Underwriting Optimism: Analyst Bias toward IPO Peers *

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Abstract

Lead underwriter analysts make favorable recommendations for issuers' product-market peers to boost IPO valuations, a phenomenon we term *Peer-firm IPO Optimism* (PFIO). Buy probabilities rise by 5.5% and sell probabilities fall by 21.8% relative to their unconditional means. PFIO increases with underwriting responsibility, peer size, investor attention, and valuation complexity. However, earnings and long-term growth forecasts show no greater optimism, consistent with underwriting incentives rather than sincere optimism. Affected buys and upgrades elicit no significantly weaker announcement responses but underperform unaffected recommendations over longer horizons. Unlike direct-affiliation bias, PFIO is not detectably weaker at banks sanctioned under the Global Settlement.

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1 Introduction

For decades, research and regulatory reform have focused on analysts' incentives to favor their employers' investment-banking clients (Corwin et al., 2017; Ljungqvist et al., 2007; Michaely and Womack, 1999). Yet the firm an analyst discusses need not be the firm the brokerage has a direct underwriting relationship with. When investors use publicly traded peers to value an IPO, underwriting incentives can extend to research on those peers. We ask whether analysts affiliated with the IPO's lead underwriters issue more favorable recommendations on the issuer's product-market peers during the underwriting window. The quiet period makes this channel particularly relevant. Affiliated analysts restricted from publishing on the issuer can still publish on its already-public peers.[1] We label this channel *Peer-firm IPO Optimism* (PFIO).

Underwriters have reasons to exhibit PFIO given their duties in both the primary and secondary markets. In the primary market, IPO offer prices are typically anchored to comparable-firm multiples, and underwriters tend to select peers with high growth rates and high valuation multiples when justifying those prices (Eaton et al., 2022; Paleari et al., 2014; Ritter and Welch, 2002). Favorable peer research feeds directly into this valuation process by supporting the peer stock prices that determine the multiples and reinforcing the sector narrative underwriters use to market the offer to investors during bookbuilding. In the secondary market, underwriters actively support the issuer's price for roughly one month after listing, and they bear the cost of a weak debut. Roughly one in four IPOs in our SDC-based sample closes the first day below the offer price and becomes a "broken" IPO.[2]

[1] Under NASD Rule 2711 and NYSE Rule 472 (adopted in 2002), managers and co-managers were prohibited from publishing research on the issuer for 40 calendar days after the IPO, and other syndicate members for 25 days. The 2012 JOBS Act eliminated the post-IPO research quiet period altogether for emerging growth companies, and FINRA Rule 2241 (effective 2015) reduced the quiet period for non-EGC IPOs to a minimum of 10 days for participating underwriters and dealers. However, Alhusaini et al. (2025) note that few analysts changed their behavior after the JOBS Act, partly because of "uncertainty about the new regulation and its expected enforcement."

[2] This figure is based on our calculations using SDC IPO offer prices and CRSP first-day closing prices. For comparison, Table 19e of Ritter (2026) implies a similar first-day loss rate of 23.9% for operating-company IPOs during 2001–2024.

When an IPO becomes broken, it exposes the underwriter to inventory losses on stabilization trades, reputational damage with issuers and institutional clients, and erosion of future market share (Booth and Smith, 1986; Dunbar, 2000). Tilting peer research positively around the listing date can support sector sentiment and sustain marginal demand at a moment when the underwriter is actively defending the offer price. Consistent with this channel, Alhusaini et al. (2025) show that investors trade the IPO stock on the listing date based on peer-firm recommendation revisions issued during the quiet period.

However, PFIO also entails costs. Biased research erodes analyst credibility with buy-side clients and exposes brokers to regulatory and reputational sanction, particularly after the post-2003 reforms tightened oversight of analyst conduct (Corwin et al., 2017). Investors who view peers as competitors for capital may also interpret peer optimism as a negative signal for the issuer's relative appeal, neutralizing or reversing the intended effect. Whether the underwriter's IPO support incentive dominates these countervailing forces is therefore an empirical question.

We answer this question by studying analyst recommendations on issuer peers around 1,730 U.S. IPOs from 2003 through 2023. We define the IPO underwriting window as the two months before through one month after the listing date. This is the period when underwriters are most actively marketing and supporting the offering (Pisciotta, 2023). We find that affiliated analysts' recommendations on the issuer's product-market peers are more favorable during this window. When we examine buy and sell recommendations separately, we find that the probability of a buy rises by 2.84 percentage points (5.5% relative to the unconditional mean), and the probability of a sell falls by 1.35 percentage points (21.8% relative to the unconditional mean). With analyst–month and firm–month joint fixed effects, these estimates reflect within-analyst and within-firm variation each month. The design absorbs analysts' overall optimism and firm-specific information and sentiment shared across analysts. The PFIO coefficient is roughly 44% of the size of the well-documented direct-affiliation bias, indicating that this indirect channel is economically comparable to the conflict

that two decades of regulation have sought to police.

We next examine how affiliated analysts' optimism toward issuer peers evolves around IPO listings. Following the same analyst–firm pairs over time, we find that optimism rises before listing, peaks two months prior, and declines steadily through two months after listing. No comparable hump appears for non-affiliated analysts covering the same peers or for the same affiliated analysts covering non-peer firms. This temporary optimism, concentrated in affiliated analysts' peer coverage, is consistent with incentives to market and support the IPO.

We find further support for this interpretation. First, PFIO is stronger for lead-underwriter analysts than for ordinary co-manager analysts. It is also stronger among larger peers and peers with greater investor attention or valuation complexity. These patterns are consistent with stronger optimism where underwriting responsibilities and potential promotional benefits are greater, or where distortions are harder to detect. Second, affiliated analysts' more favorable recommendations are not accompanied by more optimistic forecasts of one-year-ahead earnings per share (EPS) or long-term earnings growth (LTG). If PFIO reflected sincerely more optimistic beliefs about peer fundamentals, whether driven by superior information or behavioral bias, that optimism should also appear in earnings or growth forecasts. By contrast, the wedge between recommendations and fundamental forecasts is consistent with analysts' incentives to support the IPO. Recommendations involve subjective valuation judgments, whereas earnings and growth forecasts can be evaluated against subsequent realizations. Analysts seeking to support an IPO may therefore tilt recommendations while preserving the credibility of their fundamental forecasts.[3]

PFIO can support an IPO only if investors do not fully discount affected recommendations. After conditioning on observables and fixed effects, PFIO-affected buys and upgrades receive no detectably smaller announcement responses than their non-PFIO counterparts, yet

[3]We also consider whether IPO-related workload diverts analysts' attention from their existing coverage and reduces research quality. Two findings make this explanation less persuasive. First, distraction alone does not naturally predict a systematic, temporary increase in recommendation optimism. Second, distraction predicts lower forecast accuracy, whereas we find no detectable change in EPS forecast accuracy.

underperform them over longer investment horizons. At 12 months, their buy-and-hold abnormal returns (BHARs) are 3.02 and 4.55 percentage points lower, respectively, than those following their non-PFIO counterparts. These lower returns suggest that PFIO-affected recommendations offer less investment value, yet investors do not respond detectably less favorably to them at announcement. Their continued market influence may therefore sustain affiliated analysts' incentives to use optimistic peer research to support the IPO.

Finally, we find that regulatory safeguards associated with the Global Settlement have limited reach over this indirect form of bias. Direct affiliation bias is weaker at sanctioned brokerages, consistent with Corwin et al. (2017), whereas PFIO does not differ detectably between sanctioned and nonsanctioned brokerages.

Our results remain robust when we measure analyst optimism using normalized target prices, examine newly issued recommendations, or narrow the peer set. PFIO also appears in normalized target prices, which provide a continuous measure of analysts' valuation views and avoid relying on coarse recommendation categories that can differ in meaning across analysts. The favorable pattern also appears in newly issued recommendations, showing that it is not confined to ratings carried forward from earlier reports. Finally, the coefficients increase monotonically in absolute magnitude as the peer set narrows from the 15 most similar product-market peers to the top 10 and then the top 5, indicating stronger PFIO among closer product-market peers.

Our paper makes three contributions. First, we extend the literature on investment-banking conflicts in sell-side research (Cliff and Denis, 2004; Corwin et al., 2017; Dechow et al., 2000; James and Karceski, 2006; Krigman et al., 2001; Michaely and Womack, 1999; O'Brien et al., 2005) from direct broker–client bias to a cross-firm channel. We show that when a brokerage underwrites an IPO, its analysts' recommendations become more favorable toward the issuer's product-market peers. The conflict therefore originates with one firm but enters research on another, showing how underwriting incentives can operate through product-market relationships.

Second, we contribute to research on the role of peers in firm valuation by documenting underwriting-linked bias in analysts' research about those peers. In IPO and M&A valuation, peer firms' market prices and valuation multiples provide explicit benchmarks (Eaton et al., 2022; Purnanandam and Swaminathan, 2004). In secondary markets, returns of analyst-connected firms predict focal-firm returns in patterns consistent with gradual information diffusion (Ali and Hirshleifer, 2020). More directly, institutional investors trade on analysts' recommendation revisions for product-market peers during the quiet period (Alhusaini et al., 2025). This reliance on peer information creates incentives to shape peer-based valuation inputs. Prior work shows that underwriters and advisers strategically select higher-valued comparables in IPOs and M&A transactions (Eaton et al., 2022; Paleari et al., 2014; Vismara et al., 2015). Managers also adjust their own firms' disclosures to influence acquisition targets' valuations (Kim et al., 2020) or weaken competitors' IPOs (Billett et al., 2024). Whereas these studies examine comparable selection and corporate disclosure, we show that underwriting incentives can also shape analysts' recommendations about an issuer's product-market peers. Our findings thus identify an additional source of bias in the information available to investors for peer-based valuation.

Lastly, our findings have implications for regulatory design. Existing rules focus primarily on the direct underwriting relationship between a brokerage and the firm covered in its research. PFIO can arise even when the covered firm has no such relationship with the brokerage, because the underwriting incentive comes from another firm's IPO. This indirect conflict may therefore be less visible under current disclosure and oversight. Our finding that PFIO does not differ between sanctioned and nonsanctioned brokerages suggests that safeguards against direct conflicts have limited reach over this indirect bias. Therefore, disclosure and internal compliance monitoring may need to consider both a brokerage's relationship with the covered firm and its contemporaneous underwriting relationships with that firm's product-market peers.

The remainder of the paper proceeds as follows. Section 2 describes the data, variable construction, and empirical design. Section 3 documents the existence and timing of PFIO. Section 4 examines incentive-consistent heterogeneity and tests alternative explanations using forecast direction and accuracy. Section 5 studies market reception and evaluates recommendation quality using subsequent abnormal returns. Section 6 examines regulatory reach and measurement robustness. Section 7 concludes.

2 Data and Empirical Design

2.1 IPO, Analyst, and Peer Data

Data on U.S.-listed IPOs are obtained from Refinitiv's Securities Data Company (SDC) database. We focus on IPOs on the American Stock Exchange, New York Stock Exchange, and NASDAQ that issue ordinary common shares over 2003–2023. We exclude real estate investment trusts, closed-end funds and trusts, unit issues, and other listed non-common security types. We then link these IPOs to CRSP and Compustat. This step left us with 3,193 deals with nonblank Compustat identifiers from 3,189 distinct issuers.

Data on analysts' recommendations, target prices, one-year-ahead earnings per share (EPS) forecasts, and long-term earnings growth (LTG) forecasts come from I/B/E/S. Following Pisciotta (2023), we restrict analyst-panel observations to 2003–2023. Starting in 2003 limits the influence of the widespread shift from five-tier to coarser three-tier rating systems following NYSE Rule 472 and NASD Rule 2711 (Birru et al., 2024; Kadan et al., 2009). Such changes in rating scales can otherwise be mistaken for changes in analyst optimism.[4]

We match IPO managers to I/B/E/S brokerages by name. Because I/B/E/S generally supplies an abbreviated brokerage identifier rather than a full name, we use Capital IQ Transcripts to recover brokerage names and manually verify ambiguous links.[5] Among the

[4]Our main recommendation results remain qualitatively similar when we extend the analyst-panel observation window to 1991–2023 (Internet Appendix Table IA.1).

[5]Specifically, we match the full name of each analyst participating in conference calls in Capital IQ

linked deals with nonblank firm identifiers, 2,963 have at least one lead underwriter mapped to I/B/E/S.

We next identify product-market peers for each IPO. Because SEC rules do not require IPO prospectuses to disclose comparable-company lists, we use the Hoberg–Phillips Text-based Network Industry Classifications (TNIC) to define peers systematically. TNIC constructs annually updated, firm-specific peer sets from pairwise similarity in firms' 10-K product descriptions.[6] Prior research supports this choice. Eaton et al. (2022) show that text-based peers better predict valuation comparables disclosed in M&A filings than SIC- or NAICS-based peers. More directly for our setting, Alhusaini et al. (2025) use TNIC to identify peer firms when studying analyst information during the IPO quiet period.

In our main specification, we select for each IPO firm the fifteen firms with the highest TNIC product similarity scores based on the issuer's first available TNIC fiscal-year vintage at or after the IPO year. Applying this peer definition assumes that product-market relationships remain sufficiently stable around listing. IPOs without TNIC matches are excluded. Because the TNIC data are currently available through 2023, our sample ends in 2023. After we impose the lead-underwriter match, require TNIC peers, and merge the data with the monthly analyst-coverage panel, the main recommendation sample contains 1,730 IPO firms.

2.2 IPO Underwriting Exposure

To test for PFIO, we identify when analysts cover an IPO issuer's peers while their brokerage serves as a lead underwriter. Our indicator, *IPO underwriting*, equals one when: (1) analyst i covers a TNIC peer j of an IPO issuer; (2) the analyst's brokerage serves as a lead underwriter for that IPO; and (3) month t falls within the period from two months before through one month after the month containing the listing date. It equals zero otherwise. Internet

Transcripts to analysts covering the same firm and year in I/B/E/S. We then link the analyst's Transcript affiliation to the I/B/E/S `ESTIMID`. When multiple affiliations map to one `ESTIMID`, or vice versa, we manually verify the abbreviations before matching the brokerage name to an SDC manager.

[6]We thank Professors Gerard Hoberg and Gordon Phillips for making the TNIC data publicly available at `https://hobergphillips.tuck.dartmouth.edu/`.

Appendix Figure IA.1 illustrates these brokerage–issuer–peer relationships. The baseline $[-2, +1]$ window covers the late registration and marketing period, pricing and allocation, and the initial period of aftermarket support.

2.3 Outcome Variables and Controls

Recommendations. We construct a monthly panel dataset of analyst recommendations for publicly listed U.S. companies. For each analyst–firm–month observation, we retain the latest recommendation outstanding at month-end. Following Malmendier and Shanthikumar (2014), a recommendation remains effective from its announcement through the earlier of its I/B/E/S stop date and 180 days after its review date. We reverse the I/B/E/S coding so that 1 denotes *Strong Sell* and 5 denotes *Strong Buy*. We also construct two indicator variables for *Buy* and *Sell* recommendations, based on whether the recommendation level is greater than or less than 3, respectively. *Upgrade* and *Downgrade* indicate positive and negative changes, respectively, from the analyst's prior recommendation.

Fundamental forecasts and forecast accuracy. We also construct monthly panels of one-year-ahead EPS forecasts and long-term EPS growth forecasts for the tests of alternative explanations in Section 4.2. Proportional mean forecast bias (*PMFB*) captures directional bias in EPS forecasts, while *LTG consensus deviation* measures long-term growth forecasts relative to consensus. Higher values of either measure indicate greater optimism. We assess EPS forecast accuracy using proportional mean absolute forecast error (*PMAFE*) and relative *Accuracy*. Higher *PMAFE* indicates worse accuracy, whereas higher *Accuracy* indicates better accuracy. Appendix B provides the detailed construction of these measures.

Control variables. Following prior research (e.g., Hirshleifer et al., 2019; Pursiainen, 2022), we control for factors that may influence analysts' reporting behavior. Specifically, we include an indicator for investment-banking relationships between the brokerage and the covered firm (*IB affiliation*); the number of analysts following the firm (*Firm coverage*); the number of firms covered by the analyst (*Analyst coverage*); the number of analysts employed

by the brokerage (*Broker size*); the number of years since the analyst first issued an EPS forecast for the firm (*Firm expertise*); and the number of years since the analyst's first observed EPS forecast (*Analyst experience*). We also control for the logarithm of the firm's stock price at the end of the previous month (*Log price*) and the monthly value-weighted return of its Fama–French 48 industry (*Industry return*). For detailed variable definitions, see Appendix A.

Table 1 reports descriptive statistics for our variables. The average recommendation is 3.655, with a median of 4, indicating a tilt toward *Buy* rather than *Sell* recommendations. The mean of *IPO underwriting* is 0.009. In our I/B/E/S sample, 2,238 of 6,870 firms experience at least one IPO by a peer firm underwritten by a brokerage whose analysts cover the focal firm, indicating that although peer IPOs are infrequent, exposure is widespread across firms. On average, each analyst covers 19 firms, and each firm is followed by 17 analysts. Analysts have an average of 13 years of experience and cover a given firm for 4.5 years. Lastly, the average brokerage in our sample employs 67 analysts, consistent with I/B/E/S's greater representation of larger brokerages.

2.4 Empirical Design

To examine whether analysts affiliated with IPO lead underwriters issue more favorable recommendations for issuer peers, we estimate the following baseline regression:

$$Recommendation_{i,j,t} = \beta_1 IPO\ underwriting_{i,j,t} + \boldsymbol{\beta}_2' \mathbf{X}_{i,j,t} + \delta_{i,t} + \mu_{j,t} + \epsilon_{i,j,t}, \qquad (1)$$

where i, j, and t index analysts, peer firms, and months. $\mathbf{X}_{i,j,t}$ denotes the vector of controls defined in Section 2.3. Our preferred specification includes analyst–month fixed effects, $\delta_{i,t}$, and firm–month fixed effects, $\mu_{j,t}$. It therefore compares analysts covering the same firm in the same month while absorbing each analyst's overall recommendation tendency that month. A common hot-IPO market or sector-sentiment shock cannot by itself generate a positive

β_1 because firm–month fixed effects absorb information and sentiment shared by analysts following the peer. Given the importance of analyst–firm matching in analyst behavior, we also report the result from an alternative specification that compares each analyst–firm pair over time using analyst–firm and month fixed effects and the full control set. Standard errors are clustered by analyst and month.

3 IPO Underwriting and Peer Recommendations

This section examines whether analysts affiliated with lead underwriters have more favorable recommendations for the IPO issuer's peer firms during the underwriting window. We first estimate the baseline PFIO relation and then trace its evolution around the listing date using an event-time specification.

3.1 Baseline Results

Table 2 reports estimates of Equation (1). Columns 1–4 use the recommendation scale, and Columns 5–8 use the *Buy* and *Sell* indicators. Odd-numbered columns include analyst–firm and month fixed effects; even-numbered columns report the preferred analyst–month and firm–month specification.

As shown in Columns 1–4, *IPO underwriting* is associated with significantly more positive stock recommendations for peer firms of the IPO issuer. The coefficients remain relatively stable across specifications. In Column 4, the coefficient of 0.0396 implies that affiliated analysts' recommendations for peer firms are, on average, 0.0396 points higher on the recommendation scale, equivalent to a 1.1% increase relative to the mean recommendation level of 3.655. This estimate is approximately 44% of the estimate for a direct investment-banking relationship in the same specification, as reflected in the coefficient on *IB affiliation* (0.0901), which has been well documented as a key driver of analyst optimism bias.

The results using *Buy* and *Sell* dummies as dependent variables remain consistent. Under

the preferred specification in Column 6, the probability that an affiliated analyst's effective recommendation is a buy rises by 2.84 percentage points when her brokerage serves as a lead underwriter for an IPO. This corresponds to a 5.5% increase relative to the unconditional probability of a buy recommendation (51.7%). Similarly, Column 8 shows that the probability of a sell recommendation falls by 1.35 percentage points, representing a 21.8% decrease. Across the three measures, PFIO is statistically significant and economically meaningful relative to the canonical direct-affiliation benchmark, consistent with a distinct underwriting-related incentive to tilt recommendations for peer firms.[7]

The coefficients on the remaining control variables align with expectations. Analysts who cover more firms, are employed at larger brokerages, or have greater general experience tend to issue less optimistic recommendations, consistent with the view that these analysts face fewer career concerns and possess greater bargaining power, thereby reducing incentives to issue biased reports. By contrast, analysts with longer firm-specific experience tend to issue more favorable recommendations, potentially reflecting closer relationships with firm management.

3.2 Recommendation Dynamics Around IPOs

We next examine whether affiliated analysts' optimism toward issuer peers is concentrated around the offering or reflects a more persistent tendency. If optimism is related to temporary incentives to market and support the IPO, it should rise as listing approaches and subside afterward.

We follow each lead-underwriter analyst's recommendations for a given issuer peer from twelve months before through twelve months after listing. Monthly event indicators activate only at or after the focal issuer's S-1 filing month. The regressions include the full controls in Section 2.3, analyst–firm fixed effects, and month fixed effects. Figure 1 therefore reports av-

[7]The coefficient on *IB affiliation* is much smaller when we instead include analyst–firm and month fixed effects because, although the annual relationship indicator can vary over time, it is largely persistent within analyst–firm pairs in our data and is therefore absorbed by the fixed effects.

erage within-pair changes in recommendation levels, with prefiling observations and months +3 through +12 serving as the reference category.

This event-time specification does not absorb the firm-wide and analyst-wide shifts captured by the preferred analyst–month and firm–month specification in Table 2. We therefore conduct two placebo tests using the same event-time specification. The first follows recommendations for the same issuer peers by analysts at brokerages that do not serve as lead underwriters for the focal IPO. The second follows the same lead-underwriter analysts' recommendations for non-peer firms around the same IPOs, testing whether optimism extends across their broader coverage.

Figure 1 shows that the coefficients for lead-underwriter analysts covering issuer peers rise from near zero in month −5 to a peak in month −2 and then decline monotonically through month +2. In contrast, neither placebo group exhibits a comparable hump; their estimates remain relatively flat and close to zero from month −5 onward.[8]

This timing is consistent with temporary incentives to support the IPO. The late prelisting rise is less consistent with brokers winning underwriting mandates because their analysts already hold more favorable views of the sector. The subsequent decline is also harder to reconcile with a sincere and lasting upward revision in beliefs about peer fundamentals. The two placebo comparisons further suggest that this temporary optimism is specific to lead-underwriter analysts' coverage of issuer peers, rather than reflecting firm-wide sentiment or optimism across their broader coverage.

4 Underwriting Incentives or Sincere Optimism?

The dynamic pattern documented in Section 3 is consistent with affiliated analysts' incentives to market and support the IPO. In this section, we provide further support for this

[8] All three groups have positive but imprecise estimates in the pooled bin for months −12 through −6. Because event indicators activate only from the filing month, this bin draws on a relatively small subset of IPOs with long filing periods. It also pools several postfiling months, with longer filing periods allowing more months to enter. Its composition therefore differs from that of bins closer to listing, limiting direct comparisons with the later profile.

interpretation through two sets of tests. We first examine how PFIO varies with underwriting responsibility and peer characteristics. We then use fundamental forecasts and their accuracy to assess whether PFIO reflects sincere optimism arising from superior information or behavioral bias.

4.1 Underwriting Responsibility and Peer Characteristics

Underwriting responsibility. To examine whether PFIO varies with underwriting responsibility, we compare lead underwriters with ordinary co-managers. Both participate in the underwriting process, but lead underwriters bear greater responsibility for pricing, distribution, and aftermarket support. This greater responsibility should give lead underwriters stronger incentives to support the offering. To compare the two underwriting roles directly, we extend the baseline specification in Table 2 by adding a separate ordinary-co-manager indicator alongside the lead-underwriter indicator. Panel A of Table 3 reports the joint estimates, with both indicators using the same peer definition and underwriting window. The lead-minus-co-manager differences ($\beta_L - \beta_C$) are 0.0271 points on the recommendation scale, 2.16 percentage points for *Buy*, and -1.54 percentage points for *Sell*. All three contrasts are statistically significant, consistent with stronger PFIO where the brokerage bears greater underwriting responsibility.[9]

Peer-firm characteristics. If affiliated analysts use peer recommendations to support the IPO, their additional optimism should vary across peers according to the potential benefits of optimistic coverage and the risk that biased recommendations are detected.

Firm size and investor attention proxy for the potential benefit of optimistic coverage. Larger firms attract more trading activity, institutional ownership, and media coverage, making analyst opinions about them more likely to reach a broad investor audience and shape market perceptions. Human downloads of a firm's EDGAR filings provide a second, direct

[9]Internet Appendix Table IA.2 groups IPOs by total proceeds, gross spread, and the number of lead underwriters. The point estimates are larger in the High groups, providing suggestive evidence of IPO-level heterogeneity.

proxy for investor attention (Drake et al., 2017). We define *Big firm* and *High profile* as indicators for firms in the top tertile of market capitalization and human EDGAR downloads, respectively. We therefore expect stronger PFIO for larger and higher-attention peers. Consistent with this prediction, Panel B of Table 3 shows that the interactions of *IPO underwriting* with *Big firm* and *High profile* are positive and statistically significant for the recommendation scale and *Buy*, and negative and statistically significant for *Sell*.

Valuation complexity can make biased recommendations harder to detect, lowering the expected cost of distortion. We therefore expect stronger PFIO for more complex peers. Greater intangible intensity makes valuation more subjective, so we measure complexity by the ratio of intangible assets to total assets, following Jiao (2024). *High complexity* identifies firms in the top tertile of this ratio. Consistent with this prediction, the *High complexity* interaction is positive and statistically significant for the recommendation scale and *Buy*, although the interaction for *Sell* is statistically insignificant.

Together, the differences across underwriting roles and peer characteristics are consistent with incentives to support the IPO. We next assess whether sincere optimism about peer fundamentals can also explain PFIO.

4.2 Tests of Sincere Optimism

An alternative explanation for PFIO is that affiliated analysts sincerely believe that peer firms have become more valuable. Such optimism may arise from favorable information about industry conditions and peer fundamentals acquired through IPO due diligence (Alhusaini et al., 2025), or from behavioral bias induced by involvement in the transaction even without superior information.

Both explanations predict more favorable near-term earnings or long-term growth forecasts, to the extent that the belief change operates through these measured inputs (Kecskes et al., 2017). At a given stock price and discount rate, a more favorable recommendation based on sincere beliefs should reflect higher expected cash flows or growth. Superior in-

formation additionally predicts greater forecast accuracy, while behaviorally induced sincere optimism has no unambiguous prediction for accuracy.

By contrast, incentives to support the IPO can generate a wedge between recommendations and fundamental forecasts. Recommendations are relatively subjective, whereas earnings and growth forecasts can be evaluated against subsequent realizations. Forecast accuracy is also an important dimension on which institutional investors assess analysts (Ljungqvist et al., 2007). An analyst seeking to support the IPO may therefore tilt a recommendation at lower reputational cost while leaving more readily verifiable fundamental forecasts unchanged.

Forecast direction. Columns 1–4 of Table 4 examine forecast direction. Columns 1–2 use proportional mean forecast bias (*PMFB*), which measures optimism in one-year-ahead EPS forecasts relative to the contemporaneous mean consensus. Columns 3–4 use the percentage-point deviation of LTG forecasts from the latest median consensus. Higher values of either measure indicate greater optimism. The PFIO coefficients are statistically insignificant across all specifications. Therefore, the more positive recommendations are not accompanied by detectably more positive stated expectations of either near-term earnings or long-term earnings growth. These results provide little support for either sincere-optimism channel and are consistent with the wedge between recommendations and fundamental forecasts implied by underwriting incentives.

Forecast accuracy. We next examine whether affiliated analysts' EPS forecasts become more accurate during underwriting. Improved accuracy would provide additional support for an informational advantage. Columns 5–8 of Table 4 use proportional mean absolute forecast error (*PMAFE*) and relative forecast accuracy (*Accuracy*), two alternative normalizations of absolute errors in one-year-ahead EPS forecasts, to test this prediction (Clement, 1999; Harford et al., 2019; Hirshleifer et al., 2019). Higher *PMAFE* indicates worse accuracy, whereas higher *Accuracy* indicates better accuracy. Appendix B provides the detailed construction of these measures. The PFIO coefficients are again statistically insignificant under both measures. We therefore find no detectable improvement in EPS forecast accuracy

during underwriting.[10]

Tables 3 and 4 show that PFIO varies with underwriting responsibility and peer characteristics, but is not accompanied by detectably more optimistic fundamental forecasts or more accurate EPS forecasts. This combination is consistent with underwriting-linked recommendation distortion rather than a broad shift in analysts' stated fundamental beliefs. However, earnings and growth forecasts do not capture all valuation inputs. We therefore examine the subsequent investment value of PFIO-affected recommendations in Section 5.2 as a complementary test of the superior-information explanation.

5 Market Responses and Investment Performance

Optimistic peer recommendations can support an IPO only if investors do not fully discount them. We therefore examine how investors respond to PFIO-affected recommendations at announcement. We then examine returns over longer investment horizons to assess the consequences of PFIO for investors who follow affected recommendations. This analysis also provides a complementary test of the superior-information explanation. Buys and upgrades are the primary tests because they directly express PFIO's favorable tilt. We also examine sells and downgrades to assess whether the same incentive to be optimistic has different implications for adverse recommendations.

5.1 Stock Recommendation Announcement Returns

We first examine whether investors discount PFIO-affected recommendations because of affiliated analysts' incentives to be optimistic. If investors recognize these incentives, they should respond less favorably to affected buys and upgrades than to otherwise similar non-PFIO

[10]The absence of an accuracy decline also provides no support for IPO-related distraction, which predicts lower forecast accuracy if underwriting work diverts analysts' attention from existing coverage. Our null differs from Pisciotta (2023), who studies analysts' full coverage portfolios. We focus on IPO peers, for which greater industry engagement during underwriting may offset distraction (Brown et al., 2015; Green et al., 2014).

recommendations. By contrast, a sell or downgrade issued despite the affiliated analyst's incentive to be positive may be perceived as unusually credible, implying a sharper negative response than for an otherwise similar non-PFIO sell or downgrade.

To test these predictions, we compute three-day cumulative DGTW-adjusted abnormal returns (CARs) over trading days -1 through $+1$ around each recommendation announcement (Daniel et al., 1997). We then compare CARs by *IPO underwriting* status, defined in Section 2.2. The results are reported in Table 5.[11] Panel A presents unconditional comparisons between PFIO-affected and non-PFIO recommendations separately for buys, sells, upgrades, and downgrades.

Panel A shows that PFIO-affected recommendations are associated with stronger market reactions across all four categories. The average three-day CAR for a buy is 1.94%, rising to 2.58% under PFIO. For sells, the average CAR declines from -3.26% to -4.36%. Upgrades and downgrades exhibit similar amplification, with PFIO-affected recommendations generating 37.9% and 62.4% larger reactions in magnitude, respectively.

These univariate differences could reflect confounding factors. Affiliated analysts are more likely to be employed by larger brokerages with greater reach, and peer firms may be larger and more visible on average. To address these concerns, Panels B and C report regressions using the same controls as Table 2. We use analyst–firm and month fixed effects as our preferred specification because recommendation announcements are sparse within analyst–month and firm–month cells. We also report the more saturated specification for comparability with the baseline analysis, although it retains much less within-cell variation.

Columns 1–2 of Panel B report results for buys and Columns 3–4 for upgrades. Across specifications, we find no detectably smaller announcement responses to PFIO-affected buys and upgrades. The coefficients on *IPO underwriting* are statistically insignificant and not consistently negative.

[11] Internet Appendix Table IA.3 reports complementary tests using TAQ-based retail and residual trading flows, with residual flows denoting activity not classified as retail. None of the PFIO coefficients is statistically significant.

Panel C presents results for sells and downgrades. For sells, the coefficients on *IPO underwriting* are negative across specifications, but are statistically significant only in the saturated specification. For downgrades, the coefficient is negative and statistically significant in the preferred specification, consistent with investors viewing a downgrade issued against the analyst's incentive to be positive as especially credible. However, it changes sign in the saturated specification. Overall, we do not find robust evidence that PFIO-affected sells and downgrades elicit more negative announcement responses than their non-PFIO counterparts.

Taken together, we find no robust evidence of weaker announcement responses to PFIO-affected buys and upgrades or more negative responses to affected sells and downgrades. The continued market influence of favorable peer recommendations may therefore sustain affiliated analysts' incentives to use optimistic peer recommendations to support the IPO. To assess the consequences for investors who follow these recommendations, we next examine their returns over longer investment horizons.

5.2 Longer-Horizon Investment Performance

We assess the consequences of PFIO for investors by comparing the longer-horizon performance of affected and non-PFIO recommendations. Lower abnormal returns following PFIO-affected buys and upgrades would indicate less investment value for investors who follow them. For sells and downgrades, more negative returns would instead support the direction of the recommendation (Pursiainen, 2022).

Following the recommendation-event approaches in Birru et al. (2024) and Cohen et al. (2010), we compare DGTW-adjusted buy-and-hold abnormal returns (BHARs) following PFIO-affected and non-PFIO recommendations over one-, three-, six-, and twelve-month horizons. To separate these returns from the immediate announcement response examined in Section 5.1, each return window begins on trading day +2. We estimate the models separately for buys, upgrades, sells, and downgrades. The regressions include the same

controls as Table 2 and analyst–firm and month fixed effects. Standard errors are clustered by analyst and recommendation-announcement date. Figure 2 plots the estimated coefficients on *IPO underwriting*. Internet Appendix Table IA.4 reports the exact BHAR estimates for every recommendation type and horizon.[12]

Panels (a) and (b) of Figure 2 show that PFIO-affected buys and upgrades underperform their non-PFIO counterparts over longer investment horizons. Although the one-month BHAR following a PFIO-affected buy is 32 basis points higher than that following a non-PFIO buy, the difference is statistically insignificant. The estimate turns negative by month three and becomes increasingly negative over longer horizons. At twelve months, the BHAR is 3.02 percentage points lower. The upgrade estimates are negative from the first month and become increasingly negative over longer horizons. The BHAR is 3.35 percentage points lower at six months and 4.55 percentage points lower at twelve months, providing suggestive evidence of lower investment value for investors who follow PFIO-affected buys and upgrades.

Panels (c) and (d) report the results for sells and downgrades. The sell estimates are negative at one and three months but turn positive at six and twelve months; none is statistically significant. The downgrade estimates are negative at every horizon and become more negative over time, but they are also statistically insignificant. We therefore find no statistically significant evidence that PFIO-affected sells and downgrades provide more useful warnings about subsequent performance than their non-PFIO counterparts.

The return evidence also helps assess whether PFIO reflects superior information. The forecast tests in Section 4.2 cover earnings and growth, leaving open the possibility that affiliated analysts possess favorable information about other valuation inputs. Subsequent investment performance provides a broader test of whether their more favorable recommendations reflect such information. The lower subsequent returns following PFIO-affected buys and upgrades therefore make superior information a less persuasive explanation for the additional recommendation optimism.

[12]Untabulated analyses using cumulative DGTW-adjusted abnormal returns yield qualitatively similar conclusions. We focus on BHAR because it compounds returns over the investment horizon.

6 Regulatory Reach and Robustness

Having examined the incentives behind PFIO and its consequences for investors, we turn to its regulatory implications and the robustness of our findings. Section 6.1 examines whether safeguards associated with the Global Analyst Research Settlement extend to this indirect form of bias. Section 6.2 assesses whether the documented optimism depends on how analyst output is measured, whether recommendations are carried forward, and how underwriting windows and peer groups are defined.

6.1 The Global Settlement and PFIO

The 2003 Global Analyst Research Settlement responded to conflicts arising when analysts cover firms with which their brokerages have direct investment-banking relationships. Corwin et al. (2017) find that direct-affiliation bias was substantially attenuated at sanctioned banks but persisted at other banks. The implications for PFIO depend on the reach of these safeguards. Brokerage-wide monitoring and a stronger culture of research independence predict weaker PFIO at sanctioned banks. If the relevant restrictions and monitoring remain centered on direct brokerage–firm investment-banking relationships, however, coverage of formally unaffiliated peer firms may lie outside that perimeter, predicting little difference. Sanctioned banks could also substitute toward this less observable channel, predicting stronger PFIO.

To examine these possibilities, Table 6 interacts *Sanctioned* with both *IPO underwriting* and *IB affiliation*. *Sanctioned* equals one if the analyst's brokerage is classified as a sanctioned bank, and zero otherwise. The first interaction tests whether PFIO differs between sanctioned and nonsanctioned brokerages. The second provides a same-sample benchmark based on the direct bank–firm relationship that the reforms were designed to constrain. Columns 1 and 3 include analyst–firm and month fixed effects, whereas Columns 2 and 4 include analyst–month and firm–month fixed effects.

Across all four specifications, the coefficient on *IPO underwriting* is positive and statistically significant, whereas its interaction with *Sanctioned* is statistically insignificant. We therefore find no detectable difference in PFIO between the two groups.

In contrast, the direct-affiliation benchmark is smaller among sanctioned brokerages. In the preferred specification, the interaction between *IB affiliation* and *Sanctioned* is negative and statistically significant. The implied association at sanctioned brokerages remains positive but is about 42% smaller than at nonsanctioned brokerages. This attenuation is consistent with the cross-sectional pattern documented by Corwin et al. (2017).[13]

Taken together, the sanctioned group exhibits a smaller direct-affiliation association but no detectable reduction in PFIO. This contrast is consistent with rules centered on direct brokerage–firm investment-banking relationships having less reach over recommendations for economically connected firms that lack a direct relationship with the brokerage.

6.2 Measurement and Sample Robustness

We confirm that our results remain robust when we use normalized target prices, newly issued recommendations, a shorter underwriting window, or narrower TNIC peer sets.[14]

Alternative analyst output. Analyst recommendations are coarse and partly analyst-specific. Identical ratings from different analysts may imply different levels of expected price appreciation. Target prices provide a continuous statement of analysts' valuation views. Following Bradshaw et al. (2019), we therefore replace recommendations with the latest valid target price outstanding at month-end, scaled by the CRSP stock price at the end of the preceding month. Appendix A provides the detailed construction.

Panel A of Table 7 reports the results. The coefficient on *IPO underwriting* is positive and statistically significant under both specifications. In the preferred specification, the increase in the target-price-to-price ratio is about 3.8% of average implied price appreciation. Thus,

[13]The same contrast holds using normalized target prices (Internet Appendix Table IA.5).

[14]The preferred estimates remain similar when month +1 is excluded from the PFIO window, indicating that the findings do not depend on including the post-listing month (Internet Appendix Table IA.6).

normalized target prices are also higher for affiliated analysts covering peer firms during the underwriting window, indicating that PFIO is not confined to categorical recommendations. The peer-targeting pattern also holds for target prices, with stronger PFIO among larger, more visible, and more complex peer firms (Internet Appendix Table IA.7).

Newly issued recommendations. Because the monthly panel retains effective recommendations, some of the measured PFIO could reflect ratings carried forward from earlier reports rather than recommendations issued during the underwriting period. Panel B of Table 7 examines newly issued recommendations with an observed prior rating. Because newly issued recommendations are infrequent, we extend the underwriting window from the S-1 filing month through listing month +1 to include more reports issued during the underwriting process. We use analyst–firm and month fixed effects to absorb persistent analyst–firm-specific recommendation tendencies, as newly issued recommendations are sparse within analyst–month and firm–month cells.[15] Affiliated analysts issue more favorable recommendations during underwriting, with a higher probability of *Buy* and a lower probability of *Sell*. All three coefficients are statistically significant. Thus, the favorable recommendation pattern also appears in newly issued reports and is not confined to carried-forward ratings.

Alternative top-n TNIC peer definitions. To assess whether our findings depend on the number of peers included, we retain the TNIC similarity ranking and use narrower peer sets. Panel C of Table 7 reports the preferred specifications using the top 10 and top 5 peers by TNIC similarity score, while Internet Appendix Table IA.9 reports the full fixed-effect grids. Across the recommendation, *Buy*, and *Sell* outcomes, the coefficients retain their baseline signs, remain statistically significant, and increase in absolute magnitude as the peer set narrows. The baseline finding is therefore robust to narrower peer definitions, and the pattern is consistent with stronger PFIO among closer product-market peers.

[15]The same directional pattern holds with separate analyst, firm, and month fixed effects (Internet Appendix Table IA.8).

7 Conclusion

This paper documents *Peer-firm IPO Optimism* (PFIO), in which analysts' recommendations for an IPO issuer's product-market peers become more favorable while their brokerage serves as a lead underwriter. PFIO is about 44% as large as the direct-affiliation bias in the same specification. Underwriting incentives originating with one firm can therefore shape research on its product-market peers.

The additional optimism is both temporary and selective. Affiliated analysts' optimism toward issuer peers rises before listing and subsides afterward, a pattern absent from both placebo comparisons. The increase in peer optimism is larger for lead-underwriter analysts than for analysts at ordinary co-managers. Across peers, PFIO is stronger among larger, higher-attention, and more complex firms, consistent with greater promotional benefits or lower detection risk. Yet this additional recommendation optimism is not accompanied by detectably more optimistic EPS or long-term growth forecasts. This wedge is consistent with analysts tilting less verifiable recommendations to support the IPO while preserving the credibility of their fundamental forecasts.

PFIO-affected buys and upgrades receive no detectably smaller announcement responses than their non-PFIO counterparts, yet underperform them over longer investment horizons. At 12 months, their buy-and-hold abnormal returns are 3.02 and 4.55 percentage points lower, respectively. These lower returns suggest less investment value for investors who follow the recommendations. Their continued market influence may nevertheless sustain affiliated analysts' incentives to use optimistic peer research to support the IPO. Their subsequent underperformance also makes superior information a less persuasive explanation for the additional recommendation optimism.

These findings also have implications for regulatory design. The direct-affiliation association is smaller among brokerages sanctioned under the Global Analyst Research Settlement, whereas PFIO does not differ detectably between sanctioned and nonsanctioned brokerages.

This contrast is consistent with safeguards centered on direct brokerage–firm investment-banking relationships having limited reach over this indirect form of bias. Disclosure and internal compliance monitoring may therefore need to consider both a brokerage's relationship with the covered firm and its contemporaneous underwriting relationships with that firm's product-market peers.

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Figure 1: **Recommendation Dynamics Around IPO Listings**
This figure plots coefficients from regressions of effective month-end recommendations on jointly included indicators for months relative to IPO listing. Recommendations range from 1 (*Strong Sell*) to 5 (*Strong Buy*). The regressions are estimated separately for lead-underwriter analysts covering the issuer's TNIC product-market peers (solid red), analysts at non-lead brokerages covering the same peers (dashed dark blue), and the same lead-underwriter analysts covering non-peer firms (dotted black). Each sample spans twelve months before through twelve months after listing, with month 0 denoting the listing month. One indicator pools months −12 through −6, while separate indicators represent months −5 through +2. Each indicator equals one only for observations in its corresponding month or bin at or after the issuer's S-1 filing month. Prefiling observations and months +3 through +12 form the omitted reference category. All regressions include the controls listed in Table 2, analyst–firm fixed effects, and month fixed effects. Error bars indicate 95% confidence intervals based on standard errors clustered by analyst and month. The sample period is 2003–2023.

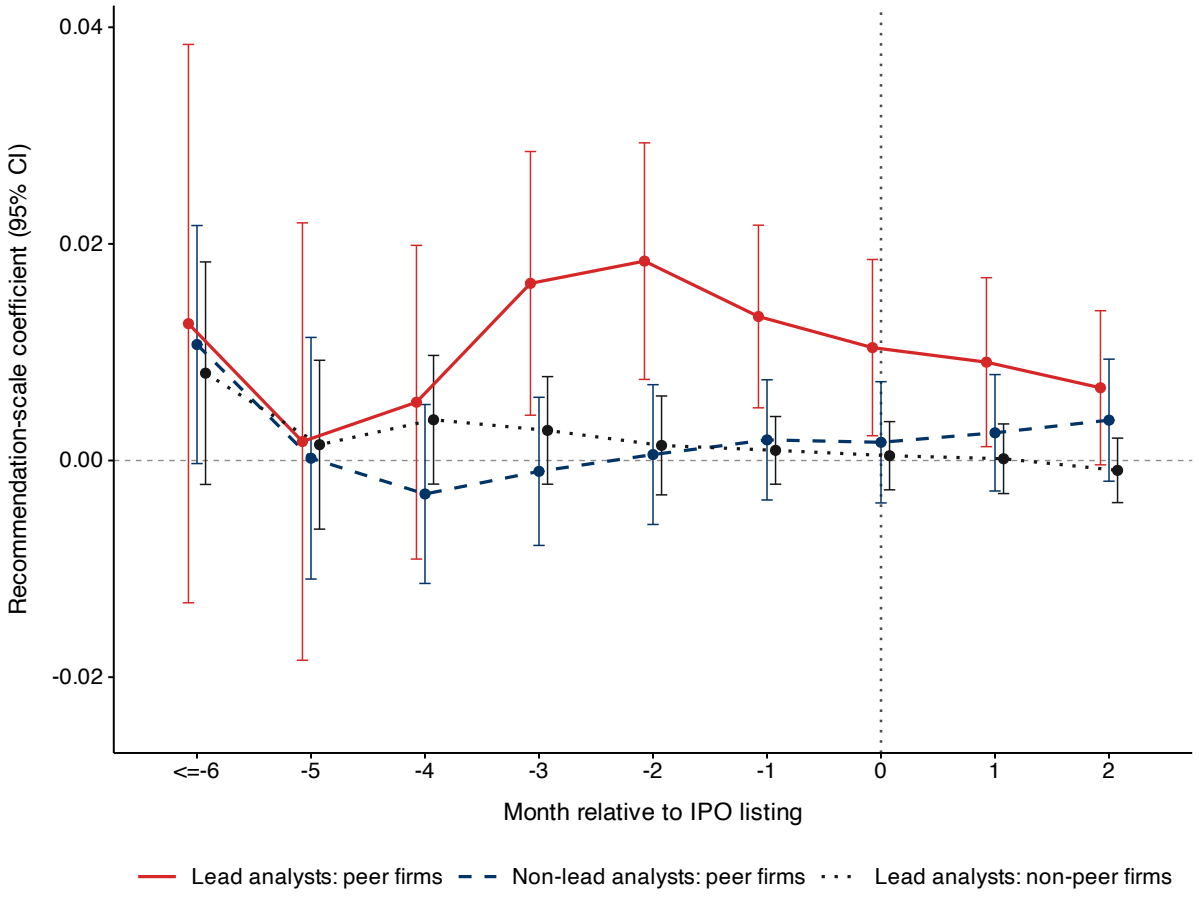


Figure 2: **Post-Announcement BHARs for PFIO-Affected Recommendations**
This figure plots coefficients on *IPO underwriting* and 90% confidence intervals from regressions of DGTW-adjusted buy-and-hold abnormal returns (BHARs) in decimal units over one-, three-, six-, and twelve-month horizons. Panels (a)–(d) report buy, upgrade, sell, and downgrade recommendations. Buys and sells have recommendation levels 4–5 and 1–2, respectively; upgrades and downgrades are increases and decreases from the same analyst's prior recommendation for the firm. *IPO underwriting* equals one for recommendations on an issuer's TNIC peers by its lead-underwriter analysts during months −2 through +1 relative to listing, and zero otherwise. Each coefficient comes from a separate regression for the indicated category and horizon and measures the conditional BHAR difference between recommendations with and without IPO underwriting exposure. Return windows begin on trading day +2 after the recommendation announcement and end on day 21, 63, 126, or 252. Models include the Table 2 controls and analyst–firm and month fixed effects. Standard errors are clustered by analyst and date. Internet Appendix Table IA.4 reports the estimates. The sample period is 2003–2023.

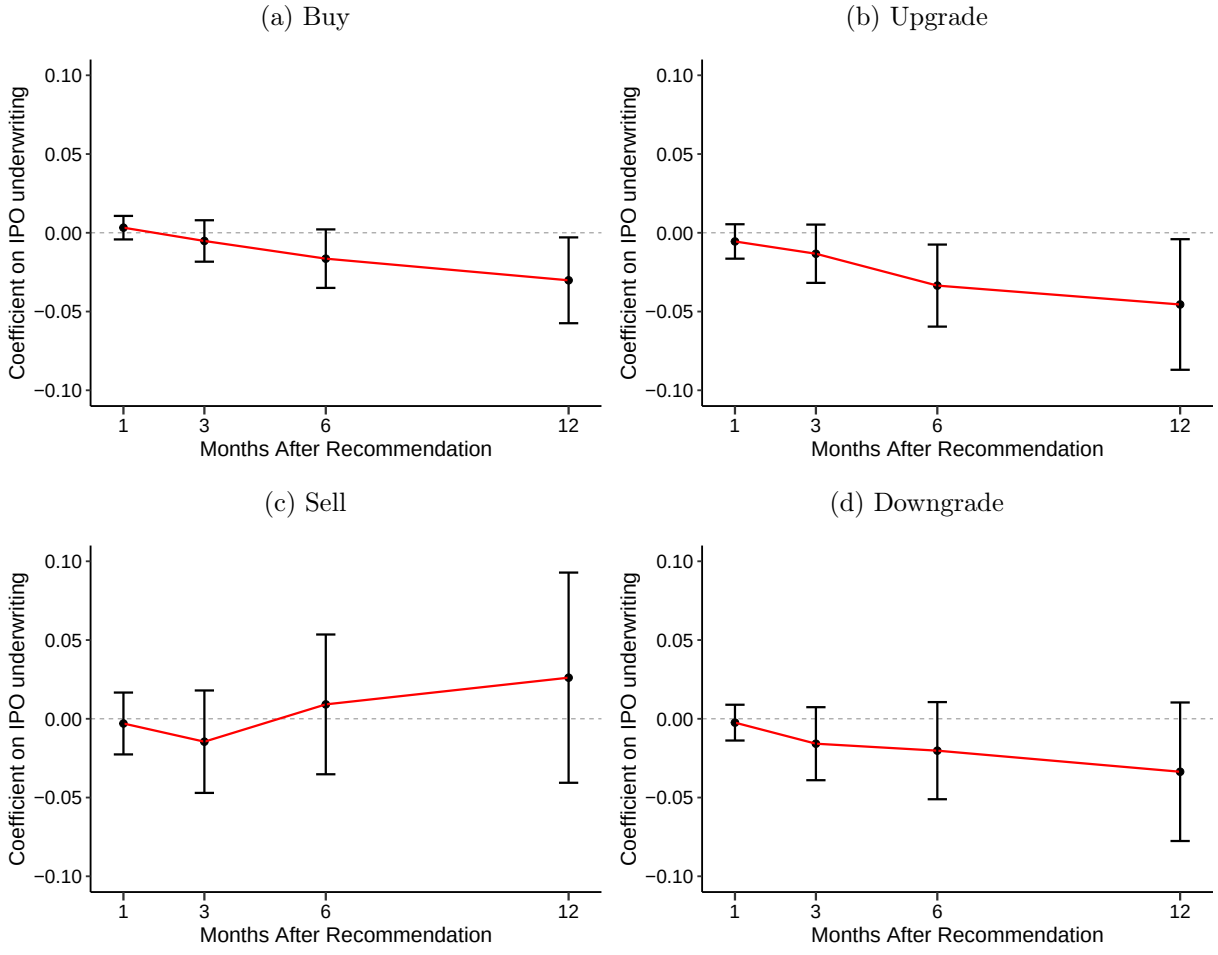


Table 1: **Summary Statistics**
This table summarizes variables in the 2003–2023 monthly analyst-output panel. Appendix A provides variable definitions.

Variable	Mean	St. Dev.	Min	p25	p50	p75	Max
Recommendations							
Recommendation	3.655	0.907	1.000	3.000	4.000	4.000	5.000
Buy recommendation	0.517	0.500	0.000	0.000	1.000	1.000	1.000
Sell recommendation	0.062	0.242	0.000	0.000	0.000	0.000	1.000
Broker relationship							
IPO underwriting	0.009	0.095	0.000	0.000	0.000	0.000	1.000
IB affiliation	0.081	0.273	0.000	0.000	0.000	0.000	1.000
Controls							
Analyst coverage	18.854	15.501	1.000	13.000	18.000	23.000	487.000
Firm coverage	17.312	10.402	3.000	9.000	16.000	24.000	66.000
Analyst experience	13.004	9.707	0.000	5.000	11.000	20.000	41.000
Firm expertise	4.517	5.009	0.000	1.000	3.000	6.000	41.000
Broker size	66.914	61.604	1.000	21.000	46.000	105.000	300.000
Log price	3.398	1.038	0.684	2.766	3.453	4.058	6.018
Industry return	1.019	5.609	−15.280	−2.200	1.260	4.430	15.870
Other Analyst Outputs							
Normalized target price	1.202	0.256	0.769	1.050	1.156	1.289	2.351
PMFB	0.020	1.687	−8.176	−0.554	0.133	0.812	6.500
PMAFE	−0.089	0.566	−1.000	−0.450	−0.102	0.138	2.244
Accuracy	−0.014	0.876	−2.742	−0.403	0.000	0.486	2.024
LTG consensus deviation	−0.842	9.947	−53.700	−3.700	−0.200	2.000	64.390

Table 2: **IPO Underwriting and Peer-Firm Recommendations**

This table reports estimates of Equation (1). The outcomes are the recommendation scale, ranging from 1 (*Strong Sell*) to 5 (*Strong Buy*), and two indicator variables. *Buy* equals one if the effective month-end recommendation is *Buy* or *Strong Buy* (4 or 5), and zero otherwise. *Sell* equals one if it is *Sell* or *Strong Sell* (1 or 2), and zero otherwise. *IPO underwriting* equals one when analyst i covers a TNIC peer j of an IPO issuer, the analyst's brokerage is a lead underwriter, and month t is in the $[-2, +1]$ listing-relative window. Columns 1–2 omit controls; Columns 3–8 include the applicable controls listed below. Odd-numbered columns include analyst–firm and month fixed effects; even-numbered columns include analyst–month and firm–month fixed effects. Controls are *IB affiliation*, log firm coverage, scaled analyst coverage, scaled broker size, scaled firm expertise, scaled analyst experience, log lagged price, and the Fama–French 48 industry value-weighted return; variables absorbed by firm–month fixed effects are omitted. Standard errors are clustered by analyst and month, with t-statistics in parentheses. The sample period is 2003–2023. Appendix A provides variable definitions. Significance levels: *0.10, **0.05, ***0.01.

Dependent Vars:	Peer recommendation				Peer buy rec.		Peer sell rec.	
Model:	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Variables								
IPO underwriting	0.0387***	0.0390***	0.0248***	0.0396***	0.0182***	0.0284***	−0.0062***	−0.0135***
	(5.4349)	(4.1000)	(3.5266)	(4.0467)	(4.4685)	(4.8231)	(−3.1406)	(−3.8906)
IB affiliation			0.0036	0.0901***	0.0139**	0.0547***	−0.0055*	−0.0278***
			(0.3321)	(12.4679)	(2.4450)	(12.8869)	(−1.7634)	(−11.5472)
Firm coverage			0.0154*		0.0157***		0.0026	
			(1.7250)		(3.3206)		(1.2088)	
Analyst coverage			−0.0028	−0.0485***	0.0009	−0.0236***	−0.0018	0.0122***
			(−0.3263)	(−3.1069)	(0.2221)	(−2.6277)	(−0.8870)	(2.8787)
Broker size			0.0210	−0.1023***	−0.0085	−0.0700***	0.0139***	0.0277***
			(1.3050)	(−6.9492)	(−1.2738)	(−8.2167)	(3.2873)	(7.3760)
Firm expertise			−0.0727***	0.0468***	−0.0398***	0.0307***	0.0140***	−0.0021
			(−5.8880)	(7.1138)	(−6.2966)	(8.0959)	(4.8946)	(−1.2629)
Analyst experience			0.0019	−0.0854***	0.0056	−0.0568***	0.0066	0.0152**
			(0.0923)	(−3.8787)	(0.5442)	(−4.5040)	(1.3584)	(2.4604)
Log price			0.1953***		0.1101***		−0.0341***	
			(33.2267)		(38.4487)		(−21.6840)	
Industry return			0.0003		0.0002		−0.0000	
			(1.0436)		(1.4146)		(−0.4814)	
Fixed effects								
Analyst–Firm	Yes	No	Yes	No	Yes	No	Yes	No
Month	Yes	No	Yes	No	Yes	No	Yes	No
Analyst–Month	No	Yes	No	Yes	No	Yes	No	Yes
Firm–Month	No	Yes	No	Yes	No	Yes	No	Yes
Fit statistics								
R^2	0.5456	0.4656	0.5521	0.4651	0.5146	0.4075	0.4843	0.3572
Observations	5,701,934	5,548,006	5,607,310	5,458,227	5,607,310	5,458,227	5,607,310	5,458,227

Table 3: **Heterogeneity in PFIO: Underwriting Roles and Peer-Firm Characteristics**
This table examines PFIO heterogeneity by underwriting role and peer-firm characteristics. The dependent variables are the recommendation scale, *Buy*, and *Sell*, as in Table 2. Panel A jointly includes lead-underwriter and ordinary-co-manager indicators, with coefficients β_L and β_C. The lead indicator is *IPO underwriting*; the co-manager indicator applies the same peer definition and window to SDC role `CO MANAGER`. The t-statistic for $H_0 : \beta_L = \beta_C$ is reported. Panel B reports interactions of *IPO underwriting* with peer characteristics, estimated separately for each outcome and characteristic. *Big firm*, *High profile*, and *High complexity* indicate top-tertile classifications in the latest year based on market capitalization, human EDGAR downloads, and intangible assets divided by total assets, respectively. All models use the preferred Table 2 controls and analyst–month and firm–month fixed effects. Standard errors are clustered by analyst and month, with t-statistics in parentheses. The sample period is 2003–2023; the EDGAR analysis ends in 2017. Significance levels: *0.10, **0.05, ***0.01.

Panel A: Underwriting responsibility			
Dependent variable	Recommendation	Buy	Sell
Lead underwriter ($\widehat{\beta}_L$)	0.0413***	0.0293***	−0.0132***
	(4.1999)	(4.9661)	(−3.8204)
Co-manager ($\widehat{\beta}_C$)	0.0142	0.0076	0.0023
	(1.5358)	(1.4618)	(0.9660)
$\widehat{\beta}_L - \widehat{\beta}_C$	0.0271**	0.0216***	−0.0154***
t-statistic for $H_0 : \beta_L = \beta_C$	(2.1028)	(2.8414)	(−3.7481)
Observations	5,458,227	5,458,227	5,458,227
Panel B: Peer-firm characteristics			
Dependent variable	Recommendation	Buy	Sell
B1. Firm size			
IPO underwriting × Big firm	0.0723***	0.0400***	−0.0281***
	(3.5823)	(3.2645)	(−4.4541)
Observations	5,195,513	5,195,513	5,195,513
B2. Investor attention			
IPO underwriting × High profile	0.0565**	0.0329**	−0.0183**
	(2.4431)	(2.2781)	(−2.4121)
Observations	3,353,158	3,353,158	3,353,158
B3. Valuation complexity			
IPO underwriting × High complexity	0.0323*	0.0297**	0.0029
	(1.7121)	(2.5939)	(0.4550)
Observations	4,681,402	4,681,402	4,681,402
Controls	Yes	Yes	Yes
Fixed effects			
Analyst–Month	Yes	Yes	Yes
Firm–Month	Yes	Yes	Yes

Table 4: **PFIO, Forecast Optimism, and Forecast Accuracy**
This table examines whether IPO underwriting is associated with the optimism and accuracy of analysts' fundamental forecasts for peer firms. The main independent variable is *IPO underwriting*, defined as in Table 2. Columns 1–4 measure forecast optimism using proportional mean forecast bias (*PMFB*) for one-year-ahead EPS forecasts and *LTG consensus deviation*, the percentage-point difference between an analyst's long-term EPS growth forecast and the latest median consensus. Higher values of both measures indicate greater optimism. Columns 5–8 use proportional mean absolute forecast error (*PMAFE*) and relative forecast accuracy (*Accuracy*) for one-year-ahead EPS forecasts. Higher *PMAFE* indicates worse accuracy, whereas higher *Accuracy* indicates better accuracy. Models use the applicable controls from Table 2. Odd-numbered columns include analyst–firm and month fixed effects, while even-numbered columns include analyst–month and firm–month fixed effects. Standard errors are clustered by analyst and month, with t-statistics in parentheses. The sample period is 2003–2023. Appendix B provides the detailed forecast-measure construction. Significance levels: *0.10, **0.05, ***0.01.

	Forecast direction				Forecast accuracy			
Underlying forecast:	One-year EPS		Long-term growth		One-year EPS		One-year EPS	
Dependent variable:	*PMFB*		*LTG consensus deviation*		*PMAFE*		*Accuracy*	
Model:	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Variables								
IPO underwriting	−0.0254	0.0020	−0.1278	0.1344	0.0073	0.0088	−0.0108	−0.0168
	(−1.2779)	(0.1198)	(−0.6191)	(0.5456)	(1.2671)	(0.8394)	(−1.2086)	(−0.9749)
Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Fixed effects								
Analyst–Firm	Yes	No	Yes	No	Yes	No	Yes	No
Month	Yes	No	Yes	No	Yes	No	Yes	No
Analyst–Month	No	Yes	No	Yes	No	Yes	No	Yes
Firm–Month	No	Yes	No	Yes	No	Yes	No	Yes
Fit statistics								
R^2	0.2746	0.6561	0.6027	0.6366	0.2337	0.4080	0.2104	0.4037
Observations	2,214,051	1,949,579	948,718	730,517	2,685,365	2,431,087	2,669,134	2,420,803

Table 5: **Market Reactions to PFIO-Affected Recommendations**
This table compares market reactions to PFIO-affected and non-PFIO recommendations. *IPO underwriting* equals one for recommendations on an issuer's TNIC peers by its lead-underwriter analysts during months −2 through +1 relative to listing, and zero otherwise. PFIO-affected recommendations have *IPO underwriting* equal to one; non-PFIO recommendations have it equal to zero. Buys and sells have recommendation levels 4–5 and 1–2, respectively; upgrades and downgrades are increases and decreases from the same analyst's prior recommendation for the firm. The outcome is the three-day DGTW-adjusted cumulative abnormal return (CAR), in decimal units, over trading days −1 through +1 around the recommendation announcement. Panel A reports unconditional mean CARs for the two groups and their differences (PFIO-affected minus non-PFIO), separately for buys, upgrades, sells, and downgrades. The group-mean t-statistics use standard errors clustered by announcement date; the difference uses a Welch unequal-variance t-test. Panels B and C report CAR regressions for buys and upgrades and for sells and downgrades, respectively. The coefficient on *IPO underwriting* measures the conditional CAR difference between the two groups. Columns 1 and 3 include analyst–firm and month fixed effects. Columns 2 and 4 include analyst–month and firm–month fixed effects. Regressions use the Table 2 controls. Standard errors are clustered by analyst and date with t-statistics in parentheses. The sample period is 2003–2023. Significance levels: *0.10, **0.05, ***0.01.

Panel A: Unconditional three-day CARs

	Buy	Upgrade	Sell	Downgrade
IPO underwriting = 1	0.0258***	0.0411***	−0.0436***	−0.0531***
	(10.0857)	(9.6179)	(−7.4621)	(−10.1116)
IPO underwriting = 0	0.0194***	0.0298***	−0.0326***	−0.0327***
	(62.5871)	(67.4767)	(−37.2649)	(−44.3992)
Difference	0.0064***	0.0114***	−0.0109**	−0.0204***
	(2.6693)	(2.7420)	(−1.9933)	(−4.1597)

Table 5: **Market Reactions to PFIO-Affected Recommendations (continued)**

Panel B: Regression estimates for buys and upgrades				
	Buy		Upgrade	
Model	(1)	(2)	(3)	(4)
IPO underwriting	0.0016	0.0015	0.0067	−0.0096
	(0.5135)	(0.1700)	(1.1271)	(−0.6053)
Controls	Yes	Yes	Yes	Yes
Fixed effects				
Analyst–Firm	Yes	No	Yes	No
Month	Yes	No	Yes	No
Analyst–Month	No	Yes	No	Yes
Firm–Month	No	Yes	No	Yes
R^2	0.3780	0.7283	0.4086	0.6692
Observations	95,683	8,781	51,960	2,389
Panel C: Regression estimates for sells and downgrades				
	Sell		Downgrade	
Model	(1)	(2)	(3)	(4)
IPO underwriting	−0.0077	−0.0987***	−0.0158***	0.0204
	(−1.1774)	(−3.8107)	(−2.5903)	(0.5394)
Controls	Yes	Yes	Yes	Yes
Fixed effects				
Analyst–Firm	Yes	No	Yes	No
Month	Yes	No	Yes	No
Analyst–Month	No	Yes	No	Yes
Firm–Month	No	Yes	No	Yes
R^2	0.3402	0.6455	0.4168	0.7625
Observations	15,148	1,107	58,885	3,680

Table 6: **PFIO at Sanctioned and Nonsanctioned Brokerages**
This table reports regressions of effective month-end recommendations, ranging from 1 (*Strong Sell*) to 5 (*Strong Buy*). The regressions jointly include *IPO underwriting*, *IB affiliation*, *Sanctioned*, and interactions of *Sanctioned* with each exposure indicator. *IPO underwriting* equals one when a lead-underwriter analyst covers an issuer's TNIC peer during months −2 through +1 relative to listing, and zero otherwise. *IB affiliation* identifies direct bank–firm transactions during years t through $t-5$. *Sanctioned* equals one for brokerages affiliated with banks sanctioned under the Global Analyst Research Settlement, and zero otherwise. The coefficients on the exposure indicators measure associations at nonsanctioned brokerages; their interactions with *Sanctioned* measure the differences for sanctioned brokerages. Columns 1 and 3 include analyst–firm and month fixed effects; Columns 2 and 4 include analyst–month and firm–month fixed effects. Columns 3 and 4 add the applicable Table 2 controls. Standard errors are clustered by analyst and month, with t-statistics in parentheses. The sample period is 2003–2023. Appendix A provides variable definitions. Significance levels: *0.10, **0.05, ***0.01.

Dependent Variable:	Peer recommendation			
Model:	(1)	(2)	(3)	(4)
Variables				
IPO underwriting	0.0439***	0.0318**	0.0253**	0.0331**
	(3.5554)	(2.0998)	(2.0569)	(2.1530)
IPO underwriting × Sanctioned	−0.0007	0.0103	0.0059	0.0100
	(−0.0508)	(0.5401)	(0.4037)	(0.5104)
IB affiliation	0.0322**	0.1193***	0.0322**	0.1198***
	(2.0751)	(10.3726)	(2.1146)	(10.2695)
IB affiliation × Sanctioned	−0.0214	−0.0485***	−0.0233	−0.0503***
	(−0.9929)	(−3.3549)	(−1.0989)	(−3.4387)
Sanctioned	−0.1596***	−0.2434***	−0.1857***	−0.2262***
	(−7.7141)	(−4.7729)	(−8.9963)	(−4.3661)
Controls	No	No	Yes	Yes
Fixed effects				
Analyst–Firm	Yes	No	Yes	No
Month	Yes	No	Yes	No
Analyst–Month	No	Yes	No	Yes
Firm–Month	No	Yes	No	Yes
Fit statistics				
R^2	0.5461	0.4661	0.5527	0.4651
Observations	5,701,934	5,548,006	5,607,310	5,457,585

Table 7: **Alternative PFIO Outcomes, Samples, and Peer Definitions**
This table reports coefficients on *IPO underwriting* from separate regressions. *IPO underwriting* equals one when a lead-underwriter analyst covers an issuer's TNIC peer during months −2 through +1 relative to listing, and zero otherwise. Panel A replaces recommendations with normalized target price, the month-end target price divided by the preceding month-end stock price, and reports both baseline fixed-effect specifications. Appendix A provides the detailed construction and sample restrictions. Panel B restricts the sample to newly issued recommendations with an observed prior rating and defines *IPO underwriting* from the S-1 filing month through listing month +1; these regressions include analyst–firm and month fixed effects. Panel C reports the preferred analyst–month and firm–month specification using the issuer's top 10 and top 5 TNIC peers, ranked by product-market similarity. Each cell reports the coefficient for the indicated peer set and outcome. All models include the applicable Table 2 controls. Standard errors are clustered by analyst and month, with t-statistics in parentheses. Internet Appendix Tables IA.8 and IA.9 report additional estimates. The sample period is 2003–2023. Significance levels: *0.10, **0.05, ***0.01.

Panel A: Alternative analyst output		
Dependent variable	Normalized target price	
IPO underwriting	0.0049**	0.0076***
	(2.2414)	(3.8321)
Controls	Yes	Yes
Fixed effects	Analyst–Firm and Month	Analyst–Month and Firm–Month
Observations	4,131,384	3,937,101

Panel B: Newly issued recommendations			
Dependent variable	Recommendation	Buy	Sell
IPO underwriting	0.0328*	0.0194*	−0.0143**
	(1.6689)	(1.7439)	(−2.2856)
Controls	Yes	Yes	Yes
Fixed effects	Analyst–Firm and Month		
Observations	224,754	224,754	224,754

Panel C: Alternative TNIC peer definitions			
Peer set	Recommendation	Buy	Sell
Top 5 peers	0.0649***	0.0441***	−0.0197***
	(4.4936)	(5.0561)	(−4.1329)
Observations	5,425,473	5,425,473	5,425,473
Top 10 peers	0.0488***	0.0313***	−0.0186***
	(4.4320)	(4.6869)	(−4.7711)
Observations	5,441,805	5,441,805	5,441,805
Controls	Yes	Yes	Yes
Fixed effects	Analyst–Month and Firm–Month		

Appendix A Variable Definitions

Variables	**Definition**
Accuracy	Relative accuracy of one-year-ahead EPS forecasts, benchmarked against the firm-level median absolute forecast error. Higher values indicate better relative accuracy. See Appendix B for exact construction.
Analyst coverage	The number of distinct firms for which analyst i issues an EPS forecast during the calendar year. For analyst i following firm j in year y, the regression measure equals this count minus the minimum coverage count among analysts following the same firm in that year, with the difference divided by the range of coverage counts among those analysts.
Analyst experience	The number of calendar years since analyst i's first observed EPS forecast for any firm. For analyst i following firm j in year y, the regression measure equals this experience minus the minimum general experience among analysts following the same firm in that year, with the difference divided by the range of general experience among those analysts.
BHAR	The stock's buy-and-hold return minus the DGTW benchmark portfolio's buy-and-hold return over a specified post-announcement horizon.
Big firm	A dummy variable equal to one if the firm's preceding available annual market-capitalization classification falls within the top tertile, and zero otherwise.
Broker size	The number of distinct analysts associated with the brokerage who issue EPS forecasts during the calendar year. For analyst i following firm j in year y, the regression measure equals this count for analyst i's brokerage minus the minimum brokerage size among analysts following the same firm in that year, with the difference divided by the range of brokerage sizes among those analysts.
Buy recommendation	A dummy variable equal to one if the recommendation is 4 (*Buy*) or 5 (*Strong Buy*).
CAR	The cumulative DGTW-adjusted abnormal return for firm j over a specified announcement or post-announcement window associated with analyst i's recommendation at time t.
Downgrade	A dummy variable equal to one when an announced recommendation is less favorable than the same analyst's prior recommendation for the firm.
Firm coverage	The number of distinct analysts issuing EPS forecasts for firm j during the calendar year.
Firm expertise	The number of calendar years since analyst i's first observed EPS forecast for firm j. For analyst i following firm j in year y, the regression measure equals this experience minus the minimum firm-specific experience among analysts following the same firm in that year, with the difference divided by the range of firm-specific experience among those analysts.

Appendix A. Variable Definitions (continued)

Variables	Definition
High and Low (IPO characteristics)	Indicators for the higher- and lower-value groups of IPOs, defined separately by total proceeds, gross spread, and the number of lead underwriters. See Internet Appendix Tables IA.7 and IA.2 for the respective cutoffs.
High complexity	A dummy variable equal to one if the firm's preceding available annual classification based on intangible assets divided by total assets falls within the top tertile, and zero otherwise.
High profile	A dummy variable equal to one if the firm's preceding available annual classification based on human downloads of its EDGAR filings falls within the top tertile, and zero otherwise.
IB affiliation	A dummy variable equal to one if the brokerage serves as a lead or co-lead underwriter on the firm's debt or equity issuance, a financial advisor on its M&A transaction, or a qualifying arranger or bookrunner on its syndicated loan in observation year t or years $t-1$ through $t-5$.
Industry return	The monthly value-weighted return, in percentage points, for firm j's Fama–French 48 industry.
IPO underwriting	A dummy variable equal to one if a peer j of the IPO issuer is covered by analyst i and the affiliated brokerage serves as a lead underwriter for the IPO during the underwriting window, which spans from two months before to one month after the month containing the IPO's listing date. Included SDC lead-role categories are Global Coordinator, Book Runner, Joint Book Runner, Joint Lead Manager, Co Lead Manager, and Lead Placement Agent. Ordinary co-managers are excluded from this baseline indicator.
Log price	The logarithm of firm j's CRSP month-end stock price from the preceding month.
LTG consensus deviation	Percentage-point difference between analyst i's long-term growth forecast for firm j and the latest median consensus. Higher values indicate greater optimism.
Normalized target price	Latest target outstanding at month-end, no more than 180 days after announcement and no later than withdrawal, converted to U.S. dollars and adjusted for stock splits, divided by the split-adjusted CRSP stock price at the end of the preceding month. The sample requires a valid CRSP link, an observation-month stock price above \$1, and at least three one-year-ahead EPS forecasters for the firm-year. Ratios below 0.70 or above 4.00 are set to missing; the remaining values are winsorized at the 1st and 99th percentiles.
PMAFE	Proportional mean absolute forecast error for one-year-ahead EPS, benchmarked against the firm-level mean absolute forecast error. Higher values indicate worse relative accuracy. See Appendix B for exact construction.

Appendix A. Variable Definitions (continued)

Variables	Definition
PMFB	Proportional mean forecast bias for one-year-ahead EPS relative to the contemporaneous consensus. Higher values indicate greater optimism relative to consensus. See Appendix B for exact construction.
Recommendation	The latest recommendation outstanding at month-end. A recommendation remains effective from announcement through the earlier of its I/B/E/S stop date and 180 days after its review date. The reversed I/B/E/S code ranges from 1 (*Strong Sell*) to 5 (*Strong Buy*).
Sanctioned	Equal to one if the analyst's brokerage is classified as belonging to one of the 12 sanctioned banks.
Sell recommendation	A dummy variable equal to one if the recommendation is 1 (*Strong Sell*) or 2 (*Sell*).
Upgrade	A dummy variable equal to one when an announced recommendation is more favorable than the same analyst's prior recommendation for the firm.

Appendix B Construction of Forecast Measures

This appendix details our measures of forecast optimism and accuracy. We construct these measures from one-year-ahead EPS and long-term EPS growth forecasts.

One-year-ahead EPS forecasts. For each analyst, we retain the most recent one-year-ahead EPS forecast as of the end of each month and calculate the forecast error as follows:

$$Forecast\ Error_{i,j,t} = EPS\ Forecast_{i,j,t} - Actual\ EPS_{j,t}. \tag{B.1}$$

Following prior literature (e.g., Clement, 1999; Harford et al., 2019), we use three measures to assess forecast quality relative to other analysts covering the same firm over a comparable horizon. First, we compute the proportional mean forecast bias (*PMFB*):

$$PMFB_{i,j,t} = \frac{Forecast\ Error_{i,j,t} - Consensus\ Forecast\ Error_{j,t}}{|Consensus\ Forecast\ Error_{j,t}|}. \tag{B.2}$$

Here, *Consensus Forecast Error* is the forecast error of the contemporaneous I/B/E/S mean consensus. Higher *PMFB* indicates greater optimism relative to consensus.

Second, we calculate the proportional mean absolute forecast error (*PMAFE*):

$$PMAFE_{i,j,t} = \frac{|Forecast\ Error_{i,j,t}| - Mean\ Absolute\ Error_{j,t}}{Mean\ Absolute\ Error_{j,t}}. \tag{B.3}$$

Finally, we define relative accuracy as:

$$Accuracy_{i,j,t} = \frac{Median\ Absolute\ Error_{j,t} - |Forecast\ Error_{i,j,t}|}{SD(Absolute\ Errors)_{j,t}}. \tag{B.4}$$

For *PMAFE* and *Accuracy*, the mean, median, and standard deviation of individual absolute forecast errors are calculated within the same firm–calendar-quarter–fiscal-period-end comparison group. Higher *PMAFE* indicates worse relative accuracy, whereas higher *Accuracy* indicates better relative accuracy.

Long-term EPS growth forecasts. Analysts also issue long-term EPS growth (LTG) forecasts with a three- to five-year horizon. As with one-year-ahead EPS forecasts, we construct a monthly panel by retaining each analyst's most recent LTG forecast for the firm. Because the LTG horizon is imprecisely defined, forecast errors are measured with greater noise than for EPS. We therefore measure *LTG consensus deviation* as the percentage-point difference between each analyst's forecast and the latest median consensus available when the forecast is issued. Higher values indicate greater optimism relative to other analysts covering the same firm.

Internet Appendix

Figure IA.1: **Brokerage, IPO Issuer, and Peer-Firm Network**
This figure illustrates the relationships used to identify PFIO. Firm 2 is the IPO issuer, and Broker A is its lead underwriter. Broker A's analysts cover Firms 1 and 3, but only Firm 1 is an identified peer of Firm 2. Broker B also covers Firm 1 but does not lead Firm 2's IPO. The red arrow marks the PFIO-treated coverage relationship during months −2 through +1 relative to Firm 2's IPO listing.

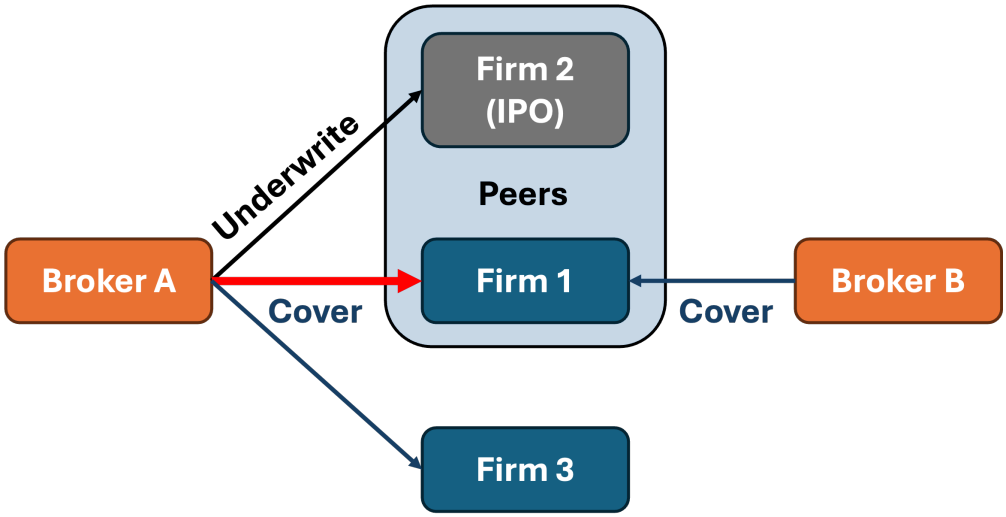


Table IA.1: **PFIO with an Extended Observation Window**

This table re-estimates the specifications in Table 2 after extending the analyst-panel observation window to 1991–2023. Outcomes are the effective month-end recommendation scale, ranging from 1 (*Strong Sell*) to 5 (*Strong Buy*), and the *Buy* and *Sell* indicators, equal to one for levels 4–5 and 1–2, respectively, and zero otherwise. *IPO underwriting* equals one when a lead-underwriter analyst covers an issuer's TNIC peer during months −2 through +1 relative to listing, and zero otherwise. Standard errors are clustered by analyst and month, with t-statistics in parentheses. Appendix A provides variable definitions. Significance levels: *0.10, **0.05, ***0.01.

Dependent Vars:	Peer recommendation				Peer buy rec.		Peer sell rec.	
Model:	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Variables								
IPO underwriting	0.0461***	0.0299***	0.0254***	0.0317***	0.0185***	0.0219***	−0.0044**	−0.0103***
	(7.0829)	(3.6353)	(3.9660)	(3.7363)	(5.1291)	(4.2919)	(−2.5884)	(−3.5982)
IB affiliation			0.0092	0.0981***	0.0162***	0.0572***	−0.0051*	−0.0255***
			(0.9664)	(14.7839)	(3.1635)	(14.9202)	(−1.8481)	(−11.8721)
Firm coverage			0.0039		0.0057		−0.0024	
			(0.5366)		(1.4959)		(−1.3918)	
Analyst coverage			−0.0060	−0.0298**	0.0000	−0.0132*	0.0001	0.0074**
			(−0.8148)	(−2.3468)	(0.0123)	(−1.8194)	(0.0569)	(2.2506)
Broker size			0.0029	−0.0895***	−0.0109*	−0.0525***	0.0113***	0.0211***
			(0.2101)	(−7.8947)	(−1.8547)	(−8.0114)	(3.3111)	(7.5299)
Firm expertise			−0.1164***	0.0435***	−0.0670***	0.0235***	0.0166***	−0.0014
			(−10.7497)	(8.0122)	(−12.1950)	(7.4168)	(7.4265)	(−1.1103)
Analyst experience			0.0049	−0.0696***	0.0078	−0.0475***	0.0040	0.0064
			(0.2882)	(−3.9598)	(0.8972)	(−4.7318)	(1.0386)	(1.3744)
Log price			0.2212***		0.1209***		−0.0305***	
			(41.5853)		(47.3375)		(−22.7162)	
Industry return			0.0002		0.0002*		−0.0000	
			(1.1049)		(1.6706)		(−1.1457)	
Fixed effects								
Analyst–Firm	Yes	No	Yes	No	Yes	No	Yes	No
Month	Yes	No	Yes	No	Yes	No	Yes	No
Analyst–Month	No	Yes	No	Yes	No	Yes	No	Yes
Firm–Month	No	Yes	No	Yes	No	Yes	No	Yes
Fit statistics								
R^2	0.5458	0.4906	0.5540	0.4890	0.5189	0.4353	0.4676	0.3733
Observations	7,515,571	7,279,601	7,356,288	7,130,698	7,356,288	7,130,698	7,356,288	7,130,698

Table IA.2: **PFIO by IPO Characteristics**

This table reports regressions using the recommendation scale by IPO characteristics. IPOs are split by total proceeds, gross spread, and the number of lead underwriters; *High* identifies IPOs at or above the pooled upper-tertile cutoff and *Low* the remaining IPOs. For each characteristic, the regressions split *IPO underwriting* into two jointly included indicators for exposure to High and Low IPOs; observations without IPO underwriting exposure form the reference category. Peer recommendation and *IPO underwriting* are defined as in Table 2. All regressions include analyst–month and firm–month fixed effects; even-numbered columns add the applicable Table 2 controls. Standard errors are clustered by analyst and month, with t-statistics in parentheses. The sample period is 2003–2023. Appendix A provides variable definitions. Significance levels: *0.10, **0.05, ***0.01.

Dependent variable	Peer recommendation					
IPO characteristic	Total proceeds		Gross spread		Lead underwriters	
Model	(1)	(2)	(3)	(4)	(5)	(6)
IPO underwriting × High	0.0426***	0.0422***	0.0531***	0.0563***	0.0427***	0.0441***
	(3.6508)	(3.4818)	(3.9882)	(4.1228)	(3.8170)	(3.8286)
IPO underwriting × Low	0.0338**	0.0358***	0.0275**	0.0257**	0.0299**	0.0287*
	(2.5554)	(2.6381)	(2.3260)	(2.1147)	(2.0673)	(1.9297)
Controls	No	Yes	No	Yes	No	Yes
Fixed effects						
Analyst–Month	Yes	Yes	Yes	Yes	Yes	Yes
Firm–Month	Yes	Yes	Yes	Yes	Yes	Yes
R^2	0.4656	0.4651	0.4656	0.4651	0.4656	0.4651
Observations	5,547,982	5,458,203	5,547,266	5,457,550	5,547,982	5,458,203

Table IA.3: **Short-Run Trading Following PFIO-Affected Recommendations**
This table reports coefficients on *IPO underwriting* from event-level regressions of short-run trading for buy, hold, sell, upgrade, and downgrade recommendations. Each cell comes from a separate regression for the indicated trading outcome and recommendation category. *IPO underwriting* equals one for recommendations on an issuer's TNIC peers by its lead-underwriter analysts during months −2 through +1 relative to listing, and zero otherwise. Buy, hold, and sell recommendations have levels 4–5, 3, and 1–2, respectively; upgrades and downgrades are increases and decreases from the same analyst's prior recommendation for the firm. Retail trades are identified and signed following Barber et al. (2024); residual activity comprises eligible signed TAQ trades not classified as retail. Abnormal volume is $\log[1 + V_{[-1,+1]}/\overline{V}_{[-63,-2]}]$, where the numerator is total volume over trading days −1 through +1 and the denominator is mean daily volume over trading days −63 through −2. Volume is measured in dollars and comprises retail buyer-initiated trades in Panel A and all eligible residual trades in Panel B. Dollar imbalance is buyer-initiated minus seller-initiated dollars divided by their sum over days −1 through +1. All windows are relative to the recommendation announcement. Volume outcomes are winsorized at the 1st and 99th percentiles within recommendation category. Models include the Table 2 controls, together with analyst–firm and month fixed effects. Standard errors are clustered by analyst and date with t-statistics in parentheses. The sample begins in January 2007 and excludes the October 2016–September 2018 Tick Size Pilot interval. Significance levels: *0.10, **0.05, ***0.01.

Panel A: Retail trading					
	Buy	Hold	Sell	Upgrade	Downgrade
Abnormal retail buy volume	−0.0175	−0.0252	0.2221	0.0456	−0.0041
	(−0.68)	(−0.56)	(1.26)	(1.24)	(−0.05)
Observations	77,612	37,437	5,954	43,300	23,635
Retail dollar imbalance	−0.0009	0.0000	0.0426	−0.0009	−0.0061
	(−0.12)	(0.00)	(1.21)	(−0.07)	(−0.30)
Observations	77,859	46,053	7,564	43,390	29,111
Panel B: Residual order flow					
	Buy	Hold	Sell	Upgrade	Downgrade
Abnormal residual dollar volume	−0.0130	−0.0093	0.1296	0.0424	−0.0011
	(−0.60)	(−0.26)	(0.91)	(1.34)	(−0.02)
Observations	77,612	37,437	5,954	43,300	23,635
Residual dollar imbalance	−0.0021	0.0051	−0.0030	0.0003	0.0050
	(−0.44)	(0.82)	(−0.18)	(0.04)	(0.48)
Observations	77,882	46,053	7,565	43,398	29,113
Controls	Yes	Yes	Yes	Yes	Yes
Fixed effects					
Analyst–Firm	Yes	Yes	Yes	Yes	Yes
Month	Yes	Yes	Yes	Yes	Yes

Table IA.4: **Post-Announcement BHAR Estimates by Recommendation Type**
This table reports the estimates plotted in Figure 2. Coefficients on *IPO underwriting* are estimated from separate regressions of DGTW-adjusted buy-and-hold abnormal returns (BHARs) in decimal units for buy, upgrade, sell, and downgrade recommendations. Buys and sells have recommendation levels 4–5 and 1–2, respectively; upgrades and downgrades are increases and decreases from the same analyst's prior recommendation for the firm. *IPO underwriting* equals one for recommendations on an issuer's TNIC peers by its lead-underwriter analysts during months −2 through +1 relative to listing, and zero otherwise. Each cell comes from a separate regression for the indicated category and horizon and measures the conditional BHAR difference between recommendations with and without IPO underwriting exposure. Columns 1–4 correspond to one-, three-, six-, and twelve-month horizons. Return windows begin on trading day +2 after the recommendation announcement and end on day 21, 63, 126, or 252, respectively. Models include the Table 2 controls and analyst–firm and month fixed effects. Standard errors are clustered by analyst and date, with t-statistics in parentheses. The sample period is 2003–2023. Significance levels: *0.10, **0.05, ***0.01.

DGTW buy-and-hold abnormal returns (BHAR)				
Signal	1-month	3-month	6-month	12-month
Buy and upgrade events				
Buy	0.0032	−0.0052	−0.0164	−0.0302*
	(0.7163)	(−0.6495)	(−1.4543)	(−1.8214)
Upgrade	−0.0055	−0.0133	−0.0335**	−0.0455*
	(−0.8292)	(−1.1826)	(−2.1175)	(−1.8062)
Sell and downgrade events				
Sell	−0.0030	−0.0145	0.0091	0.0261
	(−0.2500)	(−0.7353)	(0.3390)	(0.6434)
Downgrade	−0.0024	−0.0158	−0.0202	−0.0336
	(−0.3530)	(−1.1221)	(−1.0794)	(−1.2576)
Controls	Yes	Yes	Yes	Yes
Fixed effects				
Analyst–Firm	Yes	Yes	Yes	Yes
Month	Yes	Yes	Yes	Yes

Table IA.5: **PFIO and Normalized Target Prices by Sanctioned-Broker Status**
This table reports regressions of normalized target price. Normalized target price is the month-end target price divided by the preceding month-end stock price. The regressions jointly include *IPO underwriting*, *IB affiliation*, *Sanctioned*, and interactions of *Sanctioned* with each exposure indicator. *IPO underwriting* equals one when a lead-underwriter analyst covers an issuer's TNIC peer during months −2 through +1 relative to listing, and zero otherwise. *IB affiliation* identifies direct bank–firm transactions during years t through $t-5$. *Sanctioned* equals one for brokerages affiliated with banks sanctioned under the Global Analyst Research Settlement, and zero otherwise. The coefficients on the exposure indicators measure associations at nonsanctioned brokerages; their interactions with *Sanctioned* measure the differences for sanctioned brokerages. Both columns include analyst–month and firm–month fixed effects; Column 2 adds the applicable Table 2 controls. Standard errors are clustered by analyst and month, with t-statistics in parentheses. The sample period is 2003–2023. Appendix A provides variable definitions. Significance levels: *0.10, **0.05, ***0.01.

Dependent Variable:	Normalized target price	
Model:	(1)	(2)
Variables		
IPO underwriting	0.0067**	0.0072**
	(2.1808)	(2.2653)
IPO underwriting × Sanctioned	0.0011	0.0007
	(0.2808)	(0.1708)
IB affiliation	0.0182***	0.0181***
	(8.5835)	(8.3398)
IB affiliation × Sanctioned	−0.0065**	−0.0066**
	(−2.4544)	(−2.4561)
Sanctioned	−0.0325**	−0.0243
	(−2.0644)	(−1.5239)
Controls	No	Yes
Fixed effects		
Analyst–Month	Yes	Yes
Firm–Month	Yes	Yes
Fit statistics		
R^2	0.7132	0.7117
Observations	3,990,738	3,937,101

Table IA.6: **PFIO Excluding Listing Month +1**

This table re-estimates the specifications in Table 2 using an underwriting window of months −2 through 0 relative to listing, excluding month +1. Outcomes are the effective month-end recommendation scale, ranging from 1 (*Strong Sell*) to 5 (*Strong Buy*), and the *Buy* and *Sell* indicators, equal to one for levels 4–5 and 1–2, respectively, and zero otherwise. *IPO underwriting* equals one when a lead-underwriter analyst covers an issuer's TNIC peer during this shortened window, and zero otherwise. Standard errors are clustered by analyst and month, with t-statistics in parentheses. The sample period is 2003–2023. Appendix A provides variable definitions. Significance levels: *0.10, **0.05, ***0.01.

Dependent Vars:	Peer recommendation				Peer buy rec.		Peer sell rec.	
Model:	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Variables								
IPO underwriting	0.0376***	0.0387***	0.0246***	0.0391***	0.0177***	0.0279***	−0.0059***	−0.0129***
	(5.4010)	(4.1692)	(3.5749)	(4.0900)	(4.4148)	(4.8562)	(−3.0835)	(−3.8539)
IB affiliation			0.0036	0.0901***	0.0139**	0.0547***	−0.0055*	−0.0278***
			(0.3346)	(12.4696)	(2.4486)	(12.8885)	(−1.7657)	(−11.5493)
Firm coverage			0.0153*		0.0157***		0.0026	
			(1.7246)		(3.3200)		(1.2092)	
Analyst coverage			−0.0027	−0.0485***	0.0009	−0.0236***	−0.0019	0.0122***
			(−0.3230)	(−3.1068)	(0.2273)	(−2.6276)	(−0.8905)	(2.8786)
Broker size			0.0211	−0.1023***	−0.0084	−0.0700***	0.0139***	0.0277***
			(1.3086)	(−6.9489)	(−1.2671)	(−8.2162)	(3.2833)	(7.3753)
Firm expertise			−0.0727***	0.0468***	−0.0398***	0.0308***	0.0140***	−0.0021
			(−5.8878)	(7.1166)	(−6.2964)	(8.0996)	(4.8946)	(−1.2671)
Analyst experience			0.0019	−0.0854***	0.0056	−0.0568***	0.0066	0.0152**
			(0.0922)	(−3.8786)	(0.5441)	(−4.5040)	(1.3584)	(2.4603)
Log price			0.1953***		0.1101***		−0.0341***	
			(33.2322)		(38.4579)		(−21.6889)	
Industry return			0.0003		0.0002		−0.0000	
			(1.0426)		(1.4132)		(−0.4807)	
Fixed effects								
Analyst–Firm	Yes	No	Yes	No	Yes	No	Yes	No
Month	Yes	No	Yes	No	Yes	No	Yes	No
Analyst–Month	No	Yes	No	Yes	No	Yes	No	Yes
Firm–Month	No	Yes	No	Yes	No	Yes	No	Yes
Fit statistics								
R^2	0.5456	0.4656	0.5521	0.4651	0.5146	0.4075	0.4843	0.3572
Observations	5,701,934	5,548,006	5,607,310	5,458,227	5,607,310	5,458,227	5,607,310	5,458,227

Table IA.7: **PFIO in Normalized Target Prices by IPO and Peer-Firm Characteristics**

This table reports normalized-target-price regressions by IPO and peer-firm characteristics. Normalized target price is the month-end target price divided by the preceding month-end stock price. *IPO underwriting* equals one when a lead-underwriter analyst covers an issuer's TNIC peer during months −2 through +1 relative to listing, and zero otherwise. Panel A splits IPOs by total proceeds, gross spread, and the number of lead underwriters; *High* identifies IPOs at or above the pooled upper-tertile cutoff and *Low* the remaining IPOs. For each characteristic, the original *IPO underwriting* indicator is replaced by two jointly included indicators for High and Low exposure, with observations without IPO underwriting exposure forming the reference category. Panel B reports coefficients on interactions of *IPO underwriting* with *Big firm*, *High profile*, and *High complexity*, which identify the preceding available annual top tertile of market capitalization, human EDGAR downloads, and intangible assets divided by total assets, respectively. Each interaction is estimated separately and measures the difference in the IPO underwriting association between firms with and without the indicated characteristic. All models include analyst–month and firm–month fixed effects; even-numbered columns add the applicable Table 2 controls. Target-price construction and sample restrictions follow Appendix A. Standard errors are clustered by analyst and month, with t-statistics in parentheses. The sample period is 2003–2023; the EDGAR analysis ends in 2017. Appendix A provides variable definitions. Significance levels: *0.10, **0.05, ***0.01.

Panel A: IPO-level heterogeneity tests

	Total Proceeds		Gross Spread		# of Lead Underwriters	
Model:	(1)	(2)	(3)	(4)	(5)	(6)
High	0.0081***	0.0080***	0.0098***	0.0106***	0.0080***	0.0080***
	(3.7106)	(3.6271)	(3.1768)	(3.3946)	(3.8368)	(3.8295)
Low	0.0065**	0.0069**	0.0058***	0.0055***	0.0059*	0.0061*
	(2.1759)	(2.2818)	(2.8097)	(2.6273)	(1.6773)	(1.6869)
Controls	No	Yes	No	Yes	No	Yes
Analyst–Month FE	Yes	Yes	Yes	Yes	Yes	Yes
Firm–Month FE	Yes	Yes	Yes	Yes	Yes	Yes
R^2	0.7131	0.7117	0.7131	0.7117	0.7131	0.7117
Observations	3,991,028	3,937,389	3,991,028	3,937,389	3,991,028	3,937,389

Table IA.7: **PFIO in Normalized Target Prices by IPO and Peer-Firm Characteristics (continued)**

Panel B: Firm-level heterogeneity tests						
Model:	(1)	(2)	(3)	(4)	(5)	(6)
IPO underwriting × Big firm	0.0216***	0.0182***				
	(5.2153)	(4.3856)				
IPO underwriting × High profile			0.0157***	0.0137***		
			(3.3728)	(2.8903)		
IPO underwriting × High complexity					0.0089**	0.0079**
					(2.5623)	(2.2397)
Controls	No	Yes	No	Yes	No	Yes
Analyst–Month FE	Yes	Yes	Yes	Yes	Yes	Yes
Firm–Month FE	Yes	Yes	Yes	Yes	Yes	Yes
R^2	0.7104	0.7099	0.7117	0.7108	0.7168	0.7157
Observations	3,808,911	3,797,009	2,277,240	2,259,253	3,407,449	3,366,836

Table IA.8: **PFIO in Newly Issued Recommendations**

The sample retains analyst–firm–month observations with a newly issued recommendation and an observed prior recommendation by the same analyst for the same firm. Outcomes are the newly issued recommendation scale, ranging from 1 (*Strong Sell*) to 5 (*Strong Buy*), and the *Buy* and *Sell* indicators, equal to one for levels 4–5 and 1–2, respectively, and zero otherwise. *IPO underwriting* equals one from the issuer's S-1 filing month through listing month +1 when the analyst's brokerage is a lead underwriter and the covered firm is a TNIC peer; this underwriting window is broader than the baseline $[-2, +1]$ window. Odd-numbered columns include separate analyst, firm, and month fixed effects; even-numbered columns include analyst–firm and month fixed effects. All models include the Table 2 controls. Standard errors are clustered by analyst and month, with t-statistics in parentheses. The sample period is 2003–2023. Appendix A provides variable definitions. Significance levels: *0.10, **0.05, ***0.01.

Dependent Variables:	Peer recommendation		Peer buy rec.		Peer sell rec.	
Model:	(1)	(2)	(3)	(4)	(5)	(6)
Variables						
IPO underwriting	0.0382**	0.0328*	0.0264***	0.0194*	−0.0125**	−0.0143**
	(2.2683)	(1.6689)	(2.7796)	(1.7439)	(−2.1820)	(−2.2856)
IB affiliation	0.0284***	−0.0191	0.0215***	0.0033	−0.0231***	−0.0045
	(3.2330)	(−1.2345)	(4.4170)	(0.3767)	(−7.5376)	(−0.8559)
Controls	Yes	Yes	Yes	Yes	Yes	Yes
Fixed effects						
Analyst–Firm	No	Yes	No	Yes	No	Yes
Analyst	Yes	No	Yes	No	Yes	No
Firm	Yes	No	Yes	No	Yes	No
Month	Yes	Yes	Yes	Yes	Yes	Yes
Fit statistics						
R^2	0.1650	0.3356	0.1196	0.2609	0.1477	0.3320
Observations	254,100	224,754	254,100	224,754	254,100	224,754

Table IA.9: **PFIO with Alternative Top-n TNIC Peers**

This table reports the full specification grids corresponding to Panel C of Table 7. Panel A uses the issuer's top 5 TNIC peers, and Panel B uses the top 10, ranked by product-market similarity. Outcomes are the effective month-end recommendation scale, ranging from 1 (*Strong Sell*) to 5 (*Strong Buy*), and the *Buy* and *Sell* indicators, equal to one for levels 4–5 and 1–2, respectively, and zero otherwise. *IPO underwriting* equals one when a lead-underwriter analyst covers one of these peers during months −2 through +1 relative to listing, and zero otherwise. All models include the Table 2 controls; fixed effects are reported in the table. Standard errors are clustered by analyst and month, with t-statistics in parentheses. The sample period is 2003–2023. Significance levels: *0.10, **0.05, ***0.01.

Panel A: Top 5 peer firms						
Dependent Variables:	Peer rec.		Peer buy rec.		Peer sell rec.	
Model:	(1)	(2)	(3)	(4)	(5)	(6)
Variables						
IPO underwriting	0.0349***	0.0649***	0.0229***	0.0441***	−0.0100***	−0.0197***
	(3.3110)	(4.4936)	(3.6038)	(5.0561)	(−3.4649)	(−4.1329)
Controls	Yes	Yes	Yes	Yes	Yes	Yes
Fixed effects						
Analyst–Firm	Yes	No	Yes	No	Yes	No
Month	Yes	No	Yes	No	Yes	No
Analyst–Month	No	Yes	No	Yes	No	Yes
Firm–Month	No	Yes	No	Yes	No	Yes
Fit statistics						
R^2	0.5520	0.4657	0.5146	0.4083	0.4842	0.3584
Observations	5,575,619	5,425,473	5,575,619	5,425,473	5,575,619	5,425,473
Panel B: Top 10 peer firms						
Dependent Variables:	Peer rec.		Peer buy rec.		Peer sell rec.	
Model:	(1)	(2)	(3)	(4)	(5)	(6)
Variables						
IPO underwriting	0.0248***	0.0488***	0.0174***	0.0313***	−0.0082***	−0.0186***
	(2.9563)	(4.4320)	(3.4911)	(4.6869)	(−3.5802)	(−4.7711)
Controls	Yes	Yes	Yes	Yes	Yes	Yes
Fixed effects						
Analyst–Firm	Yes	No	Yes	No	Yes	No
Month	Yes	No	Yes	No	Yes	No
Analyst–Month	No	Yes	No	Yes	No	Yes
Firm–Month	No	Yes	No	Yes	No	Yes
Fit statistics						
R^2	0.5520	0.4654	0.5146	0.4078	0.4843	0.3577
Observations	5,591,728	5,441,805	5,591,728	5,441,805	5,591,728	5,441,805