

'Up-the-Ladder' Warrants

(Provided by [VC Experts](#) – enter “VCLocator” at the [invitation screen](#) for a 10% discount.)

High net worth individuals ("angels") play an increasingly important roll in emerging growth finance. Some estimates, particularly from the influential book [Angel Investing](#) put the relationship of angel capital to early stage investments by professional VCs at 5 to 1... five dollars of angel capital going into promising start ups for every one dollar of VC investment.

Angels, at least those who opt to make serious investments, are faced with a variety of problems, however. Traditionally, the most affluent have enlisted as LP's in professionally managed private equity funds (VC funds), sometimes negotiating for co-investment privileges in order to reduce the "carry" and management fees and to participate in direct investments. The major issue inherent in that mode is significant transaction costs. Accordingly, a number of angels have focused on "non- promoted direct investments," buying securities directly in the operating companies themselves. The major problem in this context is that the market for angel capital is colossally inefficient. If the angel is not beguiled into favoring deals randomly encountered (from the college roommate or brother-in-law, etc.), then the challenge is to access a competitive deal stream. However, it has historically been difficult for any one individual to obtain the necessary exposure, although angel clubs like the Band of Angels in Palo Alto and the Common Angels in Boston have attempted to ease this problem.

Further, some intermediaries have adopted business models aimed at bringing about efficiencies. The general theme is to enable angels to structure a portfolio which is, all other things being equal, competitive with what they would otherwise achieve as limited partners in a professionally managed private equity fund ... and this initiative deserves a hard look. The transaction costs are much lower for a structured, non-promoted portfolio than for an LP interested in a private equity fund, where twenty percent comes off the top in the person of the [carried interest](#) (which is often closer to 25%) in favor of the general partner, plus management fees and expenses which approximate an annual five percent ($2.5\% \times \text{Committed Capital}$ equals, typically, 5%, plus or minus, times capital actually deployed).^[1]

This analysis is somewhat disingenuous, however, because a private equity fund has two very significant advantages over an angel investor, the first being obvious ... full time professionals making the investment. The angels may feel, to be sure, that their direct, hands-on involvement can neutralize that factor. The second advantage, however, is hard for any angel (ex-Paul Allen) to neutralize. Thus, angels tend to make a one-time investment. They may have pre-emptive rights but the private equity fund has greater resources and can participate, while angels typically can or will not, in later rounds, some of which may be 'down rounds.' Accordingly, on behalf of its limited partners, the private equity fund may well have superior returns because it has been able to preserve its percentage interest in the most promising deals by participating in the later rounds, rounds which may well be unavailable to the angels because, at the point in time when the round is presented, they do not have the spare cash.

To try to help in that regard, we have been conjuring with a piece of financial engineering, building the same into the template deal structure as follows: Warrants

in favor of the angel investors at significant step-ups from the current valuation, which we label for the moment as '[up-the-ladder warrants](#).' To see how the structure works, consider the following example:

Let's say the angels are investing \$1,000,000 in 100,000 shares (\$10 per share) at a [pre-money valuation](#) of \$3 million, resulting in a post money valuation of \$4 million (\$1 million going into the Company). We suggest angels obtain 100 percent warrant coverage, meaning they can acquire three warrants, totaling calls on another 100,000 shares of the Company's stock; but, so as not to scare off subsequent venture capitalists, the exercise prices of each warrant will be based on pre-money valuations which are relatively heroic... win/win valuations, if you like. For the sake of argument, the exercise prices could be set at \$30, \$40 and \$50 a share (33,333 shares in each case).

The warrants would be available for (i) the founders; (ii) angels and (iii) another category of investors which has been discouraged by the fact that dilution eats up their potential profits upon a liquidity event ... *i.e.*, universities and teaching hospitals.^[2]

Let's use a hypothetical example to see how this regime could work. Since the angels have invested \$1 million at a post-money valuation of \$4 million, they therefore own 25 percent of the Company ... 100,000 shares out of a total of 400,000 outstanding. The three warrants, as stated, are each a call on 33,333 shares. Subsequent down rounds raise \$2,000,000 and dilute the angels' share of the Company's equity from 25 percent to 5 percent ... their 100,000 shares now represent 5 percent of 2,000,000 shares (cost basis still \$10 per share) and the down round investors own 1,900,000 shares at a cost of \$1.05 per share (assume only one down round). Finally, assume the Company climbs out of the cellar and is sold for \$100 million in cash, or \$50 per share.

Absent 'up-the-ladder warrants' the proceeds to the angels would be \$5 million ... not a bad return (5x) on their investment but, nonetheless, arguably inconsistent with the fact that the angels took the earliest risk. The 'up-the-ladder warrants' add to the angels' ultimate outcome (and we assume cashless exercise or an SAR technique, and ignore the effect of taxes) as follows: 33,333 warrants at \$20/share are in the money by \$666,666 and 33,333 warrants at \$10 a share are in the money by \$333,333. However, the number of shares rises to 2,066,666 and the buy-out price per share falls to \$48.39, meaning the angels get another \$731,136. The angels' returns have increased 18% while the VCs' returns have fallen 3%. From the 'down round' investors standpoint, the result is relatively harmless. Without the 'up-the-ladder warrants,' for an investment of \$2 million they would get back \$95 million, or 47.5 times their money. With the 'up-the-ladder warrants,' you take out another \$731,176, which the angels obtained by virtue of their warrants, and result is over 47.0 times their investment. Thus, the slippage is relatively trivial. Granted, it is not clear why the angels should get any warrants if all the subsequent rounds are 'up' rounds or in the unlikely event there are no subsequent rounds at all. The fix for that problem is simple enough; the warrants are only triggered if the angels are in fact diluted to less than, say, 50 percent of their original holding, and in a down round or rounds.

This technology is not, as yet, a "market" term in angel investing and remains to be beta tested. In that regard, we welcome your feedback concerning ["Up-The-Ladder" warrants](#).

[1] By way of contrast, the angel customers of a typical matching service may pay \$1000 a year, and success fees and warrants to the agent add costs but nowhere in the range of VC fund fees. Thus, if one were to invest \$1 million as a limited partner in a private equity fund and the fund were to achieve a three-times return to the limited partners over a five year period, returning \$4 million on a \$1 million investment, the returns to the limited partners are \$4 million, minus \$1 million in cost basis, or \$3 million, minus twenty percent (\$600,000) to the general partner and minus \$250,000 (\$50,000 a year in management fee and expenses times five), for an overall profit to the limited partner of \$2,150,000. With a diversified portfolio of \$1 million worth of direct investments, the angel might pay, first, \$5,000 (\$1,000 per year) to the matching service; the deals in which the angel has invested may have paid in annual agency fees approximately \$5,000 to the agent (and we will attribute all of that for purposes of simplicity to the angel's investment), plus a placement fee of 3.5 percent, or \$35,000, and a 3.5 percent warrant. No matter how one values the warrant, the breakage is significantly less...say, \$100,000 in cash and warrant dilution, vs. \$850,000.

[2] It is well known in the business that the reason that research-generating institutions have not been able to hit home runs is that they contribute the science in return for equity (if they elect equity in lieu of cash) at the earliest possible stage and, therefore, suffer the same dilutive burdens that the other earlier stage proprietors encounter.

"For more information, please go to www.vcexperts.com and refer to the Buzz of the Week. Copyright 2002 VC Experts, Inc. All rights reserved."