significant at the 0.01 level.

\*\* Significant at the 0.05 level.

\*\*\* Significant at the 0.10 level.

Table 5  
Gross Proceeds, Age, Initial Returns, Aftermarket Returns,  
and Percentage Ownership for Initial Public Offerings  
in the Philippines Segmented by Affiliation<sup>a</sup>  
(standard error in parentheses)

Variable	Affiliated Issuing Firms	Unaffiliated Issuing Firms
Gross Proceeds <sup>b</sup>	PhP2,024.82 (2,240.95)	PhP622.95 (67.81)
Firm Age <sup>c</sup>	15.56 yrs (19.12)	17.50 yrs (21.76)
Initial Returns <sup>d</sup> (t-statistic)	<b>36.17%*</b> <b>(49.42)</b> <b>(t=5.12)</b>	<b>10.68%*</b> <b>(23.16)</b> <b>(t=3.42)</b>
3- Year Aftermarket Returns <sup>e</sup> (t-statistic)	41.50% (151.37) (t=1.60)	55.82% (158.46) (t=1.96)
n	49	55

- a A firm is considered affiliated to a group if more than 50% of outstanding stock is held by a corporate group or its affiliates, or if a company officer has a direct relationship to a corporate group.
- b Gross proceeds are calculated as the total number of shares sold through the offer times the offer price.
- c Firm age is calculated as the number of years from the year of incorporation to the IPO offer year.
- d Initial returns are calculated as the return from the IPO offer price to the price at the end of the first day of trading.
- e Three-year aftermarket returns are calculated for the three year period starting from the end of the first day of trading.
- \* Significant at the 1% level.

Table 6  
Ownership of Publicly-Traded Philippine Corporations  
Segmented by Group Affiliation<sup>a, b</sup>  
(Data Source: Philippine Stock Exchange Investments Guide, 1997, 3<sup>rd</sup> Edition)

Variable	Non-IPO Firms	IPO Firms		
		All IPO Firms	Affiliated IPO Firms	Unaffiliated IPO Firms
Top Owner	36.31	39.09	49.54	29.87
Top 5 Owners	62.80	66.68	73.80	60.41
Top 10 Owners	71.16	75.42	80.31	71.11
Top 20 Owners	77.24	81.80	84.85	79.11
Group Ownership <sup>c</sup>	28.23	36.63	53.81	21.46
Corporate Ownership <sup>d</sup>	2.85	2.34	2.38	2.31
Institutional Ownership <sup>e</sup>	10.96	8.99	3.20	14.10
Foreign Ownership <sup>f</sup>	7.32	6.52	4.49	8.32
Government Ownership <sup>g</sup>	1.95	2.11	1.90	2.29
Individual Ownership <sup>h</sup>	2.44	2.02	0.93	2.98
Blind Accounts <sup>i</sup>	6.83	9.27	8.17	10.24
n	101	96	45	51

- a A firm is considered affiliated to a group if more than 50% of outstanding stock is held by a corporate group or its affiliates, or if a company officer has a direct relationship to a corporate group.
- b Ownership percentage is calculated as of the end-of-year 1997.
- c Ownership percentage of companies controlled by domestic family corporate groups and foreign corporate groups.
- d Ownership percentage of domestic corporations and holding companies not controlled by a corporate group.
- e Ownership percentage of domestic banks and insurance companies.
- f Ownership percentage of foreign corporations and financial institutions not controlled by a corporate group, 50% of mutual fund ownership, and non-Filipino Philippine Central Depository shares (book entry).
- g Ownership percentage of government retirement funds and direct ownership of government, Universities, and religious organizations.
- h Ownership percentage of individual investors and 50% of mutual fund ownership.
- i Ownership percentage of blind numbered accounts and Filipino Philippine Central Depository shares (book entry).

TABLE 7

Parameter estimates of regressions relating IPO returns to firm size (SIZE), firm age (AGE), industry (NAT and FINC), hot issues market (VOL), affiliation (GROUP), and ownership (OWN and FOR). The sample includes 97 Philippine IPOs with data including initial returns and all independent variables and 61 with data including aftermarket returns and all independent variables. (t-statistics are in parentheses)

IPO returns		Intercept	IR <sup>a</sup>	SIZE <sup>c</sup>	AGE <sup>d</sup>	NAT <sup>e</sup>	FINC <sup>f</sup>	VOL <sup>g</sup>	GROUP <sup>h</sup>	OWN <sup>i</sup>	FOR <sup>j</sup>	n	R <sup>2</sup>	B-P-G <sup>k</sup>
Initial Returns <sup>a</sup>	1	38.71 (0.53)		-0.63 (-0.18)	-1.46 (-0.44)	0.25 (0.02)						97	0.30%	1.13
	2	30.06 (0.40)		0.13 (0.04)	-2.74 (-0.77)	-3.84 (-0.28)	-9.42 (-0.96)					97	1.28%	1.80
	3	30.88 (0.40)		0.06 (0.02)	-2.71 (-0.75)	-3.85 (-0.28)	-9.37 (-0.94)	4.45 (0.05)				97	1.28%	5.36
	4	96.00 (1.27)		-4.28 (-1.07)	-0.61 (-0.18)	5.34 (0.40)	-4.70 (-0.49)	14.96 (0.18)	<b>29.02*</b> <b>(3.29)</b>			97	11.89%	6.62
	5	85.08 (1.04)		-3.75 (-0.89)	-0.58 (-0.16)	5.34 (0.36)	-5.32 (-0.54)	-4.23 (-0.05)	<b>27.41*</b> <b>(2.94)</b>	0.87 (0.18)	-1.33 (-0.74)	97	12.48%	10.39
Adjusted Aftermarket Returns <sup>b</sup>	1	-15.39 (-0.03)	-1.04 (-1.87)	-0.72 (-0.03)	35.35 (1.87)	-0.02 (-0.00)						61	11.53%	2.61
	2	-25.24 (-0.05)	-1.11 (-1.99)	2.58 (0.11)	26.38 (1.32)	-36.50 (-0.46)	-78.19 (-1.33)					61	14.30	2.91
	3	-135.71 (-0.28)	-1.11 (-2.00)	11.34 (0.45)	23.45 (1.16)	-32.53 (-0.41)	-85.74 (-1.45)	-284.94 (-0.97)				61	15.76	6.68
	4	-202.27 (-0.29)	-0.99 (-1.69)	13.25 (0.48)	19.83 (0.94)	-46.41 (-0.56)	-93.58 (-1.54)	-298.84 (-0.51)	-39.23 (-0.64)			61	16.41	7.23
	5	-152.05 (-0.29)	-0.91 (-1.54)	13.25 (0.48)	19.43 (0.92)	-29.66 (-0.32)	-77.17 (-1.22)	-167.64 (-0.51)	-22.58 (-0.35)	-4.44 (-0.14)	14.90 (1.29)	61	19.06	7.85

- a Initial returns are the average across IPOs for each given year and calculated as the return from the IPO offer price to the price at the end of the first day of trading.
- b Adjusted aftermarket returns adjusts the 3-year returns for each firm to a matched firm and is calculated as

where  $R_{T,I}$  is the 3-year holding period return beginning the closing price at the end of the first day of trading for the IPO and  $R_{T,M}$  is the 3-year holding period return for the corresponding matched firm over the same period.

- c Log (gross proceeds).
- d Log (1+age in years).
- e Dummy equal to 1 if the IPO firm is in the agriculture, fishing and forestry industries mining and quarrying, and the oil and gas industry, and 0 otherwise.
- f Dummy equal to 1 if the IPO firm is in the finance, insurance, real estate or business services industries and 0 otherwise.
- g The annual volume of IPO issuance by year divided by total IPO volume in sample.
- h Dummy equal to 1 if greater than 50% of outstanding stock is held by a corporate group or its affiliates, or if a company officer has a direct relationship to a corporate group.
- i Log of percentage of stock owned by the largest five shareholders divided by 1 minus this same percentage ownership.
- j Log of percentage of stock owned by the foreign investor divided by 1 minus this same percentage ownership.
- k B-P-G is a Lagrange Multiplier test of heteroskedasticity based on Breusch and Pagan (1979) and Godfrey (1978). The test statistic has a chi-square (d) distribution, where the degrees of freedom, d, is the number of regressors.
- \* Significant at the 1% level.

## Appendix 1

Philippine Domestic Corporate Family Groups and  
Foreign Corporate Groups with a Presence in the Philippines.  
Source of Data Includes the  
Philippine Stock Exchange: Corporate Reviews,  
VIP's of Philippine Business, and Business World.  
(Note: This is a list of all major, identifiable corporate groups.  
Not all groups have firms in our IPO sample)

### Domestic Corporate Family Groups

#### Group Name

Aboitiz  
Anscor Group (Soriano)  
Ayala  
Concepcion (RFM)  
Del Rosario  
Floirendo  
Gotesco Group (George Go)  
Guoco Group (Jonathan and David Go)  
Lopez (ABS-CBN)  
Matrix Group (Cervantes)  
Metrobank Group (Ty)  
Pan Malayan Group (Yuchengco)  
Sarmiento  
Solid Group (Joseph and Elena Lim)  
Uytengsu  
Wellex Group (Gatchalian)

#### Group Name

Alcantara  
AsiaWorld Group (Tan Yu)  
Cojuangco  
Consunji  
Filinvest Group (Gotianun)  
Gokongwei  
Gow (Jaime and Jimmy)  
Jaka Group  
Manila Banking Group (Puyat)  
Megaworld Group (Andrew Tan)  
Ortigas Group  
Ramos (Alfredo)  
Shoemart Group (Sy)  
Tan (Lucio Tan)  
Villar

### Foreign Corporate Groups with a Presence in the Philippines

#### Group Name

First Pacific Group (Pangilinan) (Hong Kong)  
Metro Pacific (Hong Kong)

#### Group Name

Keppel Group (Singapore)  
Kuok Group (Singapore)

## Endnotes

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1. Ritter (1984) reports that during the period 1977 to 1982, 468 small company IPOs, as defined by sales, have average initial returns of 43.4% and 382 large company IPOs returns of 9.6%. Ibbotson, Sindelar, and Ritter (1994) show similar results based on size, measured both by sales and offer price.
2. Loughran, Ritter, and Rydqvist (1994) look for the presence of the following determinants of IPO offer prices (1) institutional constraints, such as binding government market regulations, (2) non-arms length sale of shares to politicians, employees, etc., (3) tax avoidance, (4) information acquisition prior to setting price, and (5) discretion in allocating shares.
3. Evidence of decline in IPO underpricing during economic liberalization is documented in studies of South Korea. Significant regulatory changes in South Korea on June 25, 1988 liberalized the ability to set IPO offer prices. Kim, Krinsky, and Lee (1993), investigating solely this post-liberalization period from July 1, 1988 to March 31, 1990, find initial returns of 57.5%. Dhatt, Kim, and Lim (1993) find higher initial returns of 78.1% in a study of 347 IPOs covering both the pre and post-liberalization period from 1980 to 1990.
4. In the Philippines the economy is dominated by large family groups through their holding companies (e.g. Sy Group with SM Investments Corporation, the Gokongwei Group with JG Summit Holdings, Inc., and the Lopez Group with Benpres Holdings Corporation), many of which have significant holdings in large commercial banks (e.g. the Gokongwei Group with 28% of Philippine Commercial International Bank, the Lopez Group with 26% of Philippine Commercial International Bank, and the Ayala Group with 46% of the Bank of Philippine Islands) [Philippine Stock Exchange (1997)].
5. There are two other important reasons why the accuracy of this ownership disclosure is questionable. First, investors are able to purchase common stock without disclosure through numbered accounts whenever these accounts comprise less than 10% ownership. This problem is exacerbated if a number of these blind accounts are controlled by a single party and the total ownership interest of these accounts is significantly high. Second, the wide use of foreign holding companies enables stock owners to hide holdings under the umbrella of undisclosed foreign ownership.
6. The Philippines still uses merit reviews for approving IPOs. A merit review system calls for the SEC to judge an IPO on the merit of the prospective investment and not on the quality of the disclosure. This system operates under the premise that investors are not able to satisfactorily evaluate the IPO, whether due to problems with information quality or perceived lack of investor sophistication.
7. In the Philippines, companies are able to issue both Class A and B shares. Prior to recent market liberalization, the Philippine Constitution stipulated that no foreign ownership would be

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allowed in certain industries, while in the remaining industries foreign ownership was limited to 40% [Philippine Stock Exchange (1997)]. To ease associated monitoring responsibilities, a corporation can issue common shares that are classified into Class A or Class B. Class A shares can only be owned by Filipino citizens, while Class B shares can be purchased by any combination of domestic and foreign investors and may represent 40% of total shares. Both classes have the same voting and dividend rights. In computing average returns, we only consider price data on Class A shares, when both Class A and B shares are listed. We do not feel this will induce any bias since, in the 17 cases where companies issue both Class A and B shares we find average initial returns of 17.81% for Class A and 20.86% for Class B shares.

8. We feel a matched set of firms more accurately reflects the risk characteristics of our IPO sample [see Loughran and Ritter (1994)]. An alternative technique is to adjust raw returns by a market index, which in this case may be the Philippine Stock Exchange Index (PHISIX). However, due to a limited number of listings and the fact that many of the larger IPOs included in our sample become part of the index almost immediately after the offering, we feel the matched-firm technique is preferable.

9. There are no initial public offerings from May 1997 through August 1998.

10. We find a p-value 0.24 on a Student's t-test of the difference between means of raw IPO aftermarket returns and a set of matched firms, under the assumption of unequal variances.

11. Segmenting the sample by offer price produces results that largely confirm those we found when segmenting by gross proceeds. As an alternative measure of size we segmented the sample of IPO firms according to whether the firm is listed on the First, Second, or Third Board of the PSE. The First Board is designed for listing companies with at least 400 million peso capital stock, the Second Board for companies with at least 100 million peso capital stock, and the Third Board for venture-capital companies with at least 100 million peso capital stock and that are selling shares at a price equal to par value. For the previous three years prior to listing, companies applying for listing on the First Board must have cumulative pre-tax profit of 50 million pesos and 10 million pesos per year, the Second Board requirement is 30 million pesos cumulative and 5 million pesos per year, and there are no profitability requirements for listing on the Third Board [Philippine Stock Exchange (1997)]. However, as of December 1997 no companies traded on the second board and only five on the third board. Waterfront Philippines Inc., on 3/17/95, and Urbancorp Realty Developers, Inc., on 3/19/96, listed on the Secondary Board when only two boards existed referred to as the Primary and Secondary Board. Both have since moved to the recently created Third Board. Ever Gotesco Resource & Holdings, Inc., on 9/16/96, Boulevard Properties & Holdings, Inc., on 4/28/97, and Premiere Entertainment, Inc., on 5/5/97 listed on the Third Board.

12. Based on an exchange rate of PhP27 to \$1.

13. Some examples of IPOs of affiliated companies include Kuok Philippine Properties Incorporated which is affiliated with the Kuok Group of Singapore, Benpres Holdings Corporation which acts as the holding company for the Lopez families investments, DMCI

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Holdings which was formed when the Consunji family consolidated their various business interests, Kepphil Shipyard Incorporated which is affiliated with the Keppel Group of Singapore, Swift Foods Incorporated is a subsidiary of RFM Corporation, Empire East Land Holdings Incorporated is a majority-owned subsidiary of Megaworld Properties & Holdings Incorporated, Ever-Gotesco Resources & Holdings Incorporated established by the Ever-Gotesco Group, and Alaska Milk Corporation which is a subsidiary of General Milling Corporation.

14. As evidence, there are several IPO that raise funds for newly established holding companies of large corporate conglomerates. For example, the age of some of these holding companies when they went public include: (1) three months for Kuok Philippine Properties Incorporated, (2) three months for Alaska Milk Corporation, (3) five months for Benpres Holdings Corporation, (4) five months for Swift Foods Incorporated, (5) ten months for DMCI Holdings, (6) one year and eleven months for Empire East Land Holdings Incorporated, and (7) one year and eleven months for Ever-Gotesco Resources & Holdings Incorporated.

15. NEDA is the acronym for the National Economic and Development Authority.

16. The limited industry categories is common in emerging markets since accompanying market liberalization is typically piecemeal and applies to only a few industries at a time, and limited market interest results in IPOs in industries that may assure more certain success.

17. Excluding foreign corporate group ownership, group ownership for affiliated and unaffiliated companies is 49.49% and 15.14%, respectively.

18. Including foreign corporate group ownership, foreign ownership for affiliated and unaffiliated companies is 8.81% and 14.64%, respectively.

19. This measure is used by Kim, Krinsky, and Lee (1993). We also tested alternative measures of size. Similar to Beatty and Ritter (1986) we use the inverse of gross proceeds, and alternatively, we substituted a dummy variable based on offer price, where an offer price of less than Php2.00 was considered a low price issue. Low price issues may be indicative of the lack of market liquidity [Loughran (1993)]. These alternative measures did not have an effect on our results.

20. This measure is used by Ritter (1991). We also tested an alternative measure, defined as a dummy variable where an IPO is considered young in age if it goes public within 10 years of start-up [Loughran, Ritter, and Rydqvist (1994)]. This alternative measure does not affect our results.

21. This measure is used by Ritter (1991).

22. This measure is used by Ritter (1984). Ritter (1984) defines natural resource related companies as those involved in oil and gas exploration and development, oil and gas field services and refining, coal, and mineral exploration.

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23. This measure is used by Ritter (1991).

24. This log transformation is similar to that employed by Demsetz and Lehn (1985) and converts a bounded into an unbounded variable. We chose to measure the percentage of the top five owners as of the end of year 1997 since a firm's ownership structure seems to be established 5-6 after the initial public offer [Goergen (1997)]. Since our sample focuses on recent IPOs we chose data from the latest time period available.

25. Similar to the measure employed by Demsetz and Lehn (1985).