

WEIGHTED AVERAGE ANTI-DILUTION PROTECTION

Get out your calculator

By Frank Demmler

An investor in any given round of financing is concerned that the next round could be at a lower price per share than what he is paying this round. Therefore, the investor will insist upon anti-dilution protection.

If pressed for justification, the investor may explain that if the value of a company declines between rounds, management must be largely responsible. The investor maintains that he shouldn't be penalized for management's deficiencies.

There are two common types of anti-dilution protection: full ratchet and weighted average.

Last week's article examined full ratchet anti-dilution protection. This week we will look at weighted average anti-dilution protection.

WEIGHTED AVERAGE ANTI-DILUTION PROTECTION

Unlike full ratchet anti-dilution protection that is effectively a "do-over," weighted average anti-dilution protection gives consideration to the relationship between the total shares outstanding as compared to the shares held by the original investor.

A reminder, investors purchase preferred stock that is convertible into common stock. Initially the conversion is on a one-to-one basis, or at the same share price as that paid for the preferred stock. Anti-dilution protection is implemented by adjusting the conversion price.

The legal language that is used in a term sheet to say this is:

In the event that the Company issues additional securities at a purchase price less than the current Series A Preferred conversion price, such conversion price shall be adjusted in accordance with the following formula:

$CP_2 = CP_1 * (A+B) / (A+C)$, where:

CP_2 = New Series A Conversion Price

CP_1 = Series A Conversion Price in effect immediately prior to new issue

A = Number of shares of Common Stock deemed to be outstanding immediately prior to new issue (includes all shares of outstanding common stock, all shares of outstanding preferred stock on an as-converted basis, and all outstanding options on an as-exercised basis; and does not include any convertible securities converting into this round of financing)

B = Aggregate consideration received by the Corporation with respect to the new issue divided by CP_1

C = Number of shares of stock issued in the subject transaction

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Let's look at how this works.

THE FIRST ROUND

Let's go back to our example transaction.

- I offer to invest \$400,000 in your company in exchange for 40% of it.
- Since you own all 600,000 shares of your company, I am offering to buy 400,000 new shares in order to acquire 40%.

- My investment of \$400,000 divided by 400,000 shares that I'm buying yields a per share price of \$1.00.
- Since you own 600,000 shares, that means the value of the stake in your company is \$600,000, which is the pre-financing value.
- Adding my \$400,000 to that yields a post-financing value of \$1,000,000.
- That is confirmed by taking the total number of outstanding shares, 1,000,000 (your 600,000 and my 400,000) and multiplying that by the share price of \$1.00.
- That also says that the post-financing value of your company is \$1,000,000.

	Investment	Price per Share	Shares	%	Post-Financing Value
You			600,000	60.00%	\$ 600,000
Investor 1	\$ 400,000	\$1.0000	400,000	40.00%	\$ 400,000
Anti-dilution protection			0	0.00%	\$ -
Investor 1 subtotal			400,000	40.00%	\$ 400,000
Investor 2			0	0.00%	\$ -
Investor subtotal			400,000	40.00%	\$ 400,000
Total			1,000,000	100.00%	\$1,000,000

There's one difference this week. The terms of this deal include **weighted average anti-dilution protection**.

THE SECOND ROUND

It's time to raise some more money. Unfortunately, the only investment offer you are able to attract is at a lower price per share than the prior round.

Without anti-dilution protection, the deal would proceed:

- The new investor offers to invest \$500,000 for 50% of your company.
- If 50% of the company is worth \$500,000, then the total company must be worth \$1,000,000.
- Since there are 1,000,000 shares outstanding today and they will represent 50% of the company after the financing, then the new investor is buying 1,000,000 shares.
- The \$500,000 investment divided by 1,000,000 shares yields a share price of \$0.50.
- Since I paid \$1.00 per share, I'm not happy. In fact, the 400,000 shares that I paid \$400,000 for are now worth \$200,000 (400,000 shares X \$0.50 per share).
- The value of my investment has been diluted.
- In addition, the percent of the company I own has decreased (been diluted) from 40% to 20%.
- By the same reasoning, your equity stake is now only worth \$300,000, and you've only got \$500,000 of investor's money to keep your business alive.

	Investment	Price per Share	Shares	%	Post-Financing Value
You			600,000	30.00%	\$ 300,000
Investor 1	\$ 400,000		400,000	20.00%	\$ 200,000
Anti-dilution protection					
Investor 1 subtotal			400,000	20.00%	\$ 200,000
Investor 2	\$ 500,000	\$0.5000	1,000,000	50.00%	\$ 500,000
Investor subtotal			1,400,000	70.00%	\$ 900,000
Total			2,000,000	100.00%	\$1,200,000

BUT I do have anti-dilution protection, so the deal will have needs to be adjusted.

THE ADJUSTMENT – SCENARIO #1

With anti-dilution protection, the deal would proceed:

- The new investor offers to invest \$500,000 for 50% of your company.

Let's enter the values for the variables in the weighted average anti-dilution formula:

$CP_2 = CP_1 * (A+B) / (A+C)$, where:

CP_2 = New Series A Conversion Price

CP_1 = \$1.00

A = 1,000,000

B = 500,000

C = 1,000,000

$CP_2 = \$1.00 * (1,000,000 + 500,000) / (1,000,000 + 1,000,000)$

$CP_2 = \$1.00 * (1,500,000) / (2,000,000)$

$CP_2 = \$0.75$

So, with my conversion price being reduced from \$1.00 to \$0.75, my 400,000 shares of preferred stock will convert into 533,333 shares of common stock. Weighted average anti-dilution protection has given me the rights to 133,333 shares of common stock.

	Investment	Price per Share	Shares	%	Post-Financing Value
You			600,000	28.13%	\$ 300,000
Investor 1	\$ 400,000		400,000	18.75%	\$ 200,000
Anti-dilution protection		\$0.7500	133,333	6.25%	\$ 66,667
Investor 1 subtotal			533,333	25.00%	\$ 266,667
Investor 2	\$ 500,000	\$0.5000	1,000,000	46.88%	\$ 500,000
Investor subtotal			1,533,333	71.88%	\$ 766,667
Total			2,133,333	100.00%	\$1,066,667

Are we done? Maybe. Maybe not.

- **Deals are negotiated with percentages, but are structured with shares.**

THE ADJUSTMENT – SCENARIO #2

Remember the first element of the deal:

- **The new investor offers to invest \$500,000 for 50% of your company.**

Does that mean before, or after, consideration of the shares associated with the anti-dilution protection? If the former, then the solution found above is correct.

If the latter, then we have to put the “Iterate” function of our spreadsheet to work again (as we did last week with full ratchet anti-dilution protection).

	Investment	Price per Share	Shares	%	Post-Financing Value
You			600,000	25.38%	\$ 253,846
Investor 1	\$ 400,000		400,000	16.92%	\$ 169,231
Anti-dilution protection		\$0.6875	181,818	7.69%	\$ 76,923
Investor 1 subtotal			581,818	24.62%	\$ 246,154
Investor 2	\$ 500,000	\$0.4231	1,181,818	50.00%	\$ 500,000
Investor subtotal			1,763,636	74.62%	\$ 746,154
Total			2,363,636	100.00%	\$1,000,000

This yields a transaction price per share of \$0.4231, instead of \$0.50. My conversion price has become \$0.6875, instead of \$0.75 and the number of common stock shares to which I have rights has increased from 533,333 shares to 581,818 shares.

THE INVESTOR OUTCOME

The new investor buys 50% of the company (or almost 50%, depending upon the scenario that’s been selected).

I get rights to less than 200,000 shares of common stock as a result of weighted average anti-dilution protection. That’s something, but pretty modest when compared to the 2,001,000 shares that resulted from full ratchet anti-dilution protection.

YOUR OUTCOME

Just as in the case of full ratchet anti-dilution protection, all of these adjustments have occurred to the investors’ positions. What happens to you?

It isn’t pretty. As the number of shares for the investors ratchet higher and higher, your number of shares remains constant at 600,000.

Your share of your company is in the range of 25-30%, compared to 10% with full ratchet!

The value of your shares has dropped to less than \$300,000, which is better than \$100,000 in the full ratchet case! You have paid a price for the down round, but not to the extreme of full ratchet anti-dilution protection.

RECAP

An investor in any given round of financing is concerned that the next round could be at a lower price per share than what he is paying this round. Therefore, the investor will insist upon anti-dilution protection.

Weighted average anti-dilution protection is more friendly to entrepreneur than full ratchet anti-dilution protection.

Next week we'll look at the practical implications of the forms of anti-dilution protection.

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