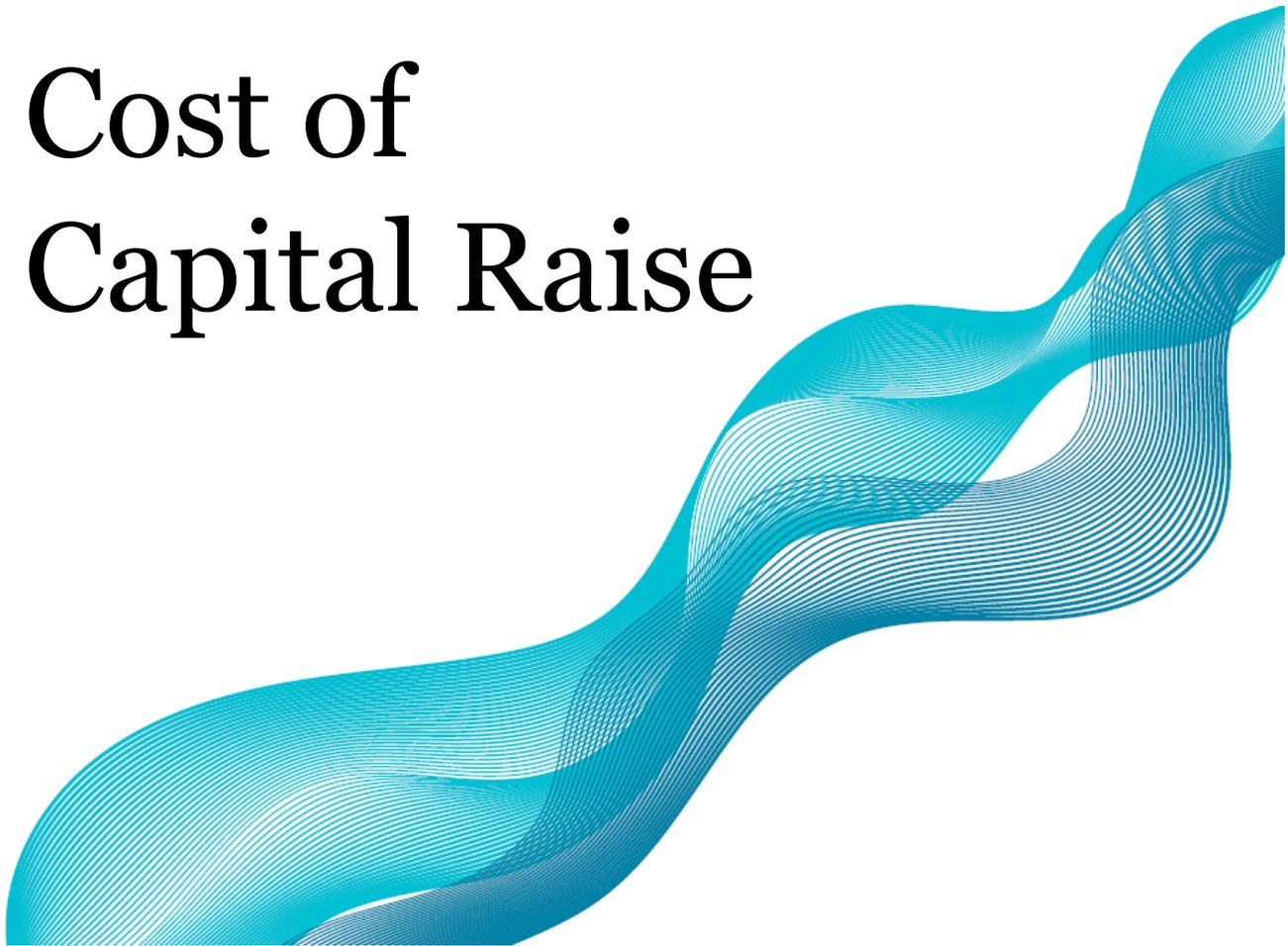


Cost of Capital Raise



CaaS Capital
Management

ABSTRACT

Since their creation in the 16th century, the primary objective of equity capital markets has been to assist companies during periods of capital raising for new investments. We examined historical equity capital raises from 2005 to 2021 in the US, and found that the most significant costs to such companies are i) market discount and ii) banking commissions. In determining the market discount, pre-offering liquidity is an important factor, while banking commissions are a function of deal type and notional size. We propose that corporates should minimize their capital raises during IPOs due to the high relative costs, and focus instead on improving stock liquidity in the public market. Doing so enables corporates to minimize the overall cost of capital raising in the long term.

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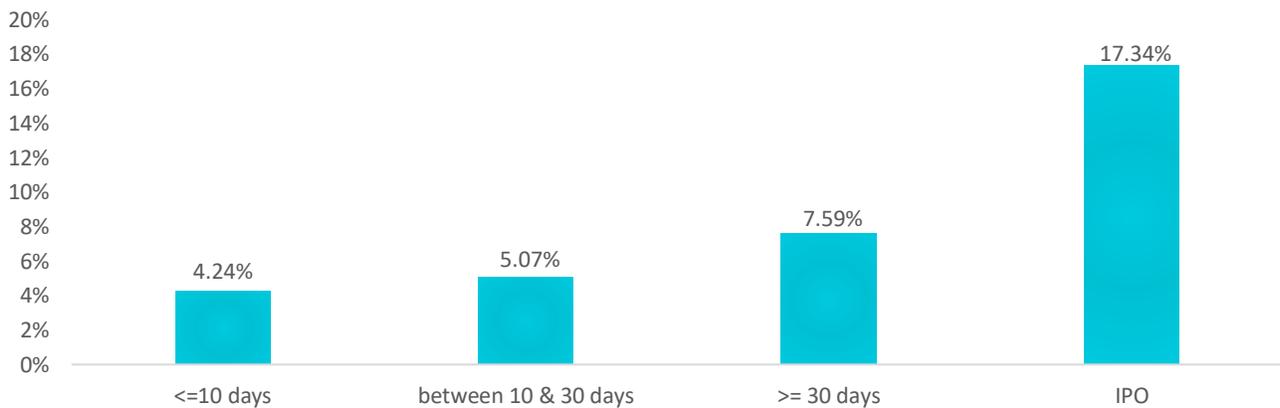
Mikhail Shilshut

MARKET DISCOUNT

We studied historical capital raises in the US, including all operating company IPOs and follow-on offerings between 2005 to 2021¹, and found that the existing liquidity of a stock is directly proportionate to the cost of future capital raises. In our study, the cost of capital raise is defined as i) first day return for IPOs, and ii) discount to price prior to deal announcement for follow-on offerings.

While there are many factors influencing the equity risk premium demanded by the market, we find that pre-offering liquidity is a crucial factor in determining the cost of capital raise. Liquidity is represented by average daily volume (ADV) relative to the total share outstanding. A stock with higher liquidity can offer shares at a smaller discount. Therefore, management teams should consider the impact to post-deal liquidity during the deal allocation process as poor post-deal liquidity reduces institutional coverage and significantly increases the cost of future capital raises.

Exhibit 1: Market Discount of Capital Raise by Daily Volume



Source: CaaS Capital Management, Bloomberg, Capital Market Gateway.

Buyers of stocks bear less risk as the stocks become more liquid, and hence demand less risk premium. They can trade out of their positions easily when the stock volume is naturally high. Heavy volumes also validate the current market prices to be fair market value. In Exhibit 1, we can see that the average cost of capital raise is lower when the offer sizes are low multiples of average daily volume. IPO has the highest cost as there are no shares trading in the market prior to the deal and thus buyers require a greater margin of error to buy the stock (please refer to our paper [“First Day IPO Excess Return Abnormality in the US”](#) for a discussion regarding rationales behind excess first day IPO returns). Since the cost of capital raise decreases with more available liquidity in the market, management should consider issuing a smaller amount of stock at time of IPO when the cost is the highest.

¹ We included both primary and secondary transactions. We excluded all the SPAC IPOs because the dynamics of SPAC IPOs are significantly different from normal operating companies. We only included deals of the following bookrunners including 'Lehman Brothers', 'Citigroup', 'BoFA Securities', 'Credit Suisse', 'Morgan Stanley', 'J.P. Morgan', 'SVB Securities', 'CIBC Capital Markets', 'Raymond James', 'Cantor', 'Goldman Sachs & Co.', 'RBC Capital Markets', 'Barclays', 'Guggenheim Securities', 'Deutsche Bank Securities', 'Wells Fargo Securities', 'UBS Investment Bank', 'Canaccord Genuity', 'Jefferies', 'Piper Sandler', 'Baird', 'William Blair', 'Cowen and Company', 'Stifel', 'DNB Markets', 'BTIG', 'B. Riley Securities', 'BNP Paribas', 'Mizuho Securities', 'KKR', 'Truist Securities', 'Evercore ISI', 'XP Securities', 'Lazard', 'BTG Pactual', 'HSBC'

There is an optimal size of IPO issuance because “too small” offerings cannot generate the proper attention in the market (e.g. companies without enough shares floating in the market are not eligible to be added in various indices). Management teams should pay particular attention to the IPO allocation to ensure stock liquidity is at a relatively high and healthy level after the deal. In extreme cases, if an IPO is allocated to a few pre-IPO investors only, there will not be enough following in the market outside of the same pre-IPO investors, resulting in the IPO effectively acting as another private funding round with extra paperwork. When a stock trades with good liquidity post IPO, management teams will have the choice to offer more stock via follow-ons or blocks at more advantageous times. Therefore, IPO allocation should be carefully structured with a variety of investors of different time horizons. Syndicating banks would be able to provide valuable insights on sizing and allocation because company fundamentals and market environment need to be overlaid on a case by case basis.

INVESTMENT BANK COMMISSION

Investment banking commissions in the US are another significant cost when considering an equity capital raise. We investigated equity offerings from 2005 to 2021² and found that the commissions are mostly determined by deal type and deal notional. IPOs, among the different stages of capital raising, and small deals in general are the most expensive.

Exhibit 2: Average Commission by Offering Type

Offerings by Deal Type	Count	Avg. Fee
IPO	2,397	7.2%
Follow-ons	5,272	5.2%
Blocks	1,904	1.6%

Source: CaaS Capital Management, Capital Market Gateway.

Exhibit 2 illustrates that investment banks charge significantly more for IPO than overnight blocks. The extra cost is justified by the cost of preparing the S-1, investor education (PDIE), investor introduction (roadshows) and all prior work completed to prepare the company for its public debut. Overnight deals incur none of these costs for banks, apart from taking the risk on to their balance sheet. To distinguish between follow-ons and blocks, we use the presence of a marketing period i.e. follow-on offerings hold at

least a group conference for management to talk to investors after deal announcement. Investment banks used to take entire overnight block deals onto their own balance sheets, however, regulations have made it harder for banks to continue this practice, and there are now specialized funds that take the risk onto their balance sheets. Reputable investment banks usually have the ability and experience to distribute deals at fair prices. Hence, the charge for overnight blocks is only a fraction of the IPOs.

Follow-on offerings are more similar to IPOs than blocks. Companies that raise capital via follow-on offerings, while publicly traded, usually have small floating shares or average daily volumes relative to deal size. Exhibit 3 shows that follow-ons have offered 2.2 times more stock than blocks on average when measured as a multiple of average daily volume (ADV). Less liquid stocks are unable to get attractive bid prices via the block processes since they are not yet known by the market,

Exhibit 3: Average Daily Volume Multiple by Offering Type

	Count	Avg. ADV Multiple
Follow-ons	5,200	30.3
Blocks	1,897	13.8

Source: CaaS Capital Management, Bloomberg, Capital Market Gateway.

² Commission is based on estimation from Capital Market Gateway and available public filings. Deals without reliable commission estimates are excluded. Excluded deals are mostly unregistered deals

hence there are often investor introductions via roadshows or group conference calls, which have significant costs associated.

Deal notional is another significant factor impacting bank commission. Banks do the same amount of work on investor education and introduction regardless of the deal size, but bigger deals sometimes sell themselves as investors are more familiar with the bigger private companies. Therefore, investment banks are often more willing to take a smaller percent of a bigger deal as commission (see Exhibit 4.)

Exhibit 4: Average Commissions by Deal Type and Deal Notional

Deal Notional	IPO		Follow-Ons		Blocks	
	Count	Average	Count	Average	Count	Average
>1B	94	4.3%	240	2.7%	117	1.0%
>500MM	156	6.2%	370	3.7%	243	1.0%
>250MM	302	6.8%	818	4.4%	450	1.2%
>100MM	807	7.5%	1652	5.2%	456	2.6%
<100MM	1038	7.6%	2192	6.0%	638	1.5%

Source: CaaS Capital Management, Bloomberg, Capital Market Gateway.

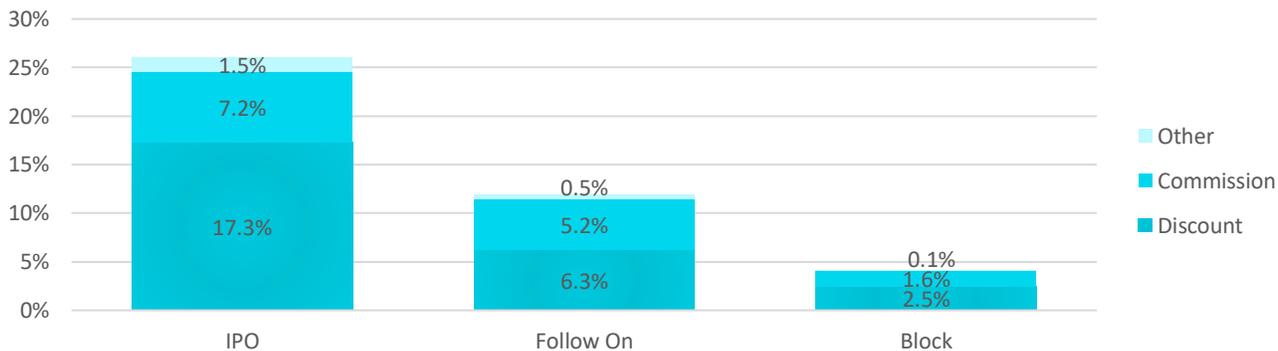
OTHER COSTS

There are other significant fees associated with legal, audit, roadshows, and regulatory matters. These fees are associated with the complexity of the deal and length of the execution. They are less sensitive to deal size and are generally less than 2% of deal proceeds for deals greater than 100 million US dollars.

OPTIMAL CAPITAL RAISE

In conclusion, we believe it has been significantly more expensive to raise capital through IPOs than blocks between 2005 to 2021. Exhibit 5 shows that capital raises through IPO cost 26% on average while blocks only cost 4.2%. IPOs are still an essential process and there cannot be a block before an IPO, but corporates should optimize the amount of capital they raise during different stages to achieve enough liquidity in the market, which will allow them to offer blocks in subsequent capital raises at the lowest overall cost. After all, the main reason for blocks to have the lowest cost is due to higher liquidity of the issuers.

Exhibit 5: Average Total Cost by Offering Type



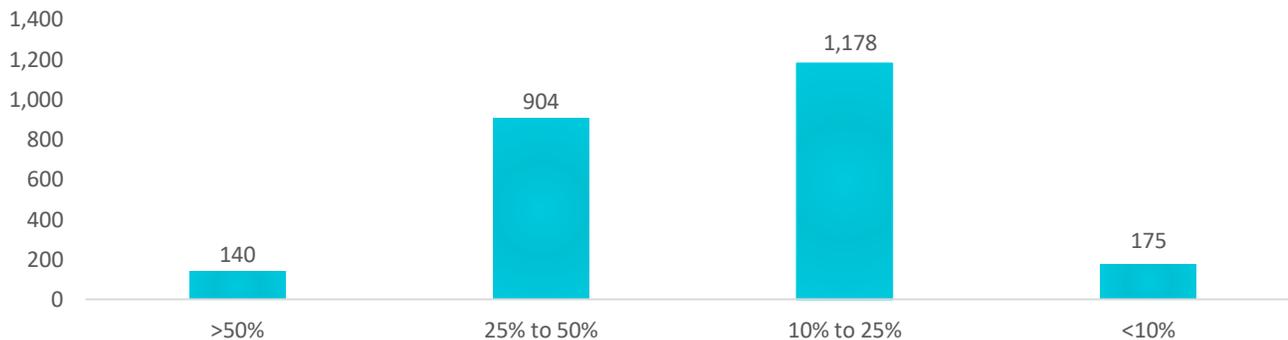
Source: CaaS Capital Management, Bloomberg, Capital Market Gateway.

Historically, offering 10% - 25% of the company at IPO is the most common approach, which has comprised almost half of all the historical IPOs (see Exhibit 6). The reasons are i) stocks with less than 10% floating are not eligible for various indices and thus cannot generate the essential institutional coverage and ii) absolute fee needs to be big enough to cover bookrunners’ costs during the process, unless the company is larger than normal for bookrunners to accept a smaller percent of bigger offerings.

Corporates should minimize the capital raised during IPO due to high costs during their first public debut. With proper allocation, offering 10%-25% of total capital during IPO is reasonable as long as it can achieve enough liquidity after IPO and generate the proper coverage through index inclusions. Corporates can reduce their long-term cost of capital raise by focusing on increasing the liquidity in the market, and once the stocks have sufficient liquidity in the public market, corporates can raise capital more economically through blocks.

It is worth noting that 2005-2021 was a period of unprecedented quantitative easing, consisting of mostly bull markets and low volatility in the US. The favorable financial conditions could have resulted in a lower cost of block trades. If we enter a period of quantitative tightening and the cost of capital is high, the cost of block trades could increase to levels that are more comparable to follow-ons.

Exhibit 6: Percentage of Company Offered During IPO Since 2005

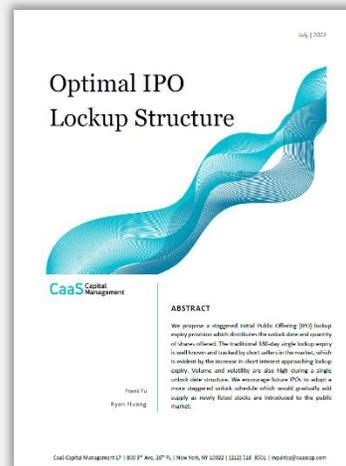
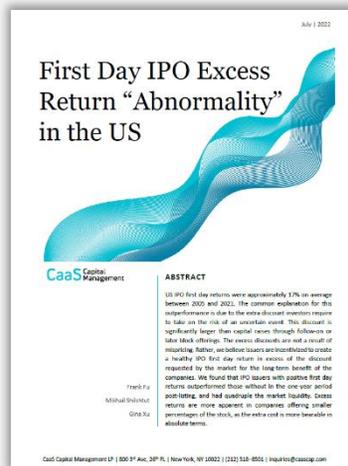


Source: CaaS Capital Management, Bloomberg, Capital Market Gateway.

CONCLUSION

We explored the cost of equity capital raise with historical capital raises from 2005 to 2021. We found that pre-offering liquidity is an important factor for the market to determine its discount. The more trading the stock has relative to the size offered, the lower the discount market demands in offerings. As no stock is trading before an IPO, the discount is highest for IPOs. In terms of investment banking fees, deal type and deal notional are the two most important factors. IPOs are significantly more expensive than block trades and bigger deals have a lower percentage fee than smaller deals. We advise corporates to minimize their capital raise during IPO and focus on improving their stock liquidity in the public market. More capital can be raised at a lower cost once the stocks have enough liquidity.

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