Locust Walk Institute

LIFE SCIENCE FINANCING TERM SHEET REVIEW

OCTOBER 17, 2017

Locust Walk is positioned as a fully integrated advisor with all key capabilities necessary for life science transaction advisory

Investment Banks

Pros	Cons
Financial analytic capability	Lack of industry operating expertise
Board level network and contacts	Strategic deliverables unusual
Investor connectivity	Limited involvement early in process

Full-Time Hire

Pros	Cons
Deep company understanding	Limited resources to execute transactions
Long-term commitment	Multiple work stream distractions
Operational expertise	Lack of broad experience (e.g., finance & partner)

Locust Walk

Locust Walk integrates the benefits of multiple advisors to provide a full-service offering for clients

Consulting Firms

Pros	Cons
Strategic analytic insights	Lack transaction capabilities
Board-ready deliverables	Not licensed as a broker/dealer
Primary/ secondary research specialty	Lack detailed company understanding

Individual Consultant

Pros	Cons
Industry & operational expertise	Not licensed as a broker/dealer
Close working relationship with management team	Lack of broad experience (e.g., finance & partner)
	Limited resources

Locust Walk has helped build many successful life science companies

SPERO THERAPEUTICS Advised on Japan buy-side exclusive licensing agreement for SPR-994 meiji Undisclosed	VeloceBioPharma Advised on Japan sell-side licensing agreement for VBP-926 Undisclosed	innocoll Advised on company acquisition GURNET POINT CAPITAL $55M Upfront, $154M CVR	pieris Sell-side Japan/Asia collaboration for PRS-080 ASKA Pharmaceutical $2.75M Upfront, $80M Milestones, Plus Royalties	pieris Sell-side immuno-oncology collaboration SERVIER $31M Upfront, $539M Milestones, Plus Royalties	TesaRx Sell-side Japan licensing agreement for THG-1001 ASKA Pharmaceutical Undisclosed
CYMABAY THERAPEUTICS Sell-side US licensing agreement for arhalofenate Kowa $15M Upfront, $190M Milestones, Plus Royalties	STRONGBRIDGE BIOPHARMA Buy-side US rights acquisition for Keveyis TaroPharma $8.5M Upfront, Undisc. Milestones and Royalties	Thar Pharmaceuticals Advised on company acquisition GRÜNENTHAL Undisclosed	NeoTX Therapeutics Buy-side licensing agreement for ANYARA Active Biotech $250K Upfront, $71M Deal Value	SAVARA Identified and initiated buy-side acquisition SERENDEX Pharmaceuticals Undisclosed	strategic SCIENCE & TECHNOLOGIES, LLC Sell-side license for Canadian rights of IbuCream Leading Consumer Health Co Undisclosed
ADVAXIS IMMUNOTHERAPIES Immuno-Oncology Advisor Undisclosed	medgenics Development & commercial collab. for anti-LIGHT mAb KYOWA KIRIN Undisclosed	STRONGBRIDGE BIOPHARMA Advised on IPO process and syndicate selection $25M NASDAQ IPO	REGENERON Sell-side Asian licensing agreement for fasinumab Mitsubishi Tanabe Pharma $55M Upfront, $270M Milestones	ARMETHEON Sell-side Asian licensing agreement for Tecarfarin LEE'S PHARM. 李氏大藥廠 Undisclosed Value	STRONGBRIDGE BIOPHARMA Buy-side licensing agreement for ALT1103 for Acromegaly antisense THERAPEUTICS $5M Upfront, $105M Milestones, Plus Royalties
STRONGBRIDGE BIOPHARMA Buy-side asset acquisition of Somatoprim for Acromegaly Aspireo Pharmaceuticals $30M in Cortendo Equity	STRONGBRIDGE BIOPHARMA Advised private placement to leading healthcare investors BROADFIN Granite Point Capital RACapital LCA TVM Capital HealthCap NEA $33.2M Private Placement	ONXEO THE ORPHAN ONCOLOGY INNOVATOR Sell-side North American Oravig® rights DARA BIOSCIENCES Undisclosed Value	ARMETHEON Advised on Series B financing Life Science Investors $24.3M Series B	STRONGBRIDGE BIOPHARMA Advised private placement to leading healthcare investors NEA RACapital BROADFIN HealthCap $26.4M Private Placemen	

Locust Walk has closed a total of 37 transactions across a variety of deal types, stages of development and therapeutic areas since 2015

Goals and Objectives

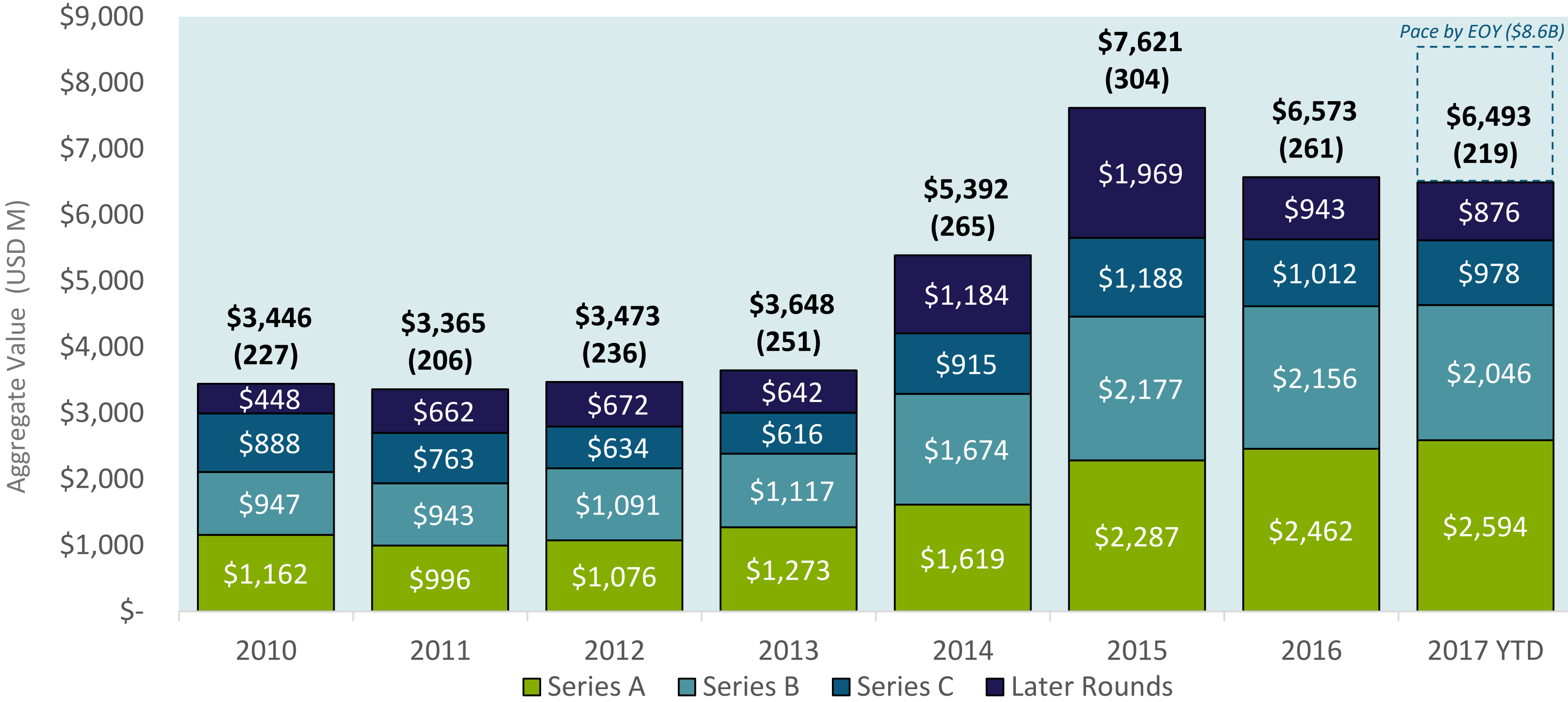
- General overview of private financings, including key trends
- Comprehensive review of each section of a preferred stock financing term sheet
- Discussion of trends in various terms and negotiation strategies

AGENDA

1. General Trends in Private Financings
2. Keys to Success for a Private Financing
3. Terms on a Private Financing Term Sheet

YTD 2017 venture investment in biopharma remains high and is on pace to be the strongest private investment year this decade

Aggregate Value and Number of Therapeutic VC Investment by Series

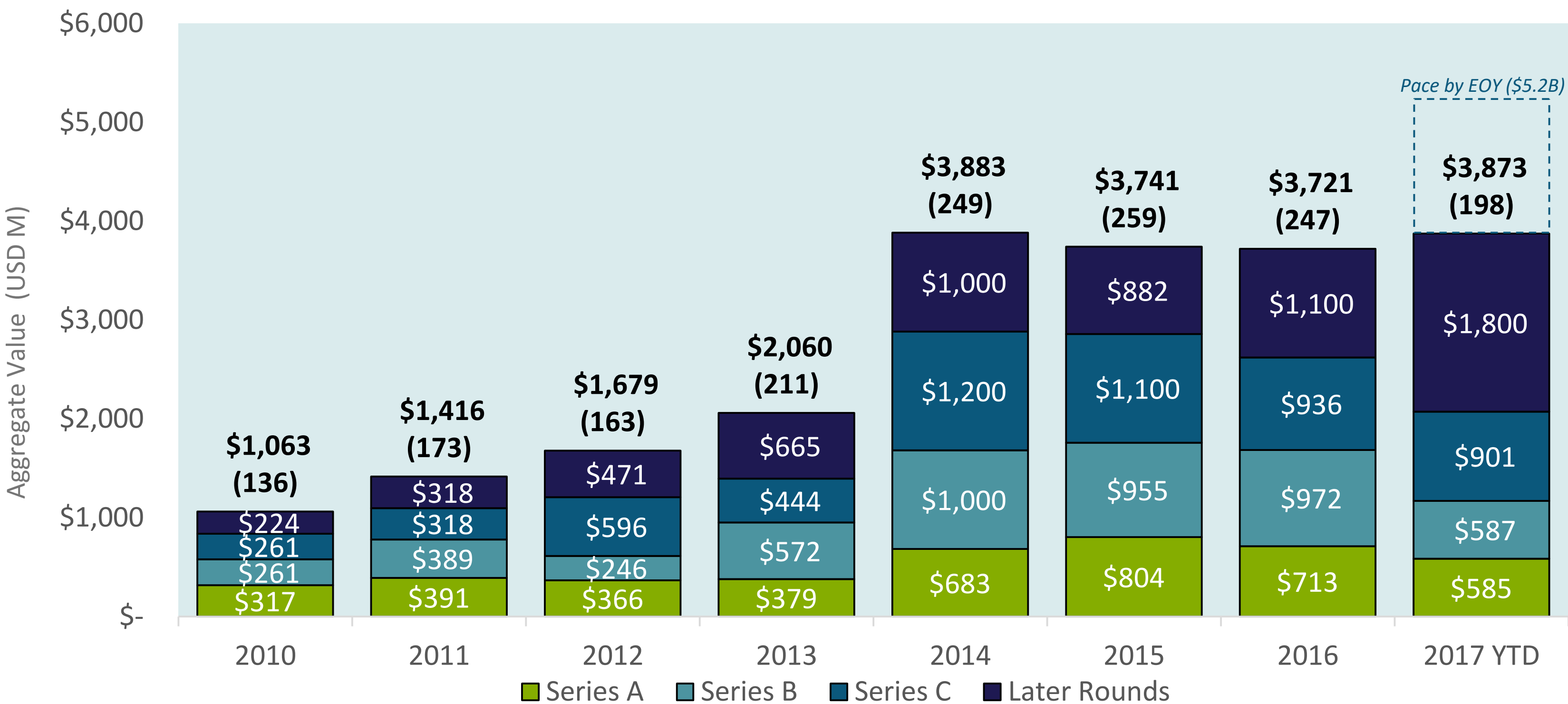


Deals (#)	2010	2011	2012	2013	2014	2015	2016	2017 YTD
A	112	92	116	120	117	152	134	119
B	58	58	65	77	88	79	73	62
C	35	29	28	29	34	44	33	24
D & Later	22	27	27	25	26	29	21	14
Total	**227**	**206**	**236**	**251**	**265**	**304**	**261**	**219**

SOURCE: Locust Walk analytics, Pitchbook: 2017 YTD as of 3Q 2017; Methodology: All US series A, B, C, D, and later investments; therapeutics include drug delivery, drug discovery, pharmaceuticals, and select biotechnology companies

YTD 2017 venture investment in medtech is strong and will become the largest private investment year this decade

Aggregate Value and Number of Medtech VC Investment by Series



Deals (#)	2010	2011	2012	2013	2014	2015	2016	2017 YTD
A	66	78	81	94	105	97	92	72
B	38	45	36	56	46	85	70	47
C	17	25	23	31	36	44	44	49
D & Later	15	25	23	30	32	33	41	30
Total	**136**	**173**	**163**	**211**	**249**	**259**	**247**	**198**

SOURCE: Locust Walk analytics, Pitchbook: 2017 YTD as of 3Q 2017; Methodology: All US series A, B, C, D, and later investments; Diagnostic Equipment, Monitoring Equipment, Surgical Devices, Therapeutic Devices, Other Devices and Supplies. Excludes deals without a deal size

AGENDA

1. General Trends in Private Financings
2. **Keys to Success for a Private Financing**
3. Terms on a Private Financing Term Sheet

Private financings – Keys to success

1 Corporate strategy drives financing requirements	▸ Craft a strategy to realize how much capital you need to achieve a value inflection for your company ▸ Understand what you need to partner and when
2 Grounded perspective on value	▸ Have perspective on the commercial potential for the product/company ▸ A commercial assessment, if available, will be an important resource to inform opportunity for the asset
3 Compelling presentation opportunity	▸ Align an appealing story around your product/company to sell to potential investors ▸ The quality of the materials is an indicator for the organization of the company and its ability to tell a story to potential acquirers
4 Raising awareness for the company	▸ The right PR/IR strategy can make the capital raise much easier to close via external validation and awareness ▸ Ensure a constant news flow to maintain interest
5 Identifying potential investors	▸ Define the universe of potential investors for your raise, and find the VC with the right experience who will champion your deal within their partnership
6 Organized, coordinated due diligence	▸ Most investors won't invest until their questions have been answered satisfactorily ▸ Don't be cagey or avoid questions as that is a red flag
7 Productive negotiations with competitive dynamics	▸ Generate competitive dynamics among investors to capture the most possible value ▸ Sometimes getting any deal is worth it regardless of the terms. Know when to negotiate and when to just get the deal done

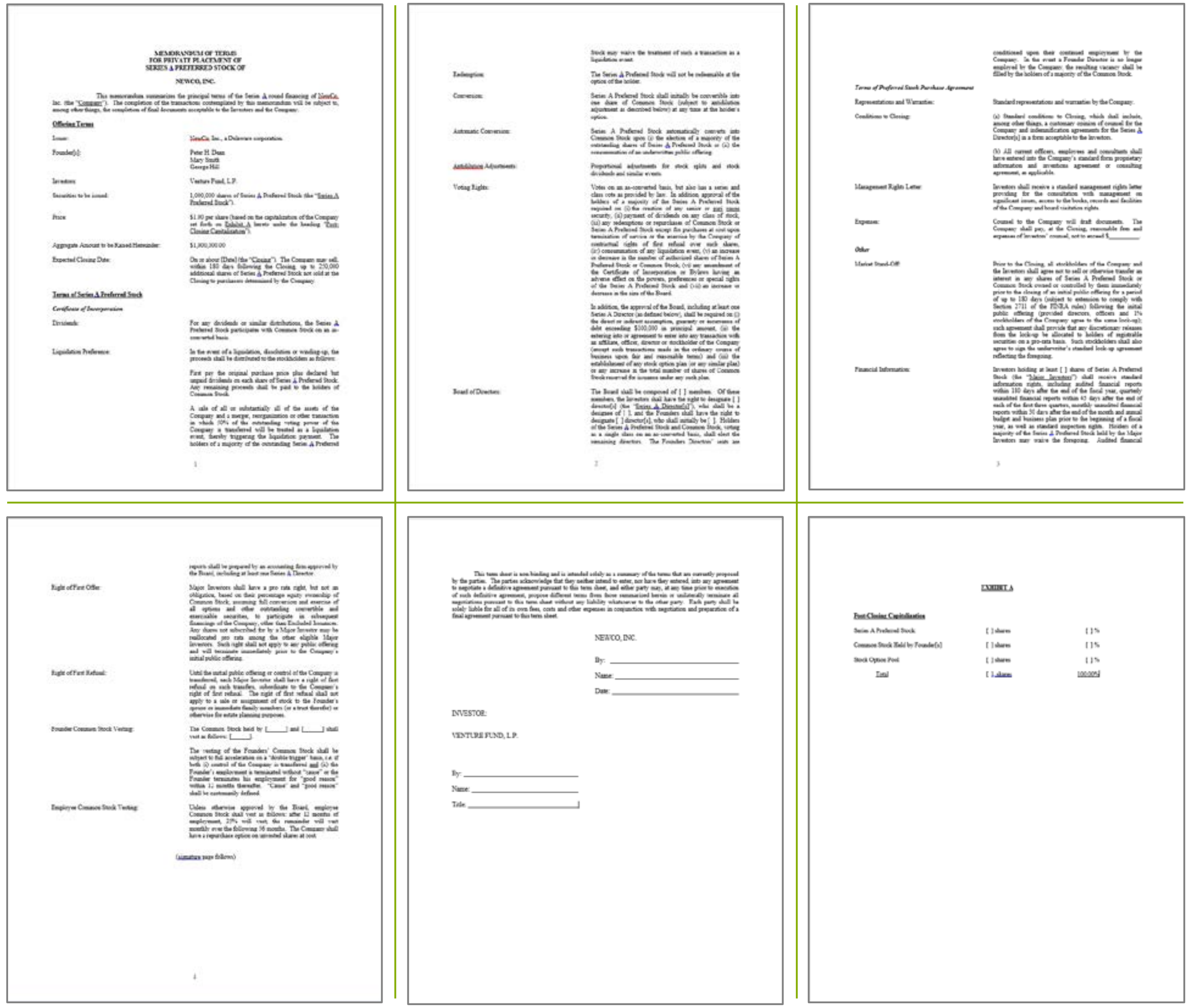
For more information about private financings, please watch Chris Ehrlich's "Fundamentals and Recent Trends in Life Sciences Private Financings" webinar

Link: http://www.locustwalk.com/locust-walk-institute-webinar/fundamentals-recent-trends-life-science-private-financing/

AGENDA

Term sheets cover each of the primary rights and preferences of the stock being issued in the financing

- A term sheet delineates the terms of a deal
- Terms included in the term sheet may include, but are not limited to:
  - Amount raised
  - Management pool
  - Valuation
  - Security type
  - Seniority
  - Dividend
  - Liquidation preferences
  - Conversion
  - Anti-dilution
  - Voting rights
  - Redemption
  - Board seats
  - Information rights
  - Registration rights
  - Preemptive rights
  - Exclusivity period
  - Expenses



A number of types of securities are issued by private companies

Security	Description
Common Stock	• A security representing ownership in a corporation at the bottom of the priority ladder • Holders of common stock elect one or members of the Board of Directors and vote on corporate policy • In a liquidation event common stockholders have rights to company assets after bondholders, preferred shareholders, and other debtholders have been paid in full • All of the upside in value for the corporation goes to equity holders
Preferred Stock	• Ownership class with a higher claim on assets and earnings than common stock • Typically has a dividend that must be paid out before dividends to common shareholders • Preference shares typically do not carry voting rights
Convertible Preferred Stock	• Preferred stock that includes an option to convert shares into a fixed number of common shares
Option/ Warrant	• A contract that gives the holder a right to buy stock in the company at a preset price (the exercise or strike price)

Founders (management team) will retain their shares as common stock, while the new shares granted to investors will typically be preferred stock

Each item on a term sheet is purposefully included and intended to serve one of two priorities: economic outcomes and control

Economic

- Economics terms govern what happens in the event the company wishes to make a distribution to stockholders or there is a liquidation event
- As the company begins to issue more senior/junior securities, order and amount of payment takes on increased importance

Control

- Investors seek to protect their investment via exerting control on certain actions of the company
- Control primarily exerted through special rights, board representation and/or consent requirements (voting thresholds)
- Brings up issues of fiduciary duties and minority shareholder rights

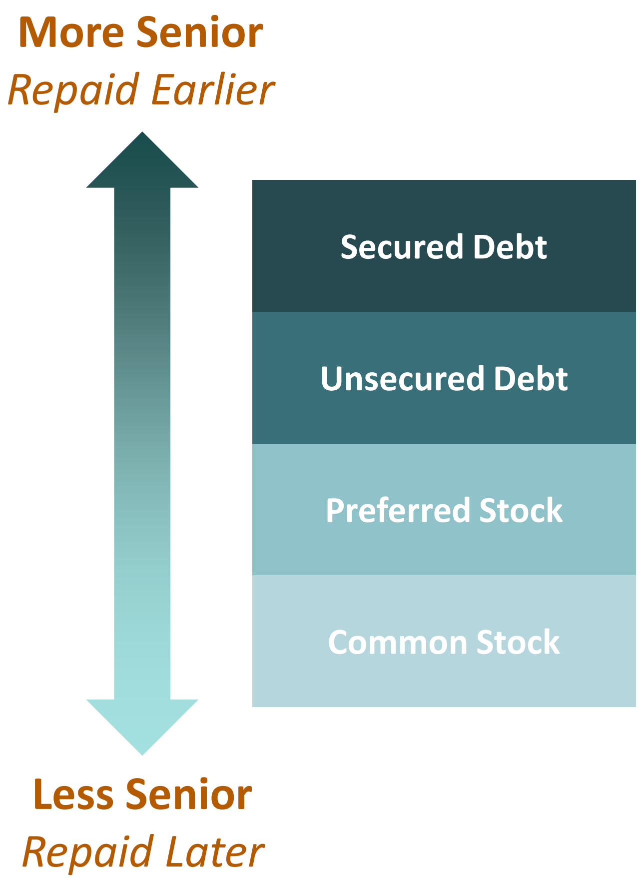
Hint!

All items on the term sheet relate to one or both of these two aspects of company ownership

A proper term sheet should strike a balance between economics and control

Term: Seniority

- If a company undergoes a liquidation event, such as an acquisition or bankruptcy, certain securities rank above others in priority for repayment
  - Senior-most securities receive repayment of their investment first
  - Second-most senior securities are repaid next, followed by third-most, etc.
- Debt is always senior to equity
  - Secured debt is senior to unsecured debt
  - Preferred securities are senior to common shares
- Due to its lower risk profile, senior securities will generally offer lower returns than more junior securities
  - Common stock, typically the least senior security, often offers investors the highest potential return
- Securities with equivalent priority are referred to as being pari-passu
  - Pari-passu is a Latin phrase meaning ‘equal footing’
- Series of stock refers to multiple rounds of financing



In most circumstances, it is preferable to have more senior stock or debt in a liquidation event

Source: Investopedia, Locust Walk analysis.

Term: Dividend

- Preferred securities typically pay a dividend to respective investors to compensate them for the amount of time it takes to get to an exit
- Payment methods:
  - Paid-in-Kind (PIK) – Payment of bonds, notes, or preferred stock, with company paying additional debt or equity instead of cash
  - Cash – Paid when declared in cash
- Dividend types:
  - Cumulative – A sum that must be remitted to preferred shareholders without regard to the company's earnings or profitability
  - Non-cumulative – May be paid to or withheld from shareholders at the company's discretion
- Frequency of payment:
  - Annually, quarterly, or monthly
- Compounding:
  - Annually, quarterly, or monthly

Hint!

Dividends are used to incentivize management to get to a value inflection point as soon as possible!

8% is standard, but both higher and lower rates can be utilized

Source: Investopedia, Locust Walk analysis.

Term: Liquidation Preference

- The liquidation preference is the order in which preferred shares are paid out
  - Determines which investors are paid first and how much each party is paid in a liquidation event
  - Venture capitalists utilize liquidation preference as downside protection in the event of a liquidation at a loss by ensuring they are first to be repaid, and as upside to ensure they are first in line to claim part of the profits in a profitable liquidation event
- Types of liquidation preferences:
  - Non-participating – Liquidation preference is only given over common stock equal to the per share price the investor paid
    - Preferred shareholders must convert their preferred stock into common stock to participate in any investment gain
  - Participating – Investors are able to exercise their liquidation preference and then participate in a pro-rata share of common stock gains
    - Participation provisions may have a cap after a multiple of the invested amount, after which the holder must convert to common stock to participate in further upside

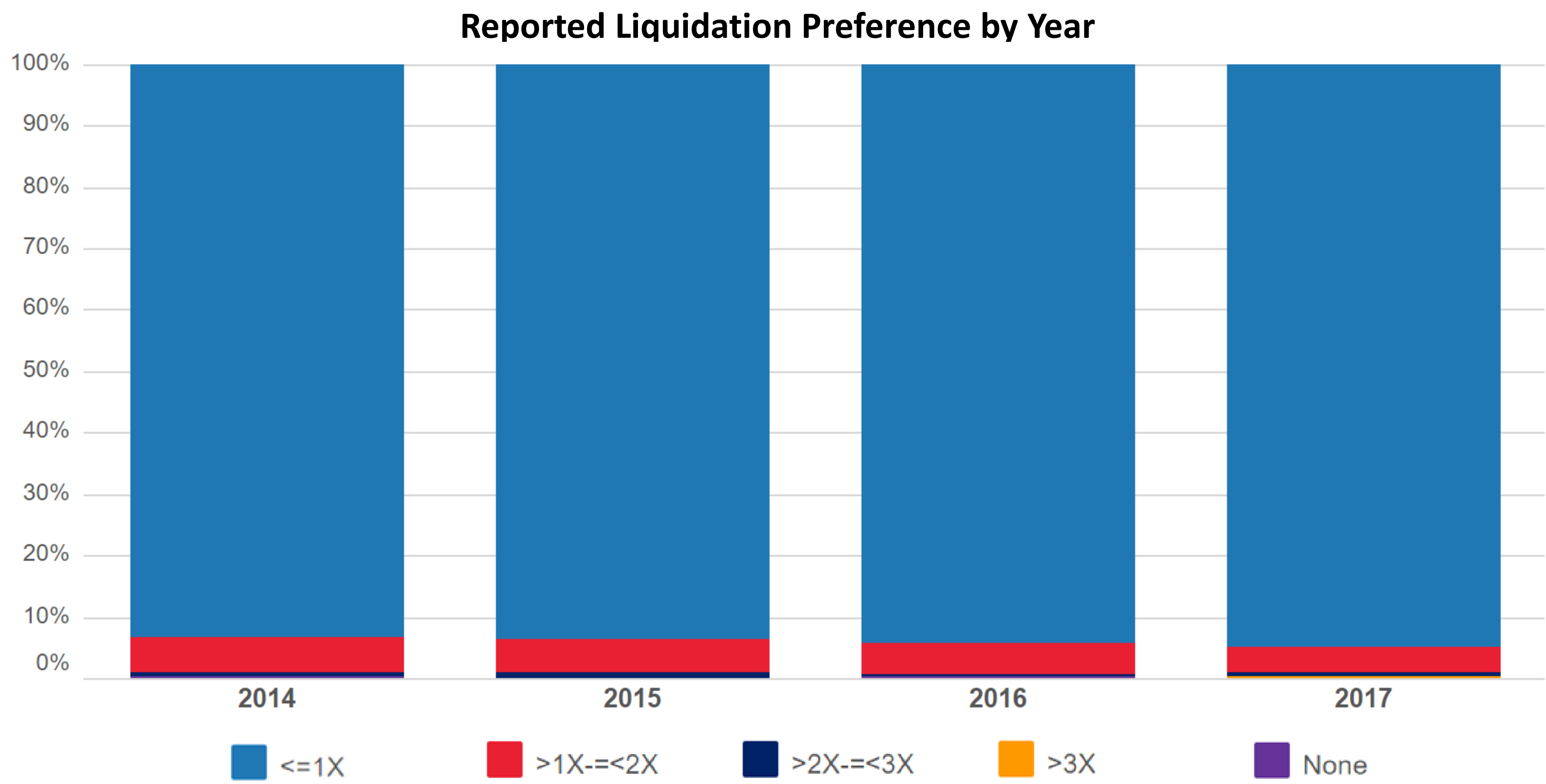
Hint!

VC's believe that their money is more important than an entrepreneur's time. That's why they get paid back first!

**For a marginal exit, the liquidation preferences will matter to both parties.
If the exit is big, these preferences diminish in importance**

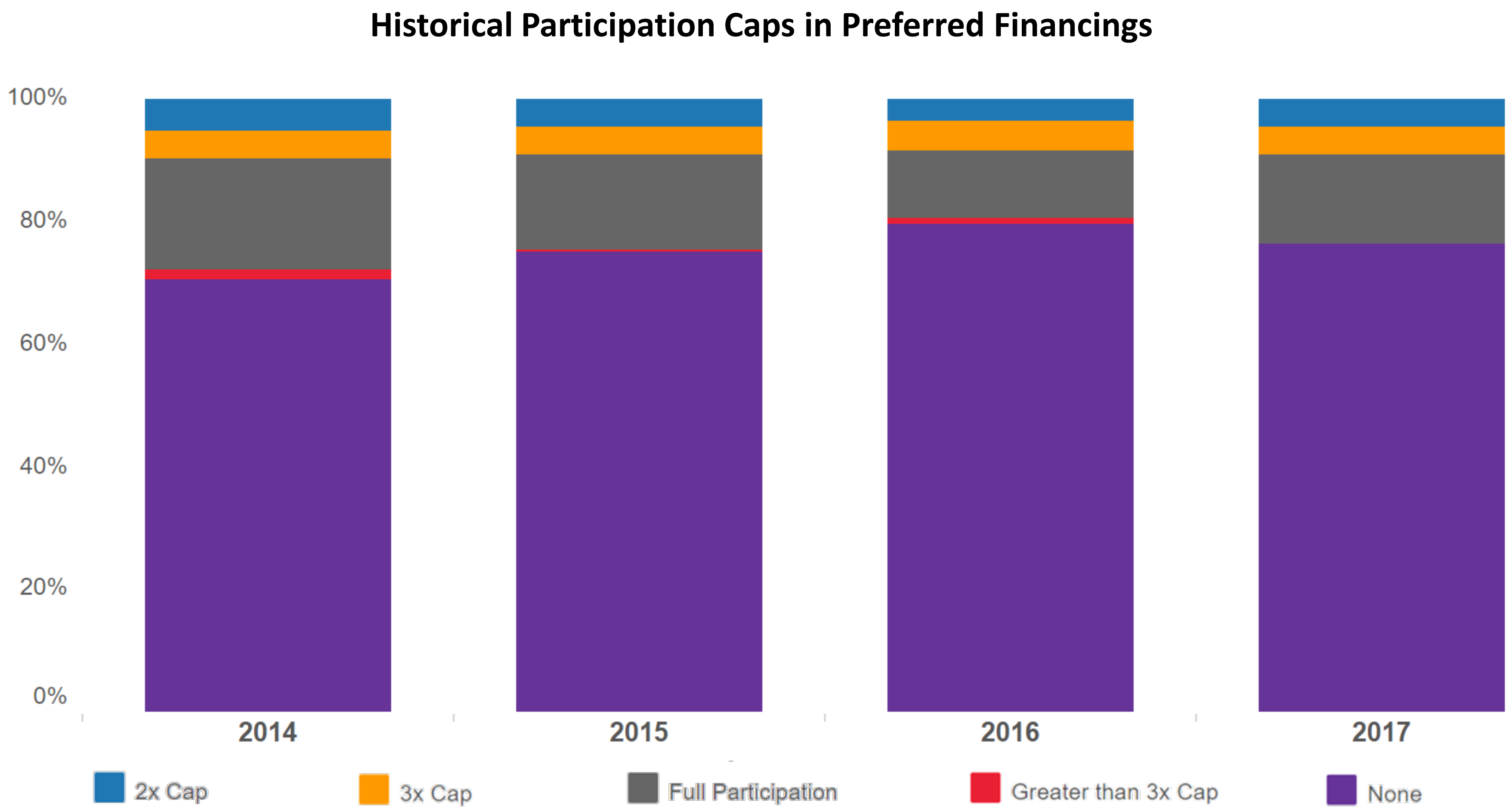
Source: Investopedia, TechStartupLawyer, Forbes, Locust Walk analysis.

The vast majority of venture financings utilized liquidation preferences of ≤ 1x



Source: CooleyGO 2014-2017YTD

Participating preferred is relatively prevalent amongst Series A financings



Source: CooleyGO 2014-2017YTD

Term: Redemption

- Redemption is the return of an investor's principal in a fixed income security, which includes preferred stock
- Repayment of the security is made either at par or at a premium price
- Redemption may be made at or before maturity of the security
- A redemption compelled by the issuer is known as a 'call'
- Most early stage deals don't include redemption terms and rarely are they actually ever utilized

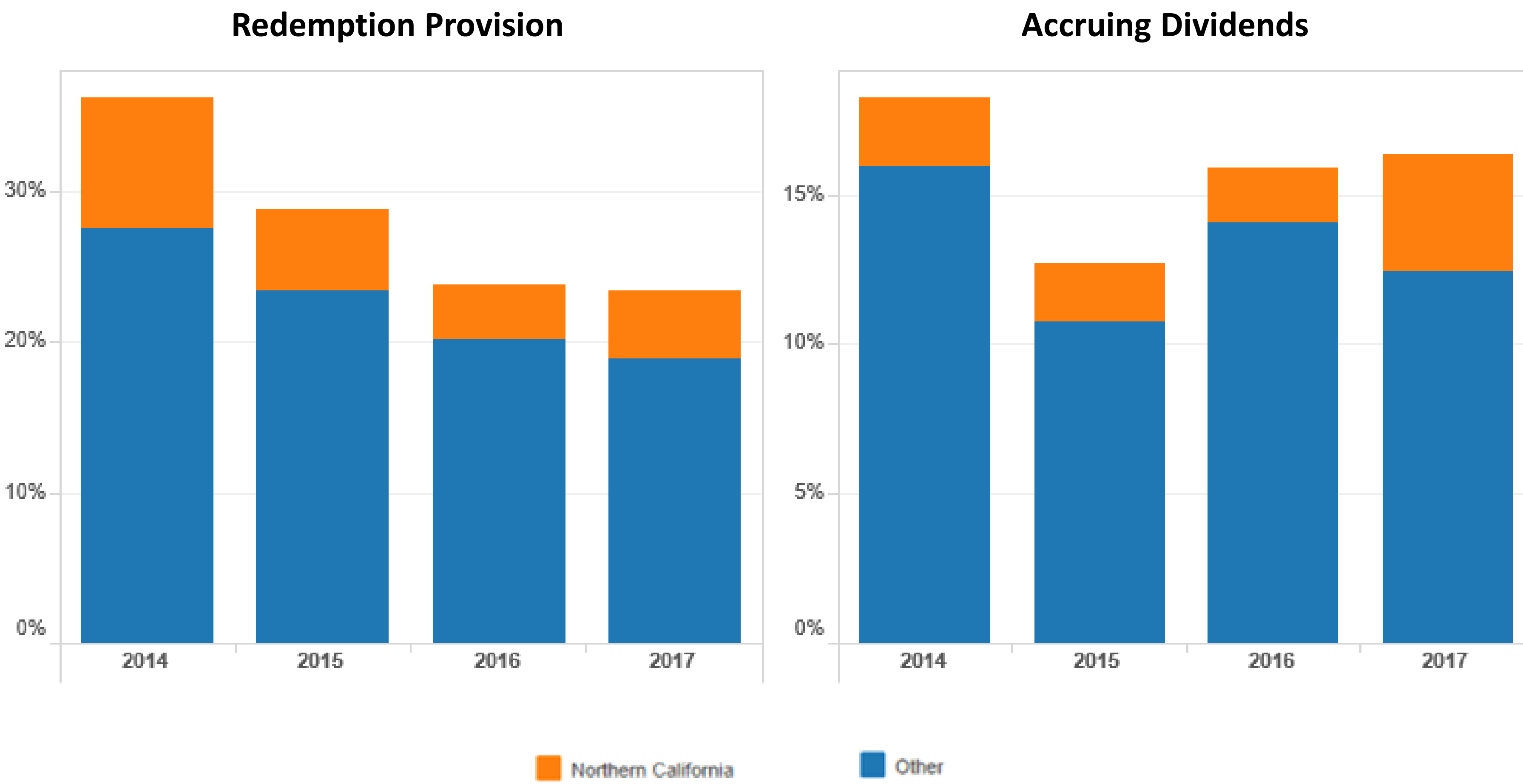
Hint!

If you don't execute fast enough, I want my money back! That is what redemptions are really used for.

This is not often used in practice but can be a point of leverage for investors

Source: Investopedia, Locust Walk analysis.

Usage of redemption provisions has been decreasing since 2014



Source: CooleyGO 2014-2017YTD

Term: Conversion and Pay-to-plays

- Conversion is the exchange of a convertible type of asset into another type of asset
- Conversion is typically executed at a predetermined price and on or before a predetermined date
- The conversion feature is in and of itself a derivative instrument that is valued separately from the underlying security, and so the conversion feature adds to the overall value of the security
- Typically, conversion allows for each share of preferred stock to be convertible into one share of common
  - This ratio may change as the capitalization tables increases in complexity, and as ‘down rounds’ occur
- “Pay-to-play” is a provision in which if preferred shareholders do not participate at a certain level in subsequent financings, their shares will convert to common stock and they will lose all special protections
  - This most often applies to ‘down rounds’

Hint!

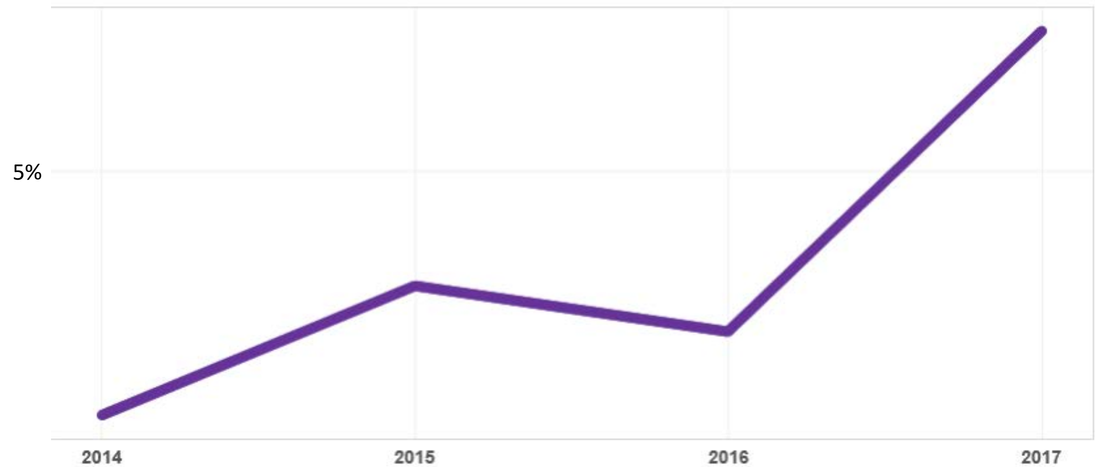
Investors want the greater of their liquidation preference or the pro rata amount owned as if converted to common.

Conversion allows preferred stockholders to gain liquidity, or later VCs to push out early investors in order to gain tighter control of the company

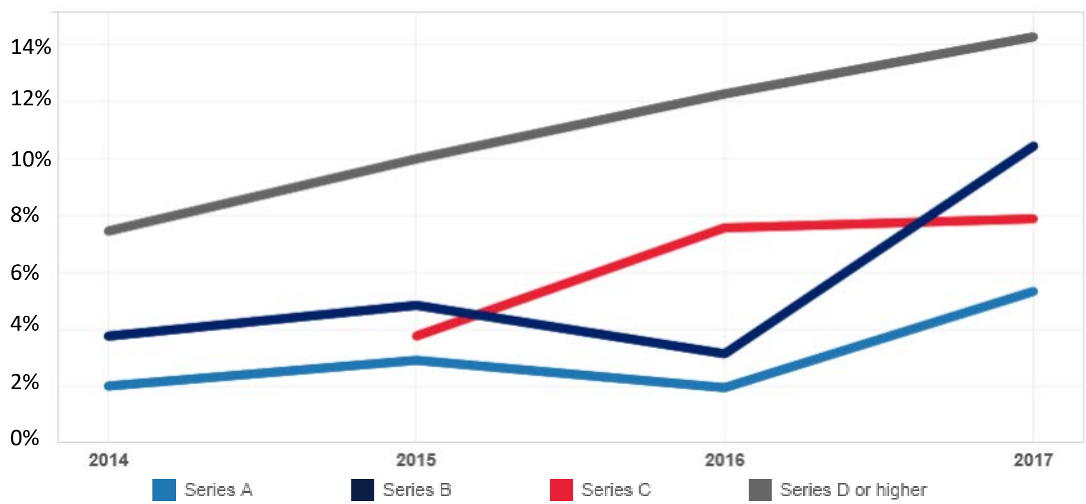
Source: Investopedia, Locust Walk analysis.

Pay to play provisions are included in <10% of deals, and have been more common amongst later stage financings

Pay to Play



Pay to Play by Series



Source: CooleyGO 2014-2017YTD

Term: Anti-Dilution

- An anti-dilution provision grants to the investor the right to maintain a certain percentage of ownership in a company by buying the proportionate number of shares in an future issue of the security
  - Anti-dilution provisions are sometimes referred to as subscription rights, preemptive rights, or subscription privileges
- The role of anti-dilution provisions are to protect investors from a potential dilutive issuance that would otherwise reduce the value of preferred shares
  - Full Ratchet Anti-Dilution – All of the anti-dilution protected round is repriced in the event of a down-round, regardless of size of new issuance
    - This increases the number of preferred shares held by the investor
  - Broad-Based Weighted Average Anti-Dilution – The anti-dilution protected round is repriced in proportion with the volume of outstanding shares plus all shares of common stock obtainable with conversion of other options, rights, etc
  - Narrow-Based Weighted Average Anti-Dilution – The anti-dilution protected round is repriced in proportion with the volume of only currently outstanding securities

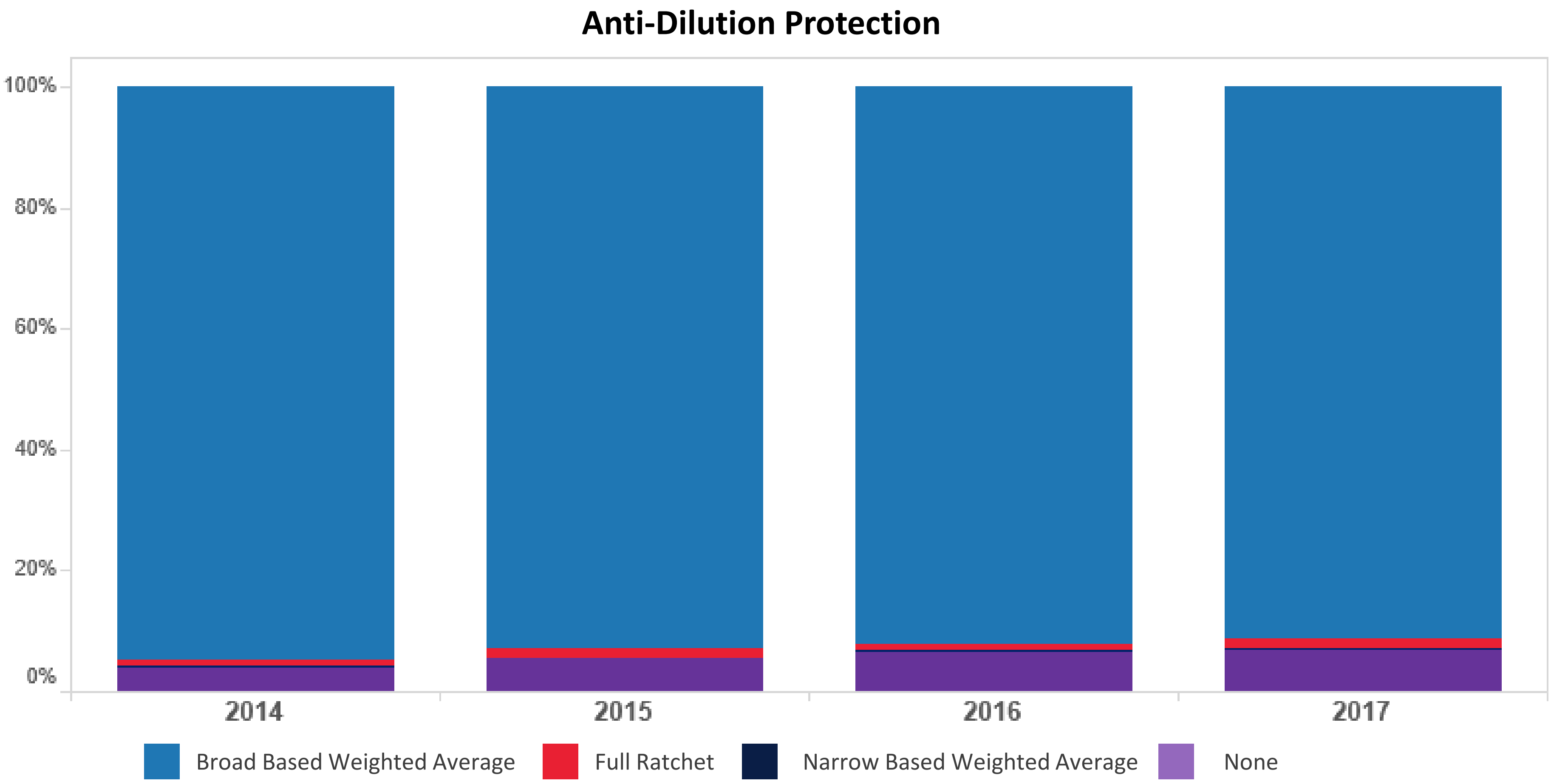
Hint!

If a VC is stupid enough to pay too much for the shares, they want to look smarter by getting compensated in a down round situation.

A full ratchet is often used when a valuation is too high but an investor wants to participate anyway

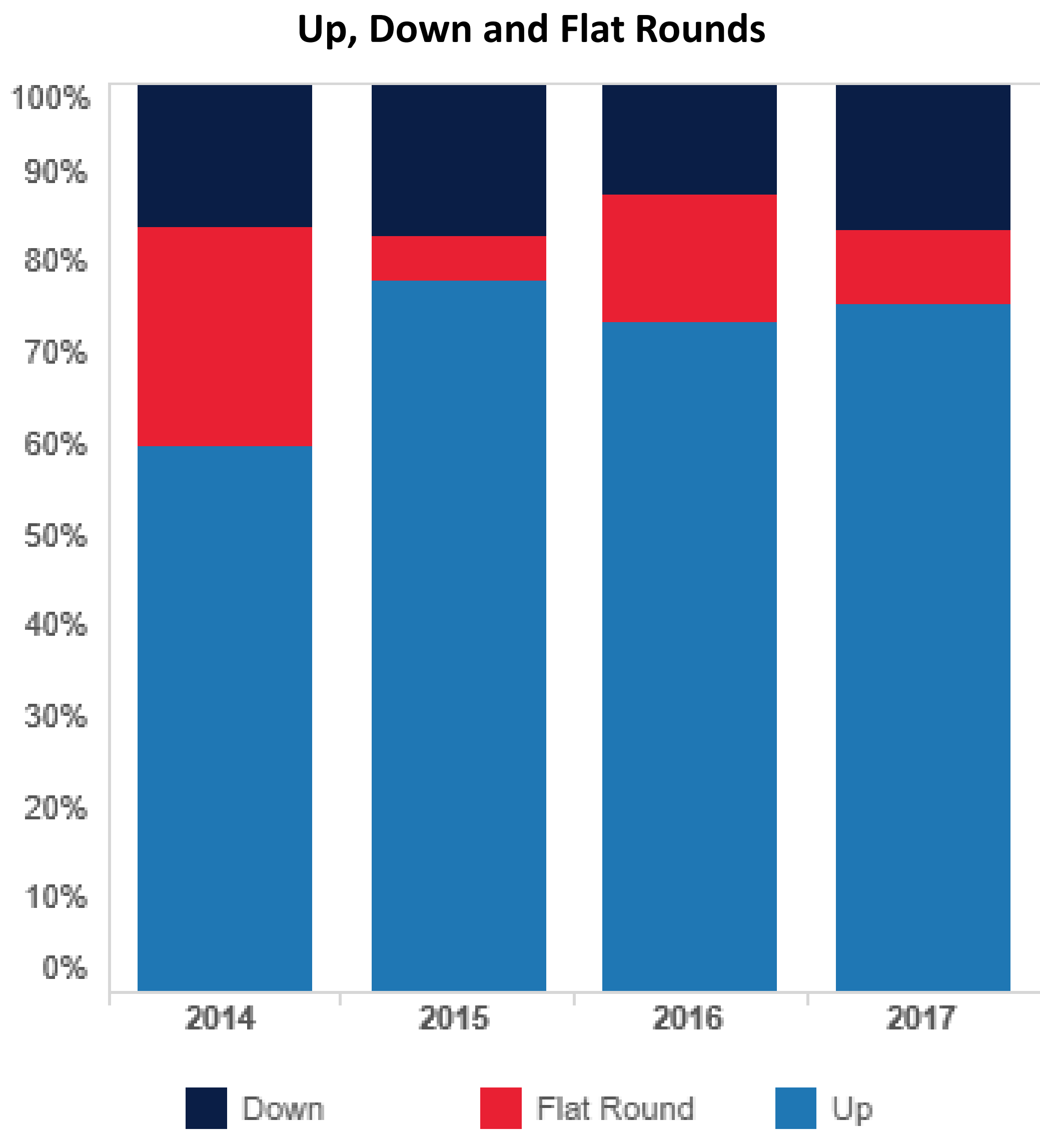
Source: Investing Answers, Feld, Investopedia, Strictly Business, Locust Walk analysis.

The vast majority of financings include broad based weighted average anti-dilution provisions



Source: CooleyGO 2014-2017YTD

The vast majority of recent venture financings are “up rounds”



Source: CooleyGO 2014-2017YTD

Term: Protective Provisions / Voting rights

- Voting rights represent the right of a stockholder to vote on matters of corporate policy, as well as on members of the Board of Directors
- Typically captured in Certificate of Incorporation so senior to any contractual rights (i.e. Voting Agreement)
- Votes are often taken on decisions such as the issuance of securities, the initiation of corporate actions, and the making of other substantial operating changes
- Shareholders do not have to be physically present to vote at the annual meeting, and may vote by proxy, through the mail or otherwise
- Typically, the number of votes granted to a specific shareholder directly reflects the number of individual shares owned but can be class votes

Hint!

Due to fiduciary rules, an investor director may approve an action but same investor can then prevent it via its stockholder votes

Protective provisions are the primary mechanism through which preferred holders exert control

Source: Investopedia, Locust Walk analysis.

Term: Registration rights

- Registration rights entitle investors who own restricted stock the ability to require a company to list the shares for sale on a public market
- If exercised, registration rights can force a privately-held company to become a publicly-traded company
- Registration rights are typically negotiated at the purchase of privately held shares issued by the company
- There are two types of registration rights: demand registration and piggyback registration
  - Demand Registration Rights – Allows the holders of a certain percentage of registrable securities to require that the company register its shares after a certain period of time (typically three to five years post-investment or six months post-IPO)
  - Piggyback Registration Rights – Enables holders of registrable shares to participate in the registration of any other class of shares by the company
- The most important term of registration rights to negotiate is how many times investors may demand registration

Hint!

Investors with substantial ownership need a mechanism to exit the stock in an orderly fashion, and need the ability to have a bank manage the sale.

Typically this is to the company's benefit but has the potential for abuse if not structured properly

Source: Investopedia, Strictly Business, Locust Walk analysis.

Term: Preemptive rights (right of first offer)

- Preemptive rights are a privilege extended to select shareholders that grants the right to purchase additional shares in the company before third parties
- A preemptive right is written in the Investor Rights Agreement between the purchaser and the company, but does not function as a put option
- Ensures that majority or other significant shareholders retain relative voting power
- Right extends to the ability of the shareholders to purchase up to their pro rata share of the new securities being offered to maintain their equity and voting position
  - Purchase is on same terms as company is proposing to offer to third parties
  - Possible to acquire more than pro rata share if not all stockholders exercise their right

Hint!

This allows investors to protect their ownership. Universities ask for this but rarely exercise (Osage University Partners).

This is important for investors to maintain their ownership positions as new capital is invested

Source: Investopedia, Investing Answers, Locust Walk analysis.

Term: Information rights

- Information rights are a provision that grants investors access to company facilities and personnel, as well as the right to receive certain reports
- The information rights provision may limit these rights to only certain investors, such as investors holding a large amount of preferred stock
- The provision typically contains limits to make fulfillment less burdensome to the company, such as limiting access to normal business hours
- Reports covered under the information rights provision include annual and quarterly financial statements, forward looking budgets, expenses, and cash position
  - Other information may include monthly financial statements, quarterly updated cap table, etc
- Information rights are customary in venture capital deals

Hint!

Smaller investors or investors who no longer are participating in funding want to receive information about the company's performance. Typically this information is confidential and not disclosed.

This provision usually doesn't cost a company anything but creates goodwill with investors

Source: Strictly Business, Locust Walk analysis.

Term: Board seats

- The Board of Directors is a group of individuals elected as representatives of the stockholders
- The Board of Directors establishes corporate management policies and makes decision on major company issues
- Public companies *must* have a Board of Directors, and some private companies also have a board
- The board makes decisions on the behalf of shareholders as their fiduciary, and safeguards the financial wellbeing of the company
- Issues under the board's authority may include: executive talent and compensation, dividend and options policies, setting broad corporate goals, executive support, and corporate resource management
- For smaller investors or investors who don't want a board seat, may request Observation Rights – can attend board meetings and participate in discussions, but no right to vote

Hint!

The best functioning boards have 5-7 seats with odd numbers. Too many is unwieldy, too few is not enough diversity of opinion.

Be careful what powers you cede and to whom you cede them

Source: Investopedia, Locust Walk analysis.

Term: Deal expenses

- Deal expenses refer to the costs incurred by an investor while performing due diligence on a company
- Typically, a venture capital firm will expect these expenses to be reimbursed by the company upon investment
- Deal expenses are usually capped, at a level set by an attorney
- Later stage larger company investments have higher expenses than those for earlier stage smaller companies

Hint!

Make sure to have the attorney's on a fixed fee arrangement!

Standard amounts range from $50-100K

Source: Investopedia, Locust Walk analysis.

Term: Drag-along and Tag-along rights

- Drag-along rights enable a majority shareholder to force a minority shareholder to join in a transaction
  - The minority shareholder must be granted the same price, terms, and conditions as any other seller
  - Drag-along rights are designed to protect the majority shareholder
  - These rights help to eliminate minority owners and sell 100% of a company's securities to the buyer
- Tag-along rights enable a minority shareholder to join a transaction along with a majority shareholder
  - Tag-along rights effectively oblige the majority shareholder to include the holdings of a minority shareholder in negotiations
  - These rights are designed to protect a minority shareholder

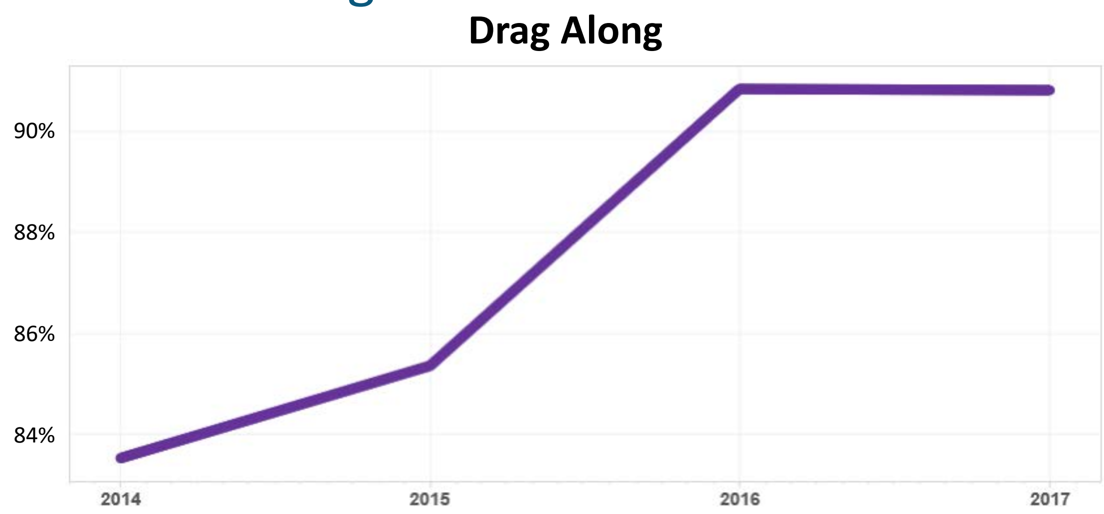
Hint!

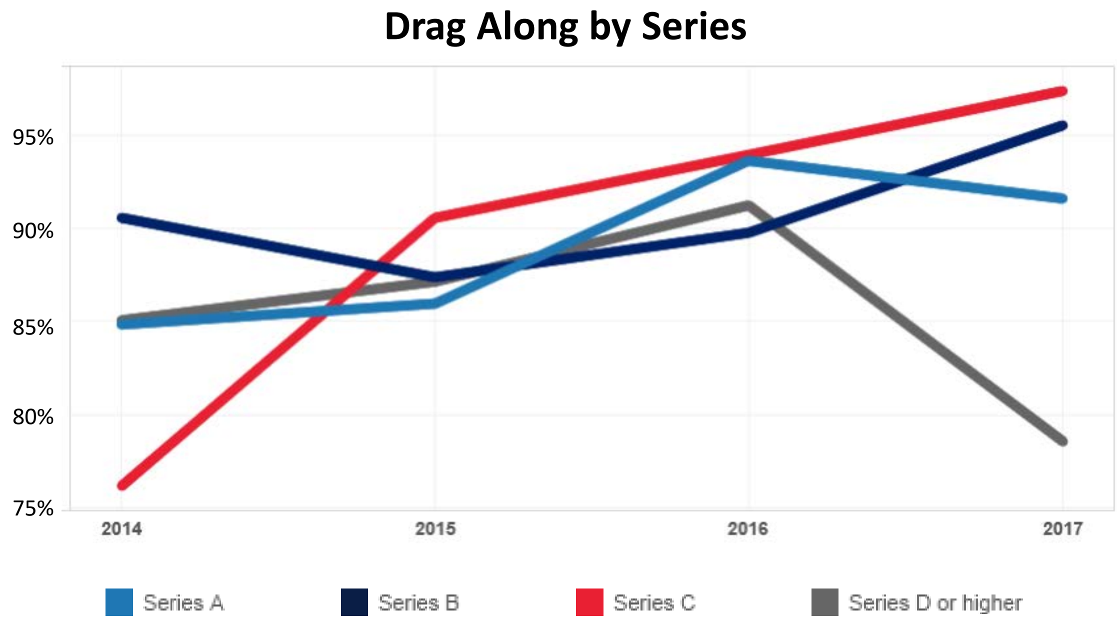
This should not be controversial. Investors will ask and companies will accept.

These are standard protections for investors in closely held businesses without access to liquidity

Source: Investopedia, Locust Walk analysis.

Drag-along rights are highly prevalent and increasing in frequency across the early rounds of financing





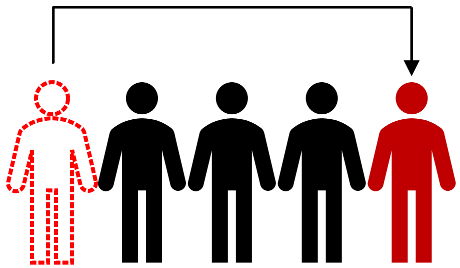
Source: CooleyGO 2014-2017YTD

Right of First Refusal and Co-Sale

- Contractual rights captured in the Right of First Refusal and Co-Sale Agreement
- Right of first refusal provides first the company and then the preferred holders the right to acquire any shares of stock being sold by management/large common stock holders (typically holders of ≥1% of outstanding stock) on the same terms as agreed to by a third party
  - Restrains ability of management/large common holders to gain liquidity since requires premium on equity
  - Can also apply to certain preferred holders but rare
- Co-sale rights provide preferred holders the right to sell their shares in replacement and on the same terms as management/large common stock holders
  - Serves as constraint on common holders to get liquidity since if terms are really good, preferred holders can sell instead
  - Have to sell same class of security as in original offer

Hint!

Standard contractual rights are important for management to negotiate carve-outs from inclusion.



Intended to constrain ability of outside investors to join investor base and ability of other investors to gain liquidity separate from others

Conditions to closing

- A list of necessary actions that must occur before the investor is required to fund
- Includes items such as:
  - Employee agreements, including vesting agreements or IP transfer agreements
  - Confirmation of reps and warranties and compliance certificate
  - Proof of board/stockholder approval and filing of Restated Certificate of Incorporation
  - Board composition confirmation
  - Execution of shareholder documents
  - Opinion of counsel
- Intended as final checklist to ensure nothing slipped through the cracks based on what was included in the term sheet or discovered in further diligence

Hint!

Closing conditions reveal the items the investor is most concerned about to ensure everything is properly in order before the money is sent

Contained in the Stock Purchase Agreement, the closing conditions are a final checklist for a financing

Term: Exclusivity Period (No-Shop)

- An exclusivity period is a length of time, typically 30–60 days, during which a company is prohibited from carrying out or furthering activities relating to the other capital raising activities other than the prospective investors with whom they have signed a term sheet
- Scope and duration of the exclusivity period will vary, with specifications and regulations written into each specific term sheet
- Periods of exclusivity signal ZOPAs, weaken BATNAs, and sets a clear deadline for negotiations
  - ZOPA – Entering into a period of exclusivity signals that both sides of the table believe there is a Zone of Possible Agreement, or ZOPA
  - BATNA – Agreeing not to negotiate with any third parties weakens an organizations Best Alternative to a Negotiated Agreement, or BATNA
  - Negotiations Deadline – The exclusivity period forces one or both parties to put forth their best and final offer before the end of the exclusivity period
- Exclusivity typically has an imbalanced effect in favor of the investor and to the detriment of the company

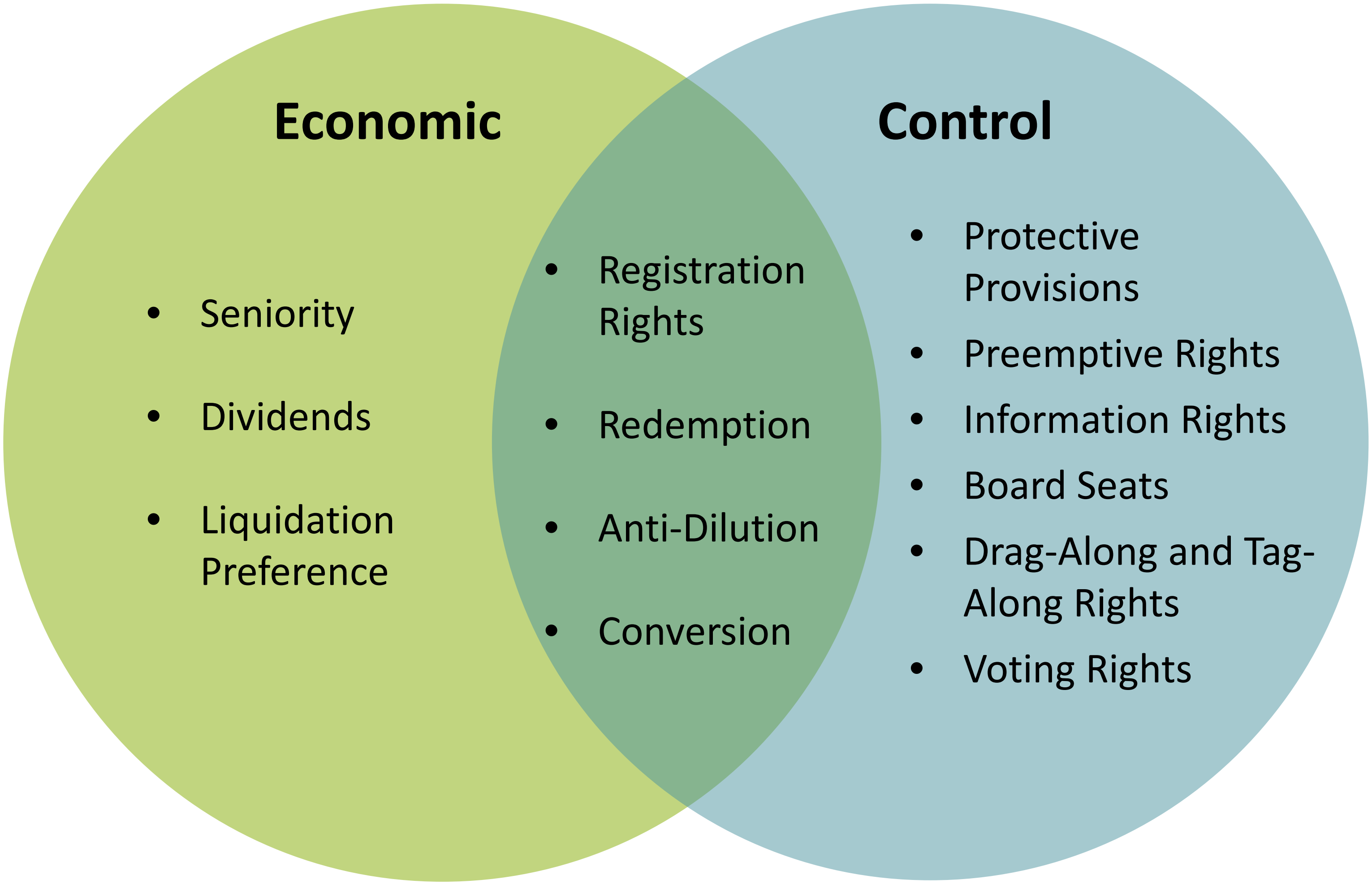
Hint!

Make sure you like the investor and the deal before signing this provision. They are enforceable.

Why would investors ask for this?
To protect themselves from doing a lot of work and then getting closed out from a deal

Source: Harvard Law, Divestopedia, Locust Walk analysis.

Each item on the term sheet relates to shareholders' economic benefit and/or control status



Upcoming Locust Walk Institute webinar topics

Topic	Speaker
BioPharma Partnering in Japan	Steven Engen, Managing Director Japan
BioPharma Partnering in Europe	Philipp von Gallwitz, VP Europe
MedTech Business Development Best Practices	Hunt Henrie, Managing Director Medtech

*Please let us know other topics you would like to see covered in future webinars. Email maria@locustwalk.com and we will try to accommodate your request.