

**A BETTER TECHNIQUE FOR DISCIPLINED VENTURE INVESTMENT DECISIONS**

Section One explores the application of net present value and internal rate of return analysis to assist in choosing between alternative early-stage investments. Section Two develops the principle of value based on rates of return by exploring the difference in reasonable expectations between the venture and mature stages of companies.

**SECTION ONE  
 A PRIMER ON INTERPRETING  
 FORECASTED INVESTMENT RETURNS  
 FOR NON-BRANDED VENTURES**

An investment decision in venture stage companies should not immediately follow the disclosure of the entrepreneur’s “win-win” proposal of a 5 to 20 times return on investment—regardless of whether his business model and cash flow projections appear reasonable or even believable. Assuming the industry, the company, the cash flows, and the deal are attractive, additional thought and comparative economics are necessary, especially for a minority investor that has no influence on the operations of the business or the power to force liquidity from the investment. Business valuation, which is grounded in fundamental corporate finance theory, incorporates discipline, critical thinking, and empirical data to make informed investment decisions that coincide with specific investor parameters and return requirements.

The potential return on investment from early-stage companies is a major selling point and highlight of entrepreneurs and/or private equity fund managers. But, assuming every aspect of the business plan has been thoroughly addressed, the investment decision should not be made without defining the potential investment returns and alternatives. Capital budgeting (i.e. deciding how and which projects to commit

investment capital) is an area of corporate finance and business valuation that can assist in clarifying the comparative economics of alternative investments. Specifically, it assumes that an investor has a finite amount of capital to invest and would necessarily choose between investment projects or deal structures—not unlike investing in early-stage companies. A prudent investor would progress beyond the quantification of an overall investment multiple to measuring the impacts of investment risk (i.e., uncertainty of cash flows), holding period, and investment alternatives.

**The Methodology of Net Present Value Is A Better Model Than The Three Times Invested Capital v. Five Times Invested Capital Model**

Interpreting expected cash flows from an overall investment multiple to comparable investment returns, while being mindful of risk, holding period and investment alternatives, are the central factors of capital budgeting. One of the most useful concepts to measure cash flows and returns is a net present value (“NPV”) analysis. For example, assume you have the choice to invest in two comparable companies (with respect to target industry and stage of development):

**Company A: which entails (1) an initial \$100,000 investment, (2) no cash distributions in years one and two, and (3) a projected liquidity event of 3 times invested capital (\$300,000) in year three, or**

**Company B: which entails (1) an initial \$100,000 investment, (2) no cash distributions in years one through five, and (3) a projected liquidity event of 5 times invested capital (\$500,000) in year six (See Table I).**

An NPV analysis promotes acceptance of any investment where the NPV is greater than zero (i.e., the net present value of the future cash flows exceeds the initial capital outlay). However, your investment capital limits you to invest in only one of the two companies. Which is the more attractive investment from a financial point of view, assuming a 40.0% required rate of return on venture investments for each year (see Table I)? Based on the forecasted liquidity and holding period, Company A with a significantly lower multiple of investment, is a better investment than Company B.

**Table I  
 Basic NPV Analysis**

	Future Cash Flow Company A	Future Cash Flow Company B
Year 0	(\$100,000)	(\$100,000)
Year 1	-	-
Year 2	-	-
Year 3	\$300,000 <sup>1</sup>	-
Year 4		-
Year 5		-
Year 6		\$500,000 <sup>2</sup>
NPV	<b>\$9,329</b>	<b>(\$33,595)</b>

<sup>1</sup> (\$100,000) + \$109,329 = \$9,329; \$9,329 = \$300,000 / (1+40%)<sup>3</sup>

<sup>2</sup> (\$100,000) + \$66,405 = (\$33,595); \$66,405 = \$500,000 / (1+40%)<sup>6</sup>

**What Is The Rate of Return of My Investment?**

Another useful capital budgeting tool that can be applied to alternative investment analysis is the concept of internal rate of return (“IRR”). IRR calculates the annual rate of return that the investment yields. Said differently, the discount rate that equates the present value of the investment’s future cash flows with the projects initial capital outlay—making the NPV equal to zero. Like the NPV, the computed IRR is influenced by the investment amount, the projected multiple of investment, and the holding period. The basic premise of IRR analysis is to accept investments where the IRR is greater than an investor’s required rate of return (which is based on the investor’s opportunity cost of capital and often referred to as a, “hurdle rate”). Using the example in Table I, the required rate of return is assumed to be 40.0% for investments of similar risk to Company A and Company B (i.e., early-stage venture backed companies). Table II summarizes the calculated IRR based on the capital investment and projected cash flows of Company A and Company B.

**Table II  
Internal Rate of Return**

	Company A Cash Flow	Company B Cash Flow
Year 0	(\$100,000)	(\$100,000)
Year 1	-	-
Year 2	-	-
Year 3	\$300,000	-
Year 4	-	-
Year 5	-	-
Year 6	-	\$500,000
IRR	44%	31%
RRR	40.0%	40.0%

The 44.2% IRR of Company A (with a positive NPV) exceeds the 40.0% required rate of return (“RRR”) and should, therefore, be made. The 30.8% IRR in Company B is below 40.0% the investor’s RRR (with a negative NPV). Thus, it should be rejected.

**What is the IRR of My 10 to 20 “Bagger”?**

For many early-stage investors, the potential return on investment should be substantially greater than 3 to 5 times invested capital in three to six years, as discussed earlier. For example, suppose my return requirement for an early-stage investment is a 10 or 20 “bagger” (i.e., multiple of invested capital) in five years, or if I want to be even more aggressive, over three years. Table III presents what these more aggressive invested capital multiples imply in terms of an internal rate of return. For each investment shown in Table III, assume that the initial investment is \$100,000 and that no cash distributions would be made to the investor until the projected exit year.

The IRR for invested capital multiples of 10 and 20 times, with holding periods between three and five years, ranges from 58% to 171%. The range of return means that the value of the initial \$100,000 investment is growing annually at a compounded average growth rate between 58% and 171%. Therefore, achieving liquidity at 10 to 20 times invested capital in five years is quite extraordinary, and in three years is spectacular. Moreover, based on the IRR of these investments, a three-year holding period offers the greatest investor return.

Assuming that entrepreneurs project investment alternatives with

the multiples shown in Table III, the investor should select the venture with a shorter holding period rather than the deal that promises to offer twice the multiple of invested capital over a longer holding period.

Considering internal rate of return as the primary factor in the investment selection process, for A, B, C, and D in this example (Table III), the venture expecting 10 times in three years is a better deal than the investment expecting 20 times in five years (i.e., 115% v. 82%). Let us extend the holding periods for investments A, B, C, and D in Table III to 10 years. Now, using a 10-year holding period, the IRR of a deal with a multiple of 10 and 20 times results in a return of 26% and 35%, respectively. It is clear that these investments have far weaker returns than the investment in Company A above, which projects a multiple of 3 times invested capital in three years (i.e., 44.2%).

*It becomes obvious that the NPV and IRR on alternative investments should impact the investment decision, especially when considering multiple deals. The derived IRR of the investment and of its alternatives should be adequately evaluated in addition to the business models, expected cash flows, liquidity assumptions, and holding periods of each investment opportunity. At this point, the potential and relative economics of the early-stage investments have been disclosed, and it would be*

**Table III  
Choosing Alternative Investments**

	Company A	Company B	Company C	Company D
	10x Invested Capital in Three Years	10x Invested Capital in Five Years	20x Invested Capital in Three Years	20x Invested Capital in Five Years
Year 0	(\$100,000)	(\$100,000)	(\$100,000)	(\$100,000)
Year 1	-	-	-	-
Year 2	-	-	-	-
Year 3	\$1,000,000	-	\$2,000,000	-
Year 4	-	-	-	-
Year 5	-	\$1,000,000	-	\$2,000,000
IRR	115%	58%	171%	82%

*opportunistic to step back and reassess the major assumptions driving the returns to the minority shareholder—most important, the proposed liquidity and exit strategy.*

### Identifying Liquidity Assumptions

Fundamental financial theory such as capital budgeting offers tools and translation of deal economics. But even if an investor's financial analysis and understanding of returns is complete, from the perspective of an investor, it is clear that the strength of any market-based valuation is only as good as the underlying market data that was utilized to determine the value of the company (e.g., comparable companies used, equity discount rate applied, profit margins forecasted, and pricing multiples of public companies utilized). The acid test for a potential investor is clearly identifying the liquidity assumptions put forth by the entrepreneur. More specifically, what comparable companies were used to derive the five times multiple of investment?

A mature company's size and risk are vastly different from the early-stage company. Large, well-known companies have established products and cash flow, which drive the magnitude of its capitalization multiples. Therefore, is the entrepreneur expecting to achieve the profit margins, the cash flows, and the eventual capitalization multiples of a large, branded company? If he is targeting a competitive industry and has used branded companies as proxies for liquidity, what adjustments should be made to the cash flow assumptions?

Relying too heavily on branded companies for comparable pricing or financial modeling is aggressive, because it is the intangible value that consumers place on these companies that impact their profit margins and market value. For example, an investor should be cautious of an entrepreneur that uses companies like Microsoft, Coca-Cola, Starbucks, Amazon, E-Bay, etc. as a proxy for liquidity of

his start-up. Despite the potential comparability or even superiority of a new product or service, brand value drives companies such as Amazon and supports their pricing—which is not the case for “Company A” or “Company B”. CEOs, marketing managers, and even engineers can attest that a strong brand can overcome “faster”, “better”, and “cheaper” early-stage entrants.

### SECTION TWO THE MARKET PRICING OF PUBLICLY TRADED BRANDED COMPANIES IS NOT A VALID VALUATION MODEL FOR THE PRICING OF VENTURE STAGE COMPANIES

#### Start-Up Companies that are Purported to be Valued Like Mature Companies

I have asked that Entrepreneurs of start-up companies seeking venture funding incorporate in their presentation the valuation rationale to their stock price proposition. The basis for the price they would have investors pay should be well thought out, and integral to their business plan because the timing, circumstance, and expected pricing of the investor's liquidity event is integral to the investment decision going in. Entrepreneurs of consumer product ventures often compare their potential enterprise to the best-known companies in their industry category. These are the most successful, fastest growing stocks with unlimited prospects, and the ones representing the most attractive investment imaginable. In essence they are saying that you may have missed investing in the last well-known opportunity that returned twenty times investors' money, but their company should be viewed as another chance to get onboard of the next one. There is nothing wrong with that kind of boosterism and self-promotion if it ends there. Selling the belief to the audience is part of the investment process. But when the comparisons are strained, they do not acknowledge that credulity is being requested as part of the investment

decision.

Those big, well known companies often times have gotten to their current level through the deliberate and patient development of a strong brand. The power of a strong brand lies in its ability to influence purchasing behavior. Brands are a collection of perceptions in the mind of the consumer and therefore, can play a broad strategic role within a business.

#### The Entrepreneur In Search of a Better Valuation Model

Brands command market share, create options for growth, attract and retain talented employees, and promote shareholder value, thereby creating value for all stakeholders - customers, shareholders, and employees. When companies create strong brands they are rewarded in the capital markets as well in the form of higher earnings multiples and lower required rates of return. It is a huge burden the entrepreneur is foisting onto the potential investor when he asks the investor to assume the start-up company will achieve the same strong brand created by publicly traded companies used for comparison purposes. The entrepreneur requires this buy-in implicitly every time he points out that those very high multiple of earnings the “comparable public companies” are trading at will be applied to the subject company in the liquidity event that will come in three to five years.

Specific expectations are attached to the dollar investment companies make into their brands. It is not a foregone conclusion that management will succeed in their mission to create this intangible asset. But when the evidence mounts and the business impact of a brand is evidenced, one of the best barometers is the ascent of shareholder value. How are stakeholders to know whether the company has created a brand?

The following is a short list of telltale

CONT

signs that some effort is creating acceptance, that the product is gaining a broadening audience, and that the audience is bonding with the product.

- Strong Brands Grow Market Share
- Strong Brands Grow Revenue
- Strong Brands Build Shareholder Value
- Strong Brands Grow Profitability
- Strong Brands Reduce Business Risk
- Strong Brand Create Options

### Empty Comparisons

The above discussion provides some of the basic principles regarding how an investor will know that brand is an operating business asset when its existence in a company is suspected. If a company has it, the market will value its stock with this asset in mind (along with all of the other assets the company holds).

### What the Investor Gets for an Investment in a Branded Company

Brand is a function of the promises a company makes of its product and the experience the consumer has regarding the product's performance and delivery on those promises. Henry Ford said: "You can't build a reputation on what you are going to do." It is not a reasonable assumption today that a product with a strong brand will emerge out of the current investment round or even from future rounds. Therefore, the investor should not pay for this non-existent asset by way of high earnings multiples and low capitalization rates today when there is no evidence the company will ever achieve one. That price will be paid by future investors that invest in a company with more operating history than an early-stage start-up possesses.

We have summarized four significant effects a brand can cause to cash flow, further demonstrating the value added an investor receives from an investment in an actual branded company. *It is these realized results from brands that deliver higher cash flows to investors, and warrant higher*

*valuations today. Said differently, if your cash flows cannot now reasonably expect the following experiences, then the price you pay for these cash flows should not reflect them either.*

### Brands Increase Cash Flow Streams

There is a demonstrated link between brands and shareholder value that stems from the most important driver of value-cash flow. Brands increase value by growing and protecting a company's cash flows. Strong brands have been shown to command greater market share and in many cases command premium prices. Brands can also reduce the sensitivity of the buying decision to increases in price. Strong brands more readily access international markets and business areas (i.e., new products, services, market segments).

### Brands Accelerate the Timing (reduce lag) of Cash Flow

Brands accelerate cash flow by reducing the lead time required to turn investment into realized cash returns and increasing shareholder value because the holding period has been collapsed, thereby reducing the period over which the time value of money calculation diminishes the present value of future cash flows. Strong brands launch new products and services faster than weaker brands (or companies with no brand for that matter); because existing levels of awareness and trust facilitate consumers' acceptance. Strong brands may help to stimulate product innovation, further increasing the return on investment through new cash flows generated from product development.

### Brands Extend the Duration of Current Cash Flow

When a brand is maintained over a long time horizon it is known as a cash cow, extending the duration of cash flow from an investment. Asserting this proposition another way, we can see that maintaining a

strong brand increases shareholder value because one of its intrinsic characteristics is a relatively higher level of customer loyalty, which is quantifiable through the enduring cash flows from those same customers.

### Brands Reduce the Uncertainty of the Future Cash Flow

A brand's impact on shareholder value is felt nowhere greater than when it reduces the risk of future cash flows. This lower level of uncertainty (as we stated earlier, risk quantifies the uncertainty that a future event will occur) that anticipated cash flows will actually materialize increases the value of these cash flows, which in turn creates greater shareholder returns. Greater shareholder returns equate to greater shareholder value.

© 2010 Cogent Valuation. All Rights Reserved.

### CONTACT COGENT VALUATION

#### LOS ANGELES OFFICE

21700 OXNARD ST., SUITE 1080 818.905.8330 V  
WOODLAND HILLS, CA 91367 818.905.8340 F

#### ORANGE COUNTY OFFICE

4 HUTTON CENTRE DR., SUITE 720 714.668.0272 V  
SANTA ANA, CA 92707 714.668.0137 F

#### SAN FRANCISCO OFFICE

601 CALIFORNIA ST., SUITE 800 415.392.0888 V  
SAN FRANCISCO, CA 94108 415.392.7070 F

