Venture Capital Transactions:

Caps on Participating Preferred and the "Zone of Indifference"

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Introduction: Participating Preferred Stock

The preferred stock in many venture capital transactions is "participating". Upon a sale of the company, participating preferred stock entitles the holder to receive both (i) the original purchase price paid per share, plus any accrued dividend (the "liquidation preference amount"), and (ii) such shareholder's *pro rata* percentage of any remaining consideration calculated on an as-converted to common stock basis (the "as converted amount"). Relative to non-participating preferred, upon an acquisition, participating preferred can result in a shift of substantial purchase price away from the founders and other holders of common and to the preferred stock-holders. To counterbalance this affect, venture investors will often agree to "cap" the participating preferred return.

While the cap will in certain circumstances reduce the impact of participating preferred on common stockholders, it can have the unintended consequence of creating a substantial range of purchase price over which the holders of preferred stock are indifferent — for purposes of this discussion what is called the "zone of indifference." It is important for preferred and common stockholders alike to understand this concept as it could well influence the way in which various shareholder groups assess the attractiveness of an acquisition offer. This article describes the basic economics of participating preferred stock, the concept of a "cap," and the resulting zone of indifference that this cap can create.

Participating Preferred Example

A simple example of how proceeds are distributed upon a change in control illustrates the economics of participating preferred. Assume Newco raised $10,000,000 in a Series A venture financing, and after the financing the venture investor owns 40% of the issued and outstanding capital stock of Newco on an as-converted to common stock basis. If Newco is subsequently sold for $60,000,000, the venture investor would be entitled to receive its liquidation preference amount of $10,000,000 off the top, plus an as-converted amount equal to 40% of the remaining $50,000,000, or an additional $20,000,000. This translates into total proceeds of $30,000,000 distributed to the venture investor — a 3X return. The common stockholders would receive the rest of the proceeds, or $30,000,000.

As a result of the participating feature, the venture capital investor would receive 50% of the proceeds even though it owns only 40% of the capital stock as converted. In contrast, if the preferred stock were non-participating, the venture capital investor would be entitled to only 40% of the total proceeds, or $24,000,000. In this example, the participating feature has the effect of shifting $6,000,000 of the proceeds away from the founders and other common stockholders and to the preferred stockholders.

Purpose of Participating Preferred

Many investors view this participation feature as downside protection — a mechanism intended to enhance the preferred stock return in the event of a disappointing outcome. If the acquisition consideration of Newco is low, but still exceeds the total invested capital, then the right to share on a *pro rata* basis in the amount in excess of invested capital allows the investors a return, albeit a modest one.

For example, if Newco were sold for $15,000,000 rather than $60,000,000, in the absence of the participation feature the investors would just be entitled to receive their invested capital back and would realize no return on the investment. But with the participating feature they would receive $10,000,000 plus 40% of $5,000,000, for a total of $12,000,000, resulting in a 20% return on capital. The participating feature can also boost a return significantly in situations where the return to investors might be considered healthy even in the absence of this right. In the example above, where Newco is sold for $60,000,000, the participation right boosted the return from 2.4X to 3X.

Introduction of a Cap

When boosting an already healthy return is not the intended purpose of the participation right, venture capital transactions are structured so that once the investor's total return on invested capital equals or exceeds a certain agreed upon "cap", the investors are entitled to either (i) the cap amount, or (ii) the amount they would receive if the preferred stock were non-participating and they were only entitled to participate in the total proceeds alongside common stockholders on an as-converted to common stock basis. This approach reduces the dilutive impact on the founders and other holders of common stock. The "cap" is a dollar amount typically expressed as a multiple of the original investment. To continue the example above, if the Series A preferred stock was participating, but subject to a 2X cap, then the investors would be entitled to either (i) $20,000,000 — 2X the initial investment, or (ii) 40% of the total proceeds. At a sales price of $60,000,000, the investors would choose the latter, or $24,000,000.

Zone of Indifference

As a result of this cap, the venture investors would receive the exact same amount between a range of purchase prices. In the example above, the investors' would receive the same amount — $20,000,000 — between $35,000,000 and $50,000,000. That is because the cap of 2X invested capital will be achieved at an acquisition price of $35,000,000. At this acquisition price, the venture investors will be entitled to receive their liquidation preference amount, or $10,000,000, plus their as-converted amount, or $10,000,000, for a total of $20,000,000 which is exactly 2X the invested capital. As stated above, once this cap is hit, the investors may choose in the alternative to receive their as-converted amount. However, their as-converted amount will not reach $20,000,000 until the total pur- chase price is $50,000,000. Because of this, the amount the investors would receive is exactly the same between $35,000,000 and $50,000,000. This is a $15,000,000 "zone of indifference".

Basic Formula

The zone of indifference for a particular series of preferred stock subject to a cap can be easily calculated. It can be expressed as the difference between X and Y where X is the value at which the as-converted percentage of the total purchase price equals the cap, and Y is the value at which the investors allocation of the total purchase price calculated on a participating basis equals the cap. Solving for the values of X and Y that satisfy this relationship reduces to the following two formulae:

X = Cap/(As Converted % Represented by the Preferred Stock)

Y = (Cap – Liquidation Preference Amount + (As Converted % Represented by

> the Preferred Stock * Liquidation Preference Amount))/As Con- verted % Represented by the Preferred Stock

Applying this to the above example:

> X = $20,000,000/(40%) = $50,000,000
>
> Y = ($20,000,000 – $10,000,000 + (40% * $10,000,000))/40% = $35,000,000
>
> X – Y = $15,000,000

Conclusion

As described above, a cap on participating preferred can create a wide range of acquisition prices over which a venture capital investor is indifferent. While the purpose of the cap is to minimize the dilutive impact on common stockholders that would otherwise result from uncapped participating preferred, the cap does have the unintended consequence of creating this "zone of indifference." It is important for stakeholders — members of the board of directors, founders and other common stockholders, and preferred stockholders alike — to understand this zone of indifference and the impact it may have on decision making dynamics of shareholders when presented with an offer to be acquired. In the above example, the investors acting in their capacity as stockholders are truly indifferent to the economics of any transaction between $35,000,000 and $50,000,000. This being the case, it would be reasonable to assume that a venture investor might be less inclined to push a negotiation with a potential acquirer with the same zeal as founders and other common stockholders in order to extract greater value between these two numbers.

For more information about caps on participating preferred stock, please contact **Jonathan D. Gworek**.