Does Underwriter Reputation Affect the Performance of IPO Issues?

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In this paper we examine the relationship between performance of the Chinese IPO firms and the reputation of investment bankers underwriting their stocks. Similar to previous studies on well-developed stock markets, we find that the initial return on the first day of trading is strongly positive for Chinese IPO stocks due to underpricing. This initial return is negatively related to the underwriter's reputation, suggesting that the better the reputation of the underwriter, the less underpricing and hence, the lower the initial return of the IPO stock.

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Extending the analysis to a ten-day window after the first trading day, we find that the cumulative return becomes negative but that the stocks with more prestigious underwriters experience less decline. We also examine the three-year return of the IPOs. Contrary to previous findings, we find a positive long-run return for the Chinese IPO stocks. This long-run return is positively correlated with underwriter reputation. Finally, we find some evidence of positive long-run operating performance for the IPO firms that employ more prestigious underwriters.

1. Introduction

The underpricing of initial public offerings (IPOs) is a well-known phenomenon. Many studies have attempted to offer an explanation for the underpricing of IPOs and their long-term performance (see, for example, Loughran and Ritter, 2002; Ritter and Welch, 2002).[1] A substantial body of research on the initial public offering of common stocks examines the effects of underwriter reputation on the initial and long-run performance of IPOs (see, among others, Logue, 1973; Beatty and Ritter, 1986; Titman and Trueman, 1986; Carter and Manaster, 1990; Maksimovic and Unal, 1993; and Carter et al., 1998). The financial press also provides some evidence of the correlation between IPO performance and underwriter reputation (See *Forbes* June 20, 1994). However, most previous studies have investigated the markets of developed countries, especially the U.S. stock market. None of them has examined the effects of underwriter reputation on the performance of Chinese IPO stocks. Furthermore, no prior research has documented the relationship between the accounting performance of IPOs and underwriter reputation.

Logue (1973) and Beatty and Ritter (1986) are among the first to examine the effect of underwriter reputation. Later studies use different reputation measures to examine the relationship between underwriter reputation and IPO performance. Carter and Manaster (1990, hereafter CM) use underwriters' relative placements in stock offering "tombstone" announcements, Johnson and Miller (1988, hereafter JM) classify underwriters into one of four prestige categories, and Megginson and Weiss (1991, hereafter MW) use the relative market share of underwriters as a proxy for their reputation. Michaely and Shaw (1994) find that IPOs managed by high-prestige investment bankers tend to have smaller initial returns and less negative long-run returns than do IPOs handled by low-prestige underwriters. Brav and Gompers (1996) find that venture-capital-backed IPOs outperform nonventure-backed offerings five years after the offering date. Carter et al. (1998) find that each of the three reputation proxies (*CM, JM* and *MW*) is significantly related to the initial returns of IPO stocks. The better the underwriter's reputation, the smaller the short-run underpricing and the less severe the long-run underperformance of IPO stocks. Liu and Wu (2002) show that other things being equal, underwriters with better reputations incur a smaller amount of underpricing. They find that underwriter prestige is negatively related to the mean and standard deviation of the initial return of IPO stocks.

Although no widely accepted theory has been developed, it is generally believed that IPOs marketed by high-prestige underwriters will experience less severe short-run and long-run underperformance in stock returns and better long-run earnings performance. Chemmanur and Fulghieri (1994) argue that investors count on the investment banks' past performance, measured by the quality of IPO firms assisted by them, to assess their credibility. By marketing IPOs with better short-run and long-run performance, investment banks enhance

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[1] Ritter and Welch (2002) provide an excellent summary of these studies.

their reputation. Hence, we expect underwriter prestige to be positively related to the short- or long-run market-adjusted returns of IPO stocks.

Several papers have investigated the issue of IPO underpricing in China. Mok and Hui (1998) examine the pricing of IPOs in the early years (before 1993) of China's stock market development. Su and Fleisher (1999) employ signaling theory to explain the underpricing of IPOs in China. Chan, Wang and Wei (2002) explain the underpricing of IPOs with several institutional variables and investigate short- and long-run stock return and accounting earnings performance relative to different benchmarks. Surprisingly, there are virtually no studies on the effects of underwriter reputation on the IPO performance in the Chinese stock market.

In this paper, we examine underwriter reputation and the performance of IPO stocks in the Chinese market. First, we investigate the extent of underpricing, the short-and long-run stock returns following the IPO, and the relationship of these returns to underwriter reputation. Second, we examine the relationship between underwriter reputation and the future accounting performance of IPO firms. A closer examination of China's IPO market is warranted for several reasons. First, the institutional and economic environment in China is quite different from most other countries where the effects of underwriters have been investigated extensively. An interesting characteristic of the Chinese IPO market is that the aggregate amount of new shares issued each year is determined by the central government. New issues typically represent a small proportion of the outstanding shares, as the majority of firm shares is owned by the state or other legal entities, and cannot be sold to public investors. Therefore, the management and ownership structure is very different from the IPO firms in other countries. Second, China's stock markets have been in smooth operation for only about ten years. Investors are not as knowledgeable and sophisticated as those in well-developed countries. In addition, there is only a nascent institutional investment community in China. Consequently, stock prices are driven by the actions of private investors who typically own very few shares and have done very little investment analysis. These institutional and regulatory differences between China and other countries suggest that the findings from the IPO studies in the U.S. and elsewhere may not directly apply to the Chinese market. For example, underwriter reputation may be more important for the Chinese market because investors are less knowledgeable and have less information on the new stock issues. Thus, Chinese investors may be more willing to accept less underpricing (premium) when stocks are underwritten by investment bankers with better reputation. Moreover, Chinese IPO market is not well developed. To ensure a successful underwriting, firms have a greater incentive to seek underwriters with good reputation. On the other hand, most of Chinese investment banks are established by central government offices or state-owned firms. Also, the majority of firm shares is owned by the state or other legal entities. Consequently, political relationship may play a very important role in the underwriter selection.[2] For these reasons, underwriter reputation may have different impacts on IPOs in China than in other markets.

The remainder of the paper is organized as follows. Section 2 discusses the characteristics of the Chinese IPO market and review prior research on this market. Section 3 discusses data and empirical methodology while Section 4 presents empirical results. Finally, Section 5 concludes the paper.

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[2] It is possible that corruption may occur due to bureaucracy.

2.   Chinese IPO markets

In 1978, China initiated various reforms to restructure its economy towards a 'socialist-market' economy. An important step for this movement was privatizing state-owned enterprises (SOEs) by issuing shares to the public via IPOs. Although the first privatization took place in 1984, subsequent IPO activity was quite modest. In all, there were only 44 IPO issues between 1984 and 1990. The low popularity of IPOs was due in large part to the fact that there were no organized stock exchanges to trade shares. Recognizing the lack of market liquidity, the state established two new stock exchanges in Shanghai and Shenzhen in December 1990 and July 1991, respectively.

Before the establishment of these two stock exchanges, the underwriting industry effectively did not exist. With the rapid growth in the stock market, this new industry began to develop quickly. According to a report of The People's Bank of China (the central bank of China), by year 2001 there are 177 investment banks authorized to underwrite the IPOs. The total asset of the 177 investment banks is 550 billion RMB, and their total liability is 478 billion. All investment banks are established by some government departments or large state owned firms. Thus, the state has a large control power on these investment banks.

The initial public offering process is quite similar with that of the U.S. except that there are more regulations and more tedious application process. A substantial proportion of the initial public offerings is linked to the privatization of state-owned firms. The Chinese government introduced five major categories of shares: (1) state shares, which are held by the State Assets Management Bureau (SAMB); (2) institutional shares held by other state-owned enterprises; (3) employee shares held by managers and employees; (4) ordinary domestic shares (or A-shares), which can be purchased only by Chinese citizens on the Shanghai or Shenzhen Exchange; and (5) foreign shares, which can be purchased only by foreign investors in Mainland China (B-shares), through the Hong Kong Stock Exchange (H-shares) or the NYSE (N-shares). Only A-shares and B-shares are traded on the Shanghai and Shenzhen exchanges. The first three types of shares are not tradable in official exchanges, whereas trading of employee shares is allowed some time (typically one year) after the IPO.

The stock offering process in China has vestiges of the Chinese transitional economy with socialist planning. The initial public offering process is more complicated from other countries due to heavier regulation. First, the aggregate value of new shares to be issued each year is part of the national investment and credit plan. The new issue quota is determined jointly by the State Council Securities Committee (SCSC), the State Planning Commission (SPC), and the People's Bank of China (PBOC), which is the central bank of China. The quota is allocated to provinces as well as to municipalities. The criteria used for allocation among provinces include the assessment of regional industrial structures, and the need for balanced regional development. Given each regional quota, local securities authorities invite enterprises to request a listing and then make a selection based on the issuing firm performance and regional development objectives. This process of selecting enterprises for listing in China differs considerably from other countries, where the decision to list a stock is usually determined by the stock exchange. The selected firms then submit their application for initial public offering to China Securities Regulatory Commission (CSRC). In their application, firms must provide the details about the offering such as when and where the shares will be offered, offering price, the number of shares to be offered, underwriter and the type of underwriting, etc. Once a firm is admitted to issue new shares through an IPO, it will

select an underwriting syndicate to issue its shares. In China, most investment bankers issue IPO stocks under a firm commitment.

In order to protect the domestic investment banking industry, foreign investment banks are not allowed to underwrite A-shares. Thus, all A-share IPOs issues are underwritten by domestic investment banks mostly owned by the state. Foreign investment banks can only underwrite B, H, N and other foreign shares. Based on the report of China Securities Regulatory Commission (CSRC), there are only 48 foreign underwriters by 2001 authorized to underwrite B, H, N and other foreign shares. These 48 foreign underwriters come from several different places, including the U.S, Japan, Hong Kong, Germany, France and other countries. Foreign underwriters generally have higher reputation in their own country, and but less known in China. In this study, we focus on the underwriting of A shares and the domestic investment banks which underwrite them.

There is a body of research that investigates the development of China's privatization program and the stock price behavior of listed companies. Corporate earnings typically decline subsequent to listing, a phenomenon in contrast to the findings from studies of other markets. Very high initial returns have been recorded on the first day of IPO listings (e.g., Bailey, 1994; Mok and Hui, 1998; Chen et al., 1999; Chan, Wang, and Wei, 2002), but long-term stock returns and earnings performance are mixed. Mok and Hui (1998) find that positive returns have been achieved a year after listing, while Chan, Wang, and Wei (2002) find that the IPOs underperform the matched non-IPO stocks three years after listing, whether from the view point of stock returns or the earnings performance. These studies focus on the return and earnings performance of IPO stocks. None of them has examined the effect of underwriter reputation on the performance of Chinese IPOs.

3.   Data and empirical methodology

Our stock return and accounting data are retrieved from the Taiwan Economic Journal (TEJ) database. Information concerning the particulars of each offering, including the number of shares offered by the firm, the underwriters involved, and the offering price have been obtained from CSRC, SHSE and SZSE. All IPOs made from 1990 to 2001 with required data are included in the sample. As mentioned earlier, although the first privatization case took place in 1984, subsequent IPO activity was quite modest, with only 44 issues between 1984 and 1990. Since there weren't any official stock exchanges during this period, we have excluded these IPO issues from this study. The sample selection process is summarized in Table I. The final sample includes 944 IPOs issued from 1990 to 2001.

Several proxies for underwriter reputation have been employed in previous studies. In this paper, we use the underwriter reputation measures as defined by Carter and Manaster (1990, CM) and Megginson and Weiss (1991, MW). Specifically, we use the number of IPOs underwritten and the relative market share of an investment banker in stock offerings as a proxy for underwriter reputation. We use underwriters' relative placements in stock offering "tombstone" announcements to obtain the CM measure. First, we count how many IPOs that each investment bank has underwritten, and rank the underwriters by this number. We use 50% and 80% to divide the whole underwriters into three groups: low, median and high reputations. The MW measure is constructed using the same process used to obtain CM measure, except that we use the total market value as a criterion to separate the whole underwriters into three groups. We define three levels of underwriter prestige based on the

ranking of each reputation proxy, with a score of three representing the most prestigious level and one representing the least prestigious level.

To evaluate the aftermarket performance of IPOs, we calculate returns for three periods: (1) the initial return period from the offering date to the first public trading date; (2) the short-term aftermarket period which covers a ten-day period after the IPO, exclusive of the first day of trading; (3) the long-term aftermarket period, which covers a three-year horizon after the IPO, exclusive of the first day of trading. The initial period vary somewhat by IPO issues. Panel B of Table 1 reports the summary statistics of the initial period.

We compute the initial return as the percentage difference between the closing price of the first trading date and the offer price:

$$IR_j = (\frac{P_{j0}}{P_{jl}} - 1) * 100\%$$
(1)

where IR_j is the initial return of stock j on the first trading day (day 0), P_{j0} is the closing price of stock j on day 0, and P_{jl} is the offering price of stock j. We also adjust the return for the market effect:

$$AIR_{j0} = (\frac{P_{j0}}{P_{jl}} - \frac{P_{j,m0}}{P_{j,ml}}) * 100$$
(2)

where AIR_{j0} is the market-adjusted return of an IPO stock on day 0, $P_{j,mo}$ is the closing value of the corresponding A-share market index on the first trading day of the new issue j, $P_{j,ml}$ is the closing value of the corresponding A-share market index on the day the new issue j is offered. The mean-adjusted initial return is:

$$AIR_0 = \frac{1}{N} \sum_{j=1}^{N} AIR_{jo}$$
(3)

where N denotes the number of companies in an IPO portfolio.

The short- or long-run aftermarket performance is computed based on the buy-and-hold strategy. In order to test the effect of underwriter reputation on short-run returns, we calculate the return over a ten-day horizon after the first trading day, since underwriters usually stabilize the stock price in this period due to their firm commitment to price support. The buy-and-hold return for firm j (R_j) over a ten-day horizon is

$$R_j = \left(\prod_{t=1}^{10}(1 + r_{jt}) - 1\right) * 100$$
(4)

where r_{jt} represents the return of firm j's stock on day t. The initial return on the first trading day is not included in the above calculation. The market-adjusted ten-day return can be computed as:

$$AR_j = \left(\prod_{t=1}^{10}(1+r_{jt}) - \prod_{t=1}^{10}(1+r_{mt}) \right) * 100 \tag{5}$$

where r_{mt} represents the return of the corresponding A-share market index on day t. The mean market-adjusted return over the ten-day horizon is

$$MAR = \frac{1}{N}\sum_{j=1}^{N} AR_j \tag{6}$$

We next calculate the return for the each of the 36 months following the first day of stock trading. Following Ritter (1991), we assume there are 21 trading days in one month, instead of using a calendar month. Therefore, the first month consists of the first 21 trading days after the first trading day (denoted as day 0), the second month consists of day 22 through day 42, and so on. The long-run aftermarket cumulative return till month T ($= 36$) for firm j (CR_{jT}) is computed as:

$$CR_{jT} = \left(\prod_{t=1}^{21*T}(1+r_{jt}) - 1 \right) * 100 \tag{7}$$

where r_{jt} represents the return of firm j's stock on day t. Again, the return on the first trading day is not included. The market-adjusted return can be computed as:

$$ACR_{jT} = \left(\prod_{t=1}^{21*T}(1+r_{jt}) - \prod_{t=1}^{21*T}(1+r_{mt}) \right) * 100 \tag{8}$$

where r_{mt} represents the return of the corresponding A-share market index on day t. Similarly, the mean market-adjusted cumulative return till month T is computed as follows:

$$ACR_T = \frac{1}{N}\sum_{j=1}^{N} ACR_{jT} \tag{9}$$

Ritter (1991) and Loughran and Ritter (1995) compare the aftermarket return of an IPO portfolio with the returns of non-IPO matching firms (matched by Size, B/M and Size-B/M). Since a relatively high percentage of listed firms in our sample period are IPOs, it is not feasible to construct a meaningful non-IPO matching sample. Instead, we use the buy-and-hold return on the market portfolio as our benchmark return.

We examine the explanatory power of the underwriter reputation measures by least squares regressions. Previous studies suggest that underwriter reputation signals the

underlying risk of the offering, impounded in the initial return. We segment our sample by underwriter reputation and report the corresponding initial returns, short- and long-run performance for each segment. We use the market-adjusted initial return, short-run return and long-run return as the dependent variables in the regression, and the underwriter reputation measures (*CM* or *MW*) as the independent variable. The coefficient for each reputation measure should be negative in the initial return regression. In contrast, for short- and long-run aftermarket return, the coefficient for each reputation measure should be positive if the reputation of investment bankers indeed signals the quality of IPO firms.

To assess the marginal impact of underwriter reputation, we control the effects of other IPO characteristics. The first variable is the gross proceeds of the IPO (*Size*), which is used to control any systematic influence due to the size of the offering. Since larger IPOs are often issued by well-established firms, the risk is expected to be lower and therefore, the initial return is expected to be smaller because these IPO stocks are less underpriced. In contrast, the short- and long-run returns are expected to be larger for these firms because they are more profitable. Based on this argument, the coefficient of size (*Size*) for the initial return is expected to be negative, while it should be positive for short- and long-run returns. The second variable is the issuing price (*Issp*). The higher the issuing (offering) price, the lower the initial IPO return. Thus, we expect a negative relationship between the initial IPO return and *Issp*. The third variable is the lottery ratio (*Proba*), which reflects outside investors' demand for new shares. The greater the underpricing of the IPO, the stronger outside investors' demand (see Hanley, 1993). This implies a negative relationship between the initial return and *Proba*.

The return regression model can be written as

$$AIR_0 = \alpha_0 + \alpha_1 * [CM \text{ or } MW] + \alpha_2 * Size + \alpha_3 * Issp + \alpha_4 * Pr\,oba + \varepsilon_0 \qquad (10)$$

We also estimate this regression model using the market-adjusted ten-day return (*AR*) and long-run return (*ACR*) as dependent variables.

In the investment banking industry, underwriters with better reputations tend to be more likely to survive market competition. Good underwriters will do their best to price IPOs at the intrinsic values of the firms to prevent losing their reputation and their clients. Also, they tend to market the stocks of high-quality firms. Thus, we expect that the IPOs handled by underwriters with better reputations will have better operating and earnings performance before and after their issuance date.

4.   Empirical Results
A.   Initial IPO returns and Underwriter Reputation Proxies

We calculate market-adjusted initial returns of the first trading day for three IPO portfolios, which are formed based on the level of underwriter reputation (either *CM* or *MW* measure). Table II provides summary statistics of the initial returns, *Size, Issp* and *Proba*. The results in Table II are consistent with the findings of the studies of U.S. and other developed markets. For example, more prestigious investment bankers tend to market the stocks of larger firms with a higher issuance price. As a result, the market-adjusted initial return is negatively related to underwriter reputation. The mean adjusted initial return declines monotonically from 468.44% (466.11%) to 161.18% (159.87%) as the level of underwriter

reputation, based on either the *CM* or *MW* measure, increases (from a scale of one to three). The standard deviation of the market-adjusted initial return also declines monotonically with the level of underwriter prestige. We also calculate the mean issuance price for each portfolio. Consistent with these findings, the mean issuance price of the IPOs increases from 6.09 (6.64) to 9.84 (9.84) as underwriter prestige increases from low to high. Panels A and B show that the differences among the returns of the three reputation groups are very large and significant at the 1% level. For example, the difference in the initial returns (market adjusted) between the low and high prestige groups is 307.26% (307.26%) and significant at the 1% level based on the *CM* measure. Similar results are found for the groups ranked by the *MW* measure.

The results of regressions on the market-adjusted initial return are presented in Table III. The variables of primary interest are the *CM* and *MW* underwriter prestige measures. We first estimate the univariate regressions against each reputation measure and control variable, and then estimate the multivariate regressions by including all variables. As expected, the coefficients for *CM* and *MW* are all negative and significant at the 1% level for both univariate (rows 1 and 2) and multivariate regressions (rows 6 and 7). Carter et al. (1998) find that the *CM* measure outperforms the *MW* measure in explaining the IPO return. In contrast, we find that the performance of these two measures (*CM* and *MW*) is quite similar. In addition, the coefficient for each control variable is as expected. The coefficients of control variables are all negative and significant at least at the 5% level.

B. Short-Run Performance and Underwriter Reputation

When the demand is weak after listing, the lead underwriter will 'stabilize' the stock price through various activities aimed at reducing the selling pressure. Chan, Wang and Wei (2002) show that in the short run the IPOs underperform several market benchmarks. However, they have not examined the relationship between the stock performance of IPOs and underwriter reputation. Table IV presents the cumulative returns and cumulative market-adjusted returns for the IPO portfolios underwritten by investment banks of varying prestige. Panels A and B report these results based on *CM* and *MW* reputation proxies, respectively.

As shown, all six IPO portfolios underperform the market over the ten-day horizon immediately after the first trading day. This result is consistent with the finding of Chan, Wang and Wei (2002). Our primary interest here is the relative performance of these portfolios. For either reputation proxy (*CM* or *MW*), the cumulative return of portfolio 1 is lower than that of portfolio 3 over the ten-day horizon. Based on the *CM* reputation proxy, the cumulative market-adjusted return is -5.20% for the portfolio with the worst underwriters while it is –2.56% for the portfolio with the best underwriters. Similar results are found for the portfolios based on the *MW* reputation proxy in Panel B. For example, the difference between the low and high prestige groups is 2.90%, which is significant at the 5% percent level.

Table V presents the regression results of the ten-day IPO returns. The coefficients of the reputation proxies are all positive with the *MW* coefficients significant at the 5% level. Results show that the *MW* measures have a slightly higher explanatory power than the *CM* measure. On the other hand, none of the control variables (*Size, Issp and Proba*) is significant. This result shows that underwriter reputation significantly affects the short-run performance of the IPOs. It is consistent with the contention that underwriters support the stock price during the first several trading days and that underwriters with better reputations

make a stronger effort to support the aftermarket price. Note that while the coefficient of underwriter reputation is statistically significant, the R^2 is low, suggesting that it may not be economically significant.

C.   Long-Run Performance and Underwriter Reputation

Prior studies have documented that IPO stocks underperform comparable non-IPO stocks over a longer horizon (see, for example, Ritter 1991; Loughran and Ritter 1995; Chen, Firth and Kim 2000; and Chan, Wang and Wei 2002). Using the U.S. IPO data from 1979-1991, Carter, Dark and Singh (1998) find that the long-run market-adjusted returns of IPOs tend to increase, or the IPO underperformance is reduced, with underwriter reputation. However, none of these studies has documented the relationship between the long-run performance of IPOs and the reputation of the underwriters in the Chinese market.

Table VI presents the long-run cumulative market-adjusted returns of IPO stocks over a three-year horizon after the offering. Again, IPOs are divided into three groups based on the ranks of the *CM* and *MW* measures in Panels A and B, respectively. For the *CM* portfolios, the three-year cumulative return is –20.80% for the group with lowest underwriter reputation. But for the medium and high prestige groups, the cumulative returns are 12.92% and 17.46%, respectively. Similar results are found for the *MW* portfolios. Thus, long-run market-adjusted returns increase with underwriter reputation. Contrary to the findings of Loughran and Ritter (1995) and Chan, Wang and Wei (2002), the overall long-run market-adjusted return of China's IPOs is positive. Investors can earn higher returns by investing in the IPOs underwritten by better underwriters.

The differences in the market-adjusted returns between the low and high prestige groups are large and significant at the 1% level. The difference is 38.26% (42.36%) when groups are ranked based on the *CM (MW)* measure. The results suggest that the quality of underwriters signals the long-run performance of IPOs.

Table VII reports the regression results for the long-run market-adjusted returns of IPO stocks. As expected, the coefficients for *CM* and *MW* are positive and significant at the 1% level. These results are consistent with those reported in Table VI, and suggest that underwriters with better reputations have a greater ability to distinguish the quality of issuing firms and that they tend to underwrite stocks of high-quality firms to enhance their reputation. However, it should be noted that regressions contain substantial noise in the data as revealed by low R^2.

D.   Operating Performance and Underwriter Reputation

The preceding results show that IPO stocks underwritten by investment bankers with better reputations tend to generate better long-term returns. An important question is whether this stock return performance is reflected in firms' operating performance. In this section, we examine the long-run operating performance of IPO firms.

Table VIII reports changes in the operating performance of IPO firms surrounding the year of issuance. The performance measures include the operating returns on assets (*ROA*), operating cash flows on total assets (*CFOA*), sales growth rate (*Sale_G*), and asset turnover (*ATO*). It is shown that *ROA*, *CFOA* and *ATO* decline steadily after the issuance, regardless of which event window is viewed. These results are consistent with the findings of Jain and Kini (1994), Mikkelson, Partch, and Shah (1997) and Chan, Wang and Wei (2002) that the issuing firms' operating performance deteriorates after the initial public offering. These

results may reflect managers' attempts to window-dress their accounting statements prior to going public, which leads to pre-IPO performance being over-stated and post-IPO performance being understated.

An important issue is whether the operating performance of issuing firms is correlated with underwriter reputation. Table VIII shows that the operating performance of the IPO group with high underwriter prestige is better than that of the group with low prestige no matter which event window is used. The differences in the operating performance between IPO groups with high and low underwriter prestige are often sizable. For example, the mean *ROA* of the group with high prestige is 13.85% before the firms issue their IPOs, while that of the group with low prestige is only 11.95%. This means that the *ROA* of the IPO firm group with low prestige is about 15% lower than that the group with high prestige. In general, the difference between the high and low prestige groups is statistically more significant when the *MW* reputation measure is used. The return on total asset, the operating cash flow to total asset ratio and asset turnover are all significantly higher for the high-prestige IPO group. These results reinforce the findings from stock return performance that high-prestige underwriters have a greater ability to discern the quality of IPO firms.

Table IX reports the regression results for IPO firms' operating performance before and after the issuing year. The dependent variables of the regressions are the operating performance measures reported in Table VIII whereas the independent variables are *CM* and *MW* reputation proxies. The overall results show that operating performance of IPO firms is positively related to underwriter reputation. However, this relationship is not as strong as that exhibited in stock returns. The *t* statistics are significant at the five percent level for the asset turnover, suggesting that the firm group with better underwriter reputation typically has higher sales before the initial public offering. Other regressions also show positive relations between operating performance measures and underwriter reputation but they are not statistically significant. Thus, although there are indications that firms' future performance is positively correlated with underwriter reputation, this positive relationship is weaker than that exhibited by aftermarket stock returns.

5. Conclusion

In this paper we examine the relationship between performance of Chinese IPO firms and the reputation of investment bankers underwriting their stocks. Similar to the findings for other markets, we find that the initial return on the first day of trading is strongly positive for Chinese IPO stocks. This strong positive return reflects the IPO underpricing phenomenon well documented in the literature. More importantly, we find that the first-day return is negatively related with the underwriter's reputation. Thus, the better the reputation of the underwriter, the smaller the amount of underpricing and hence the lower the initial return of the IPO stock.

When we extend our analysis to a ten-day window, we find that the cumulative returns are negative shortly after the first trading day. However, this decline is less severe for the stocks with high-prestige underwriters. The results show that the stocks underwritten by investment bankers with better reputations tend to be more stable in the aftermarket. This implies that better underwriters make a greater effort to stabilize the market after the stock is publicly traded.

As we further increase the event horizon to three years, we find several interesting results. The long-run return of Chinese IPO stocks show an overall positive return in the three-year period. This finding contrasts sharply with empirical evidence of overwhelming

long-run negative IPO returns for the well-developed markets documented in the literature. The regression results show a striking positive relationship between the long-run returns of IPO stocks and underwriter reputation. Results suggest that either investment bankers with better reputations have a greater ability to discern the quality of issuing firms or quality firms will seek out high-prestige underwriters. At any rate, underwriter reputation signals firm quality. Moreover, there is evidence that the operating performance in terms of various accounting measures is better before and after the stock is publicly traded for those firms hiring underwriters with better reputations. Overall, the results support the contention that IPO returns are positively correlated with underwriter reputation and better investment bankers have a greater ability to predict future profitability of issuing firms.

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Table I
Sample Selection Process

This table explains the sample selection process. All information for underwriters is obtained from Shanghai Stock Exchange (SHSE) and the Shenzhen Stock Exchange (SZSE). All IPOs from1990 to 2001 with required data are included in the sample.

Panel A: The data that we used in our analysis

	Total number of firm-commitment domestic IPOs in the original sample.	1215
Less:	Observations deleted because their first day's close price is missing	19
Less:	Observations deleted because the underwriter information is missing	89
Less:	Observations deleted because they are issued before stock exchanges were established	49
Less:	IPOs that issued B shares	114
	Final Sample:	944

Panel B: The length of the initial period:

Year	Mean	Median	Max	Min
1990	138.0	138	275	1
1992	80.8	56	292	9
1993	78.5	41	291	0
1994	66.5	53	251	3
1995	30.3	24	96	0
1996	20.1	18	228	5
1997	20.4	18	202	6
1998	47.4	39	146	12
1999	53.8	48	133	0
2000	31.3	20	190	9
2001	31.0	25	118	13
Average	54.4			

Table II
Descriptive Statistics

IR and *AIR* are the return and market-adjusted return of the first trading day; *Size* is the total capital that the firm received from its IPO, *Size = Volume * Issp*, *Issp* is the issue price of the new IPO; *Proba* is the proportion of the IPO allocated to outside investors. We separate the entire IPO sample into three groups based on the reputation of their underwriters using the Carter and Manaster (*CM*) measure or the Megginson and Weiss (*MW*) measure. Δ(i,j) represents the difference between group *i* and group *j*. *, **, and *** indicate significance at the level of 10%, 5% and 1%, respectively.

Panel A: Grouping based on the *CM* measure

Rank	IR		AIR		Size		Issp		Proba		Number
	Mean	T	Mean	T	Mean	T	Mean	T	Mean	T	
1	468.63***	(7.44)	468.44***	(7.43)	172.51***	(9.18)	6.09***	(5.41)	0.42***	(3.10)	113
2	200.01***	(8.76)	199.77***	(8.76)	341.18***	(7.79)	7.49***	(7.37)	0.80***	(6.63)	207
3	161.37***	(15.85)	161.18***	(15.82)	308.11***	(20.04)	9.84***	(12.85)	1.66***	(5.91)	624
Δ(1,2)	268.62***	(4.01)	268.67***	(4.01)	-168.67***	(-3.54)	-1.40	(-0.92)	-0.38**	(-2.09)	
Δ(1,3)	307.26***	(4.82)	307.26***	(4.81)	-135.60***	(-5.58)	-3.75***	(-2.75)	-1.24***	(-3.98)	
Δ(2,3)	38.64	(1.55)	38.59	(1.55)	33.07	(0.71)	-2.35*	(-1.85)	-0.86***	(-2.81)	

Panel B: Grouping based on the *MW* measure

Rank	IR		AIR		Size		Issp		Proba		Number
	Mean	T	Mean	T	Mean	T	Mean	T	Mean	T	
1	466.14***	(7.85)	466.11***	(7.85)	116.23***	(11.77)	6.64***	(5.77)	0.40***	(3.31)	128
2	187.94***	(9.13)	187.16***	(9.09)	273.03***	(15.09)	6.93***	(6.14)	0.84***	(5.82)	174
3	159.94***	(15.91)	159.87***	(15.88)	342.67***	(17.21)	9.84***	(13.23)	1.63***	(6.00)	642
Δ(1,2)	278.20***	(4.43)	278.95***	(4.44)	-156.80***	(-7.61)	-0.29	(-0.18)	-0.44**	(-2.34)	
Δ(1,3)	306.20***	(5.08)	306.24***	(5.08)	-226.44***	(-10.19)	-3.20**	(-2.34)	-1.23***	(-4.14)	
Δ(2,3)	28.00	(1.22)	27.29	(1.19)	-69.64***	(-2.59)	-2.91**	(-2.15)	-0.79***	(-2.57)	

Table III
Regressions for IPO Underpricing

In this table we report the regression results (944 IPOs are used in the following regressions). The dependent variable is the market-adjusted initial return (*AIR*). The independent variables are the reputation proxies (*CM/MW*) of the underwriter, total proceeds that the firm received from its IPO (*Size*), issuing price (*Issp*) and the proportion (*Proba*) of an IPO stock allocated to outside investors. *, **, and *** indicate significance at the level of 10%, 5% and 1%, respectively.

$$AIR_0 = \alpha_0 + \alpha_1 * [CM \text{ or } MW] + \alpha_2 * Size + \alpha_3 * Issp + \alpha_4 * Pr\,oba + \varepsilon_0$$

Regression		Intercept	*CM*	*MW*	*Size*	*Issp*	*Proba*	R^2
1	Coeff.	563.88***	-109.48***		-0.0013***	-3.87***	-4.06**	0.122
	T	(13.48)	(-6.89)		(-5.24)	(-6.14)	(-2.13)	
2	Coeff.	552.52***		-107.06***	-0.0011***	-3.86***	-4.09**	0.121
	T	(13.66)		(-6.87)	(-4.45)	(-6.13)	(-2.14)	

Table IV
Short-run Cumulative IPO Returns

This table reports the cumulative market-adjusted return over a ten-day horizon after the first trading day. AR_t is the cumulative market-adjusted return until trading day t. We divide the entire IPO sample into three groups based on the reputation proxies (CM/MW) of their underwriters. $\Delta(i,j)$ represents the difference in the cumulative market-adjusted return in the ten-day horizon between group i and group j. *, **, and *** indicate significance at the level of 10%, 5% and 1%, respectively.

Panel A: Grouping based on the *CM* measure

Day	Group 1			Group 2			Group 3		
	No.	*AR*	*T*	*No.*	*AR*	*T*	*No.*	*AR*	*T*
1	113	-1.43*	(-1.86)	207	-1.20***	(-2.86)	624	-0.63**	(-2.05)
2	113	-1.30	(-1.40)	207	-1.47***	(-2.71)	624	-0.42	(-1.12)
3	113	-2.81***	(-2.63)	207	-1.88***	(-2.82)	624	-0.47	(-1.09)
4	113	-3.01**	(-2.55)	207	-2.10***	(-2.79)	624	-0.59	(-1.23)
5	113	-3.81***	(-3.01)	207	-3.13***	(-4.11)	624	-1.33***	(-2.68)
6	113	-3.53**	(-2.52)	207	-2.76***	(-3.35)	624	-1.05*	(-1.84)
7	113	-3.31**	(-2.42)	207	-2.55***	(-3.13)	624	-1.01*	(-1.84)
8	113	-5.02***	(-3.72)	207	-3.07***	(-3.77)	624	-1.47**	(-2.31)
9	113	-5.33***	(-3.66)	207	-3.71***	(-4.21)	624	-2.25***	(-3.49)
10	113	-5.20***	(-3.68)	207	-3.64***	(-4.22)	624	-2.56***	(-3.94)
$\Delta(1,2)$		-1.56	(-0.94)						
$\Delta(1,3)$		-2.64*	(-1.70)						
$\Delta(2,3)$		-1.08	(-1.00)						

Panel B: Grouping based on the *MW* measure

Day	Group 1			Group 2			Group 3		
	No.	*AR*	*T*	*No.*	*AR*	*T*	*No.*	*AR*	*T*
1	128	-1.88***	(-2.63)	174	-0.47	(-0.92)	642	-0.75**	(-2.54)
2	128	-2.04**	(-2.42)	174	-0.78	(-1.16)	642	-0.49	(-1.38)
3	128	-3.28***	(-3.33)	174	-1.13	(-1.41)	642	-0.60	(-1.44)
4	128	-3.63***	(-3.33)	174	-0.97	(-1.05)	642	-0.79*	(-1.73)
5	128	-4.36***	(-3.73)	174	-2.00**	(-2.11)	642	-1.56***	(-3.30)
6	128	-3.82***	(-2.92)	174	-1.72*	(-1.65)	642	-1.30**	(-2.41)
7	128	-3.78***	(-2.96)	174	-1.73	(-1.62)	642	-1.16**	(-2.27)
8	128	-5.56***	(-4.54)	174	-2.82***	(-2.73)	642	-1.43**	(-2.35)
9	128	-5.75***	(-4.28)	174	-3.57***	(-3.33)	642	-2.21***	(-3.57)
10	128	-5.37***	(-4.07)	174	-3.84***	(-3.70)	642	-2.47***	(-3.96)
$\Delta(1,2)$		-1.53	(-0.91)						
$\Delta(1,3)$		-2.90**	(-1.99)						
$\Delta(2,3)$		-1.37	(-1.13)						

Table V
Regression of the Short-run Performance on Underwriter Reputation

The dependent variable of regressions is the cumulative market-adjusted return over a ten-day horizon after the first trading day. The explanatory variables are the same as in Table III. There are 944 IPOs in the following regressions. *, **, and *** indicate significance at the level of 10%, 5% and 1%, respectively.

$$AR = \alpha_0 + \alpha_1 * [CM \text{ or } MW] + \alpha_2 * Size + \alpha_3 * Issp + \alpha_4 * Proba + \varepsilon_0$$

Model		Intercept	CM	MW	Size	Issp	Proba	R^2
1	Coeff.	-6.46***	1.27*		0.00	-0.01	-0.04	0.004
	T	(-3.40)	(1.77)		(0.73)	(-0.38)	(-0.43)	
2	Coeff.	-6.75***		1.42**	0.00	-0.01	-0.04	0.005
	T	(-3.68)		(2.01)	(0.49)	(-0.40)	(-0.44)	

Table VI
Long-run Cumulative IPO Returns

This table reports the cumulative market-adjusted return up to a three-year horizon after a stock is offered. *ACR* is the cumulative market-adjusted return. The whole IPO sample is divided into three groups based on the reputation proxies (*CM* or *MW*) of their underwriters. Δ(i,j) represents the difference in the cumulative market-adjusted returns at end of the third year between group *i* and group *j*. *, **, and *** indicate significance at the level of 10%, 5% and 1%, respectively.

Panel A: Grouping based on the *CM* measure

Month	1			2			3		
	N	ACR	T	N	ACR	T	N	ACR	T
1	113	-6.23***	-3.23	207	-4.49***	-3.17	624	-3.88***	-4.66
2	113	-12.35***	-5.56	207	-5.41***	-3.17	624	-5.38***	-5.05
3	111	-17.46***	-6.38	202	-5.73***	-2.68	623	-6.66***	-5.36
4	111	-17.90***	-5.79	202	-4.44*	-1.88	623	-8.32***	-5.82
5	111	-18.02***	-5.40	202	-4.75*	-1.91	623	-8.30***	-5.24
6	111	-21.91***	-6.08	202	-3.83	-1.40	623	-7.89***	-4.72
7	111	-24.59***	-5.97	202	-4.44	-1.54	623	-7.81***	-4.40
8	111	-24.14***	-5.35	202	-6.28**	-2.13	623	-7.85***	-4.30
9	111	-22.54***	-4.57	202	-4.97	-1.63	623	-6.96***	-3.63
10	111	-21.75***	-4.08	202	-2.07	-0.62	623	-5.92***	-2.91
11	111	-21.56***	-3.89	202	0.65	0.19	623	-4.15**	-1.96
12	111	-20.58***	-3.53	202	1.17	0.34	623	-2.45	-1.09
13	110	-20.41***	-3.47	202	1.77	0.49	621	-0.72	-0.31
14	110	-20.41***	-3.35	195	1.00	0.27	604	-1.06	-0.43
15	109	-19.52***	-3.06	189	2.52	0.63	600	0.91	0.35
16	108	-17.96***	-2.65	188	4.84	1.13	595	2.12	0.76
17	106	-17.97***	-2.60	185	5.91	1.27	593	3.34	1.17
18	106	-16.10**	-2.27	184	5.77	1.24	590	5.66**	1.93
19	105	-12.09	-1.55	182	6.38	1.34	575	7.78**	2.44
20	104	-12.83*	-1.70	177	6.34	1.29	570	8.95***	2.75
21	103	-12.22	-1.52	173	8.62*	1.68	560	9.69***	2.95
22	102	-11.53	-1.43	171	10.63**	1.95	557	11.01***	3.29
23	102	-11.66	-1.45	168	10.32*	1.87	555	11.55***	3.36
24	102	-13.15*	-1.69	166	11.01**	1.92	551	13.01***	3.62
25	100	-12.10	-1.45	164	10.93*	1.82	549	13.04***	3.40
26	99	-11.00	-1.33	159	9.28	1.58	547	13.79***	3.63
27	98	-10.69	-1.27	157	10.02*	1.66	542	12.52***	3.35
28	98	-13.02	-1.59	156	10.74*	1.78	533	11.83***	3.09
29	96	-13.63	-1.58	155	13.52**	2.07	530	12.94***	3.23
30	96	-13.58	-1.53	154	14.12**	2.13	521	13.44***	3.23
31	96	-15.08*	-1.70	150	15.21**	2.00	514	13.37***	3.08
32	96	-15.54*	-1.72	147	16.29**	2.02	505	14.32***	3.12
33	96	-16.50**	-1.92	144	15.22**	2.03	500	14.80***	3.17
34	95	-18.57**	-2.20	142	14.85**	1.99	495	14.36***	3.09
35	94	-19.92**	-2.31	139	14.09*	1.80	493	15.44***	3.23
36	93	-20.80**	-2.49	136	12.92*	1.64	489	17.46***	3.56
Δ(1,2)		-33.72***	-2.94						
Δ(1,3)		-38.26***	-3.95						
Δ(2,3)		-4.54	-0.49						

Table VI
Long-run Cumulative IPO Returns (continued)

Panel B: Grouping based on the *MW* measure

Month	1			2			3		
	N	ACR	T	N	ACR	T	N	ACR	T
1	128	-5.42***	-2.85	174	-6.14***	-3.83	642	-3.57***	-4.44
2	128	-12.21***	-5.59	174	-8.10***	-4.43	642	-4.52***	-4.33
3	126	-20.13***	-7.63	173	-6.28***	-2.88	637	-5.68***	-4.62
4	126	-20.60***	-6.94	173	-5.94**	-2.40	637	-6.97***	-4.95
5	126	-21.09***	-6.56	173	-6.98***	-2.66	637	-6.69***	-4.30
6	126	-24.82***	-7.08	173	-7.01**	-2.44	637	-5.94***	-3.61
7	126	-28.14***	-7.35	173	-7.62**	-2.44	637	-5.69***	-3.28
8	126	-29.25***	-7.03	173	-8.27***	-2.62	637	-5.85***	-3.27
9	126	-28.91***	-6.37	173	-7.68**	-2.41	637	-4.50**	-2.39
10	126	-27.61***	-5.36	173	-5.43	-1.57	637	-3.30*	-1.66
11	126	-27.79***	-5.41	173	-1.84	-0.49	637	-1.61	-0.78
12	126	-26.73***	-4.99	173	-1.22	-0.33	637	0.01	0.00
13	125	-25.80***	-4.73	173	-0.63	-0.16	635	1.57	0.69
14	125	-26.31***	-4.64	171	-0.17	-0.04	613	1.02	0.42
15	124	-25.47***	-4.32	167	2.11	0.49	607	2.80	1.09
16	124	-23.18***	-3.69	166	4.26	0.89	601	3.98	1.48
17	123	-23.53***	-3.69	163	7.17	1.37	598	4.84*	1.74
18	123	-22.58***	-3.53	163	7.84	1.49	594	7.06**	2.47
19	122	-20.41***	-3.01	163	10.40*	1.86	577	8.95***	2.88
20	122	-19.69***	-2.89	158	8.15	1.49	571	10.51***	3.29
21	121	-18.78***	-2.59	156	10.79*	1.91	559	11.17***	3.46
22	120	-17.65**	-2.41	155	11.57**	1.99	555	12.80***	3.86
23	120	-17.84**	-2.47	154	11.70**	1.96	551	13.24***	3.88
24	120	-18.26**	-2.52	153	11.97**	1.97	546	14.68***	4.12
25	119	-17.57**	-2.31	151	11.65*	1.86	543	14.87***	3.88
26	118	-15.98**	-2.10	148	9.15	1.57	539	15.70***	4.10
27	117	-16.10**	-2.10	147	9.13	1.56	533	14.74***	3.88
28	117	-19.28***	-2.73	147	11.39*	1.79	523	13.94***	3.60
29	117	-18.84***	-2.60	144	14.72**	2.00	520	14.86***	3.71
30	117	-18.62**	-2.46	144	14.04**	1.97	510	15.75***	3.76
31	117	-20.52***	-2.84	141	15.78*	1.91	502	15.70***	3.58
32	117	-21.34***	-2.93	138	17.21**	1.98	493	16.75***	3.58
33	117	-21.31***	-2.99	136	16.69**	2.09	487	16.91***	3.56
34	117	-22.02***	-3.10	133	14.95**	1.90	482	16.68***	3.52
35	117	-23.52***	-3.36	131	17.92**	1.95	478	16.96***	3.55
36	116	-22.93***	-3.14	128	14.15*	1.70	474	19.43***	3.89
Δ(1,2)		-37.08***	-3.35						
Δ(1,3)		-42.36***	-4.79						
Δ(2,3)		-5.28	-0.54						

Table VII
Regression of Long-run IPO Performance on Underwriter Reputation

The dependent variable of the regression model is three-year cumulative market-adjusted return. The independent variables are the same as Table III. 718 IPOs are used in the following regressions. *, **, and *** represent significance at the level of 10%, 5% and 1%, respectively.

$$ACR = \alpha_0 + \alpha_1 * [CM \text{ or } MW] + \alpha_2 * Size + \alpha_3 * Issp + \alpha_4 * Proba + \varepsilon_0$$

Model		Intercept	CM	MW	Size	Issp	Proba	R^2
1	Coeff.	-27.91**	17.21***		0.00	-0.55***	0.11	0.024
	T	(-1.97)	(3.14)		(0.19)	(-2.86)	(0.20)	
2	Coeff.	-33.02**		20.05***	0.00	-0.56***	0.06	0.031
	T	(-2.52)		(3.88)	(-0.06)	(-2.95)	(0.11)	

Table VIII
Accounting performance of IPOs

ROA is return on total assets defined as the operating income before depreciation and amortization as a percentage of total assets. *CFOA* is the operating cash flow on total assets defined as the operating income less capital expenditure divided by total assets. *Sale_G* is the growth rate of net sales. *ATO* is the asset turnover measured by net sales over total assets. Δ(i,j) represents the difference between group *i* and group *j*. *, **, and *** represent significance at level of 10%, 5% and 1%, respectively.

Panel A: Grouping based on the *CM* measure

Measure of Operating Performance			Year relative to the IPO year							
			Year -1	T	Year 0	T	Year 1	T	Year 2	T
Panel A: Operating Return /Total Assets (*ROA*)										
Rank	1	35	11.95***	(8.40)	9.67***	(10.01)	8.31***	(6.87)	6.15***	(5.11)
	2	99	13.61***	(20.57)	10.44***	(21.66)	8.32***	(13.03)	6.23***	(5.80)
	3	249	13.85***	(25.13)	10.81***	(32.39)	8.99***	(25.04)	7.32***	(16.63)
	Δ(1,3)		-1.90***	(-3.77)	-1.14***	(-2.76)	-0.68	(-1.47)	-1.17**	(-2.53)
Panel B: Operating Cash Flows/Total Assets (*CFOA*)										
Rank	1	35	10.77***	(8.36)	8.21***	(8.14)	6.77***	(5.67)	3.89***	(3.52)
	2	99	11.68***	(18.34)	8.57***	(18.49)	6.51***	(10.56)	4.15***	(3.84)
	3	249	12.37***	(23.85)	9.22***	(29.50)	7.15***	(20.39)	5.31***	(12.65)
	Δ(1,3)		-1.60***	(-3.34)	-1.01**	(-2.39)	-0.38	(-0.83)	-1.42***	(-3.20)
Panel C: Sales Growth Rate (*Sale_G*)										
Rank	1	35	1.23***	(13.71)	1.13***	(17.26)	1.11***	(13.47)	1.12***	(15.50)
	2	99	1.24***	(33.16)	1.20***	(18.16)	1.16***	(10.11)	1.13***	(17.93)
	3	249	1.29***	(40.33)	1.35***	(19.81)	1.24***	(34.52)	1.31***	(11.74)
	Δ(1,3)		-0.06	(-0.48)	-0.22**	(-1.95)	-0.13	(-1.07)	-0.19	(-1.56)
Panel D: Asset Turnover (*ATO*)										
Rank	1	35	73.20***	(8.58)	53.75***	(8.98)	50.89***	(8.16)	46.17***	(7.91)
	2	99	73.93***	(12.87)	49.91***	(11.59)	52.29***	(9.58)	44.47***	(9.97)
	3	249	96.55***	(16.45)	60.68***	(21.77)	56.79***	(20.20)	53.20***	(19.55)
	Δ(1,3)		-23.35***	(-18.57)	-6.93***	(-6.67)	-5.90***	(-5.57)	-7.03***	(-6.86)

Table VIII
Accounting performance of IPOs (continued)

Panel B: Grouping based on the *MW* measure

Measure of Operating Performance			Year relative to the IPO year						
			Year -1	T	Year 0	T	Year 1	T	Year 2	T
Panel A: Operating Return/ Total Assets (*ROA*)										
Rank	1	43	9.73***	(11.61)	7.11***	(11.10)	6.52***	(7.51)	5.28***	(5.76)
	2	86	12.23***	(20.96)	8.42***	(22.35)	8.48***	(13.54)	6.79***	(7.15)
	3	254	12.42***	(27.23)	8.36***	(32.96)	7.99***	(24.97)	6.07***	(14.30)
	Δ(1,3)		-2.69***	(-7.20)	-1.25***	(-3.87)	-1.47***	(-3.92)	-0.79**	(-2.03)
Panel B: Operating Cash Flows/Total Assets (*CFOA*)										
Rank	1	43	8.89***	(11.15)	6.16***	(8.68)	5.30***	(6.04)	3.32***	(3.76)
	2	86	10.72***	(19.88)	7.07***	(19.54)	6.72***	(10.91)	4.93***	(5.16)
	3	254	10.98***	(25.84)	6.98***	(30.19)	6.29***	(20.17)	4.21***	(10.18)
	Δ(1,3)		-2.09***	(-5.74)	-0.82**	(-2.43)	-0.99***	(-2.63)	-0.89**	(-2.33)
Panel C: Sales Growth Rate (*Sale G*)										
Rank	1	43	1.26***	(15.28)	1.14***	(17.45)	1.23***	(10.47)	1.09***	(19.68)
	2	86	1.29***	(26.68)	1.23***	(19.00)	1.07***	(12.04)	1.17***	(15.06)
	3	254	1.28***	(42.13)	1.34***	(19.16)	1.25***	(31.67)	1.31***	(11.15)
	Δ(1,3)		-0.02	(-0.17)	-0.20*	(-1.84)	-0.02	(-0.15)	-0.22**	(-2.05)
Panel D: Asset Turnover (*ATO*)										
Rank	1	43	71.21***	(9.91)	53.22***	(9.98)	49.41***	(8.71)	47.47***	(8.81)
	2	86	76.45***	(11.82)	52.36***	(10.86)	54.33***	(10.14)	46.69***	(11.08)
	3	254	95.61***	(16.56)	59.61***	(21.69)	56.61***	(19.51)	52.58***	(18.48)
	Δ(1,3)		-24.40***	(-21.87)	-6.39***	(-6.80)	-7.20***	(-7.43)	-5.11***	(-5.40)

Table IX

Regression for the IPO Accounting performance of IPO stocks

The dependent variables of regressions are measures of operating performance (*OROA*, *OCF*, *SALEG*, *ATO*) around the issuing year. The independent variables are underwriter reputation proxies (*CM* or *MW*). 383 IPOs are used in the following regressions. *, **, and *** represent significance at the level of 10%, 5% and 1%, respectively.

Panel A: Regression for one year prior to the issuance

Model		OROA				OCF				SALEG				ATO			
		Intercept	CM	MW	R^2	Intercept	CM	MW	R^2	Intercept	CM	MW	R^2	Intercept	CM	MW	R^2
1	Coeff.	8.33***	1.11*		0.011	7.87***	0.86		0.008	1.46***	-0.05		0.004	42.47*	18.68**		0.019
	T	(4.64)	(1.66)			(4.73)	(1.40)			(10.68)	(-1.01)			(1.81)	(2.14)		
2	Coeff.	8.38***		1.13*	0.015	8.02***		0.84	0.010	1.43***		-0.04	0.003	45.67**		18.12**	0.023
	T	(5.42)		(1.92)		(5.60)		(1.53)		(12.10)		(-0.90)		(2.27)		(2.35)	

Panel B: Regression for the issuing year

Model		OROA				OCF				SALEG				ATO			
		Intercept	CM	MW	R^2	Intercept	CM	MW	R^2	Intercept	CM	MW	R^2	Intercept	CM	MW	R^2
1	Coeff.	6.98***	0.51		0.007	5.93***	0.46		0.006	0.92***	0.16		0.011	47.60***	4.94		0.005
	T	(6.57)	(1.29)			(5.82)	(1.22)			(3.43)	(1.59)			(3.95)	(1.10)		
2	Coeff.	7.19***		0.45	0.007	6.46***		0.27	0.003	0.99***		0.13	0.010	46.41***		5.61	0.008
	T	(7.85)		(1.27)		(7.33)		(0.80)		(4.31)		(1.51)		(4.48)		(1.42)	

Panel C: Regression for one year after the issuance

Model		OROA				OCF				SALEG				ATO			
		Intercept	CM	MW	R^2	Intercept	CM	MW	R^2	Intercept	CM	MW	R^2	Intercept	CM	MW	R^2
1	Coeff.	6.23***	0.70		0.008	4.96***	0.59		0.006	0.99***	0.08		0.007	42.49***	5.06		0.007
	T	(4.55)	(1.37)			(3.69)	(1.18)			(5.93)	(1.26)			(3.97)	(1.27)		
2	Coeff.	6.17***		0.75*	0.012	5.13***		0.54	0.006	1.07***		0.05	0.003	42.79***		5.13	0.009
	T	(5.23)		(1.67)		(4.43)		(1.23)		(7.42)		(0.91)		(4.64)		(1.46)	

Panel D: Regression for two years after the issuance

Model		OROA				OCF				SALEG				ATO			
		Intercept	CM	MW	R^2	Intercept	CM	MW	R^2	Intercept	CM	MW	R^2	Intercept	CM	MW	R^2
1	Coeff.	4.35***	0.65		0.004	1.98	0.85		0.008	0.93***	0.12		0.004	34.41***	6.09*		0.012
	T	(2.54)	(1.02)			(1.17)	(1.35)			(2.86)	(1.02)			(3.62)	(1.72)		
2	Coeff.	5.52***		0.20	0.001	3.55**		0.26	0.001	0.95***		0.12	0.005	37.73***		5.00*	0.011
	T	(3.73)		(0.36)		(2.42)		(0.46)		(3.40)		(1.11)		(4.60)		(1.67)	