



The 4 Myths of “Value”

1. Value is Clear
2. Value is Consistent
3. Value is Constant
4. Value is Only for Transactions

What is the value of 1,000 oz. of
gold?

The structure of the deal is based on the values assigned by each party

- Value is a function of Perceived Risk and Perceived Reward

Characteristics of Typical Start-Ups

- Often new, innovative, different
- Large potential market
- Unproven business plan, management team
- Long time to first revenue or profit
- Potential for rapid growth
- Securing capital is critical to survival

Components of a Deal

- Who are the **players**
- What are their **goals** and **objectives**?
- How do they **perceive and manage risk**?
- How do they **perceive and manage problems**?
- How do they get their **information**? How credible and complete is it? How much **uncertainty** is there?
- How will their claim be valued under **different circumstances**?
- What are the current and expected rules and **context** (tax law, state of economy, capital markets, etc.)

Important Things to Venture Investors

- Getting their money back.
- Getting their money back.
- Getting their money back.
- They are not interested in financing you being out on your own, making your life meaningful, or taking risks.










All of your goals, dreams, plans, aspirations, needs, talents, experiences, ideas, abilities, insights, contacts, education, energy, investments, etc. don't mean a thing to the investor if they won't help the investor at least come out whole, and hopefully with a return.

- Entrepreneurs and people with money often have very different perceptions of **risk**:
 - Entrepreneurs frequently have nothing to lose
 - Lenders have absolutely no upside, but demanding bosses
 - Investors with cash got that way by holding on to their money. They have lifestyles to support.

Possible Valuation Methods

- Market Approach
- Asset Approach
- Discounted Cash Flow / Income
- Venture Capital method
- Greater Fool approach

Market Approach

No		SIC Code	Business Description	Market Value of Invested Capital	Sale Date	Net Sales	MVIC To Sales	MVIC To Gross Profit	Equity Price To Income
1	 <input checked="" type="checkbox"/>	5941	Retail Bicycle Shop	\$122,650	2/5/2005	\$192,008	0.639	1.871	N/A
2	 <input checked="" type="checkbox"/>	5941	Bicycle Retail	\$55,000	11/1/2004	\$186,284	0.295	0.518	1.664
3	 <input checked="" type="checkbox"/>	5941	Sporting Goods - Bicycles and Cross-Country Skis	\$103,000	7/1/2004	\$366,665	0.281	0.740	N/A
4	 <input checked="" type="checkbox"/>	5941	Bicycle Store	\$57,000	11/2/1999	\$331,390	0.172	0.371	1.886
5	 <input checked="" type="checkbox"/>	5941	Retail Bicycle Sales	\$115,000	12/28/2001	\$240,209	0.479	0.926	1.664
6	 <input checked="" type="checkbox"/>	5941	Bicycle Sales	\$125,000	6/9/1997	\$315,743	0.396	1.265	26.899
7	 <input checked="" type="checkbox"/>	5941	Bicycle and Bicycle Accessories, Sales, Repair and Rental	\$152,100	6/18/1997	\$272,200	0.559	1.264	3.271
8	 <input checked="" type="checkbox"/>	5941	Bikes and Accessories	\$111,438	1/15/1993	\$284,732	0.391	0.846	4.319
9	 <input checked="" type="checkbox"/> 	5941	Retail Store Specializing in Bicycles and Vacuums	\$125,000	7/1/1996	\$690,534	0.181	0.469	15.619

Market Approach

Statistic	Count	Range	Mean	Median	Coefficient of Variation
Sale Date	9	1/15/1993 - 2/5/2005	N/A	N/A	N/A
Net Sales	9	\$186,284 - \$690,534	\$319,974	\$284,732	N/A
Market Value of Invested Capital (MVIC)	9	\$55,000 - \$152,100	\$107,354	\$115,000	N/A
EBIT	9	(\$1,924) - \$69,102	\$23,994	\$25,799	N/A
Net Income	9	(\$4,054) - \$69,102	\$23,541	\$25,799	N/A
Equity Price/Net Sales	9	0.172 - 0.639	0.377	0.391	0.429
Equity Price/Gross Cash Flow	7	1.664 - 40.640	11.656	4.180	1.277
Equity Price/EBT	7	1.664 - 26.899	7.574	3.271	1.250
Equity Price/Net Income	7	1.664 - 26.899	7.903	3.271	1.232
Equity Price/Book Value of Equity	2	1.000 - 1.781	1.391	1.391	0.397
MVIC/Net Sales	9	0.172 - 0.639	0.377	0.391	0.429
MVIC/Gross Profit	9	0.371 - 1.871	0.919	0.846	0.523
MVIC/EBIT	9	1.664 - 30.571	8.721	4.184	1.142
MVIC/EBITDA	8	1.664 - 15.767	6.755	3.686	0.859
MVIC/DiscEarnings	5	1.492 - 5.663	3.467	2.701	0.522
MVIC/Book Value of Invested Capital	2	0.944 - 1.000	0.972	0.972	0.041

Market Approach

BIZCOMPS Database - Bike Shops

SIC Code	Type	ask price	ann gross	sales date	sales price	% down	terms	Inventory	Fees	rent / sales
5941	45111 Retail-Bike Store	90	240	69	12/28/2001	90	69 5 Yrs @ 8%	25	17	13 %
5941	45111 Retail-Ski/Bike Store	73	330	45	5/31/1999	71	100 N/A	127	35	7 %
5941	45111 Retail-Bicycles	65	285	47	6/9/1997	65	23 7 Yrs @ 10%	60	20	6.30 %
5941	45111 Retail-Bicycles	98	272	56	6/30/1996	73	100 N/A	77	22	4.30 %
5941	45111 Retail-Bicycles & Vacuums	175	673	56	4/18/1996	124	19 10.25%	136	57	5.40 %
5941	45111 Retail-Mountain Bikes	39	230	35	3/31/1995	34	100 N/A	36	22	4.80 %
5941	45111 Retail-Bicycles	30	502	56	12/31/1993	30	23 5 Yrs @ 8%	100	30	8 %
5941	45111 Retail-Bicycles	50	183	29	7/31/1993	40	50 N/A	58	10	6 %
5941	45111 Retail-Bicycles	120	356	68	1/31/1993	78	50 5 Yrs @ 8%	50	10	3 %
5941	45111 Retail-Bicycles	30	285	47	1/15/1993	30	40 5 Yrs @ Pr+2	70	30	13 %
5941	45111 Retail-Bicycles	30	285	47	12/31/1992	30	40 3 Yrs @ 10%	70	45	13 %
5941	45111 Retail-Bicycles	105	278	21	12/31/1992	47	10 5 Yrs @ 8%	35	5	10 %
5941	45111 Retail-Bicycles	50	206	53	5/31/1992	44	54 5 Yrs @ 10%	40	20	9 %
Averages		73.46	317.31	48.38	N/A	58.15	52.15 N/A	68	24.85	N/A

Asset Methods

- **Market Value** of assets minus **Market Value** of liabilities
- Consider intangible assets – intellectual property, goodwill, customer lists, etc.
- Consider contingent liabilities

Benefit Stream Methods

Detailed DCF Indicated Value

Forecast	EBITDA	P.V. Using 18.12% Discount Rate	Discounted
Period	Earnings		Earnings
2008	-1,059,301	0.92011	-974,670
2009	-324,242	0.77896	-252,571
2010	470,012	0.65946	309,956
2011	682,703	0.55830	381,153
2012	973,999	0.47266	460,366
Present Value of Terminal Value			2,680,257
Subtotal			2,604,491
SELECTED ENTERPRISE VALUE before adjustment for probability of success			2,604,000

Uncertainties in Start-up Valuation

- No history
- Unfathomable market
- Untested product
- Unknown cost structure
- Unknown implementation timing
- Unknown market acceptance
- Untested delivery vehicle
- Unknown competition
- Unsophisticated management
- Unrealistic expectations



Would you have invested?

Microsoft Corporation, 1978

Traits of Successful Start-up Managers

- Strong focus and attention to cash flow
- Willingness to admit mistakes and adjust
- Adherence to a clearly defined action plan with timetables and performance benchmarks
- Clearly defined responsibility and authority
- Ability to communicate effectively and timely with employees, customers, suppliers, advisors, lenders, and investors
- Ability to design and use effective information systems
- Creativity, can-do attitude

Traits of Successful Start-up Managers (cont)

- Understanding of and reliance on risk analysis
- Leadership skills that provide guidance, motivate behavior, and set standards of conduct
- Organizational skills
- Clear goals and objectives
- A desire to seek new opportunities
- Functional and / or technical competencies
- Relevant experience and contacts.

Testing Financial Projections

- What is the most important element in your projections?
- Growth of revenues vs. growth of expenses

How to project growth

- Extrapolation
- Industry projections
- Build from bottom up

Structuring a Deal

- Value is hard to determine.
- Risks and Rewards are not always apparent.
- Risks and Rewards have different meanings to different people.
- Perceptions change
- Perceptions are not always accurate. They depend to a large part on each individual's prior experiences and beliefs.

Cost of Capital

- Forward looking
- Expected rate of return – depends on the riskiness of the specific investment
- Market driven – depends on the returns available on alternative investments
- Has market components and specific company components

Specific Company Risk

- Management
- Operations
- Ability to execute the business plan
- Financial strength
- Probability of survival (refinancing risk)
- Political and other factors

Risk Evaluation

<u>Risk Factor</u>	<u>Observation</u>	<u>Impact on Risk</u>
Ability to achieve forecasted revenue levels	Products are innovative and excellent quality	Decreases
	Products are attractively packaged	Decreases
	Products are consistent with what the market wants	Decreases
	Major aspects of sales and fulfillment channel are outsourced	Decreases
	Sales off to a slow start	Increases
	Company is pursuing many products and sales channels simultaneously. This diversifies both risk and management focus	Neutral

Risk Evaluation

Risk Factor	Observation	Impact on Risk
Skill and talent of management	Most of management team has worked together before	Decreases
	Management team to date has far surpassed what is usually accomplished in similar type start-ups	Significantly decreases
	Management lacks significant experience in this industry	Significantly increases
	Company has greater budgeting and planning skills than typically seen in start-up operations.	Significantly Decreases
	Financial management skills are critical to a rapidly growing company.	
	Management appears a little too complacent with achievements to date and I would like to see more of a sense of urgency towards generating more sales more quickly	Increases
	Organizational skills of top management, ability to communicate, ability to set goals	Decreases

Risk Evaluation

Risk Factor	Observation	Impact on Risk
Industry competitiveness	Low barriers to entry	Increases
	Many competitors	Increases
Financial	More capital needed for company to remain as a going concern	Increases*
	Recent inflationary environment tends to favor start-ups over more entrenched companies	Decreases
	Recent dollar weakness hurts importers	Increases
	Low anticipated concentration of both customers and suppliers	Decreases
	Expected time to profitability is two more years	Significantly increases

Risk Evaluation

Risk Factor	Observation	Impact on Risk
Network	Company has developed strong foreign contacts	Decreases
	Company has developed national marketing contacts for sales within the US	Decreases
	Company is dependent on outside sources for all product procuremed and all sales and marketing fulfillment	Increases
Government	Importation and sale of food items is regulated by both exporting and importing countries	Increases
	Company has hired excellent legal council, has good international contacts	Decreases

Risk Evaluation

Risk Factor	Observation	Impact on Risk
Other market factors	Increasing shift towards exotic and perceived quality products such as being sold by the Company	Decreases
	Fragmented market, apparent growing dissatisfaction with market leaders such as Starbucks	Decreases
	Competitors such as Starbucks, Harry & David, and Whole Foods have helped to establish the market demand for the Company's specific types of products	Decreases
	Exclusivity of products	Decreases
	Ability to enforce rights of ownership	Decreases
	Ease for customer of substituting different products	Increases
	Amount of value added in products	Decreases

Discount Rate/Valuation Considerations

	Enhances Value	Detracts from Value
Quality of Story/ Business Plan	Easily Understood/ Credible	Convolutd/ Questionable
Management/ Board of Directors	Strong and Experienced	Incomplete or Inexperienced
Size of Market	Large and/or Growing	Small or Flat
Barriers to Entry	High	Low
Competitors	Few	Many
Proprietary Technology	Yes	No
Achieve Plan and Financial Milestones	Performance as Promised	Late or Fail to Achieve

Calculating Discount Rate

Risk-Free Rate of Return	4.33%
Equity Risk Premium	6.30%
Small Stock Risk Premium	6.27%
Plus/Minus Industry Risk Premium	-2.78%
Company Specific Premium	4.00%
Net Cash Flow Discount Rate	<hr/> 18.12%

Duff and Phelps Tables

The Duff & Phelps Risk Premium Report

– Overview of the Data

Eight measurements of size:

Equity Size

1. Market value of common equity
2. Book value of common equity
3. Five-year average net income

Company Size

4. Market value of invested capital
5. Total assets (as reported on balance sheet)
6. Five-year average EBITDA
7. Sales
8. Number of employees

Duff and Phelps Example

Companies Ranked by 5-Year Average Net Income

Exhibit A-3

Historical Equity Risk Premium: Average Since 1963

Data for Year Ending December 31, 2007

Portfolio Rank by Size	Average Net Inc. (\$mls.)	Log of Average Net Inc.	Number as of 2007	Beta (SumBeta) Since '63	Standard Deviation of Returns	Geometric Average Return	Arithmetic Average Return	Arithmetic Average Risk Premium	Smoothed Average Risk Premium	Average Debt/MVIC
1	5,196	3.72	37	0.80	15.94%	11.73%	12.90%	5.81%	4.13%	21.56%
2	1,312	3.12	34	0.84	14.90%	11.91%	12.92%	5.82%	5.75%	25.94%
3	810	2.91	35	0.84	15.25%	12.42%	13.44%	6.35%	6.32%	28.55%
4	596	2.78	36	0.90	15.80%	12.93%	14.02%	6.93%	6.68%	28.24%
5	445	2.65	33	0.94	16.76%	11.77%	13.05%	5.95%	7.02%	26.62%
6	353	2.55	41	0.97	17.39%	12.63%	13.95%	6.86%	7.30%	26.83%
7	277	2.44	37	1.03	17.33%	12.69%	13.99%	6.90%	7.58%	25.67%
8	217	2.34	39	1.03	17.21%	13.92%	15.25%	8.16%	7.87%	24.89%
9	176	2.25	34	1.06	16.39%	13.61%	14.81%	7.71%	8.12%	24.47%
10	145	2.16	45	1.07	18.99%	13.22%	14.74%	7.65%	8.34%	24.12%
11	123	2.09	45	1.06	17.35%	13.86%	15.23%	8.13%	8.55%	25.22%
12	105	2.02	41	1.05	18.57%	14.33%	15.83%	8.74%	8.73%	25.68%
13	90	1.96	41	1.06	17.80%	14.26%	15.69%	8.60%	8.90%	25.28%
14	81	1.91	41	1.14	20.14%	14.00%	15.83%	8.74%	9.04%	24.52%
15	70	1.85	47	1.14	21.18%	13.34%	15.32%	8.23%	9.21%	24.49%
16	61	1.78	49	1.19	21.14%	16.00%	17.90%	10.81%	9.37%	24.70%
17	53	1.72	53	1.18	20.83%	14.24%	16.16%	9.06%	9.54%	24.20%
18	45	1.66	48	1.23	22.57%	15.20%	17.47%	10.37%	9.72%	24.26%
19	39	1.59	63	1.26	22.76%	14.61%	16.92%	9.83%	9.80%	25.31%
20	33	1.52	50	1.19	21.50%	15.63%	17.63%	10.54%	10.00%	25.77%
21	27	1.43	79	1.21	23.04%	15.27%	17.57%	10.48%	10.32%	25.74%
22	20	1.31	79	1.24	22.74%	15.64%	17.87%	10.78%	10.66%	25.77%
23	15	1.17	102	1.28	23.38%	16.20%	18.52%	11.43%	11.03%	24.85%
24	9	0.95	182	1.28	23.86%	15.28%	17.77%	10.67%	11.63%	26.63%
25	3	0.46	310	1.38	30.74%	17.51%	21.30%	14.20%	12.97%	26.93%
High financial risk			636	1.62	36.96%	16.27%	21.31%	14.21%		44.36%
Large Stocks (Ibbotson S&P data)						10.74%	11.95%	4.85%		
Small Stocks (Ibbotson S&P data)						14.54%	17.13%	10.04%		
Long-Term Treasury Income (Ibbotson S&P data)						7.07%	7.09%			

Equity Risk Premium Study: Data through December 31, 2007

Data Smoothing with Regression Analysis

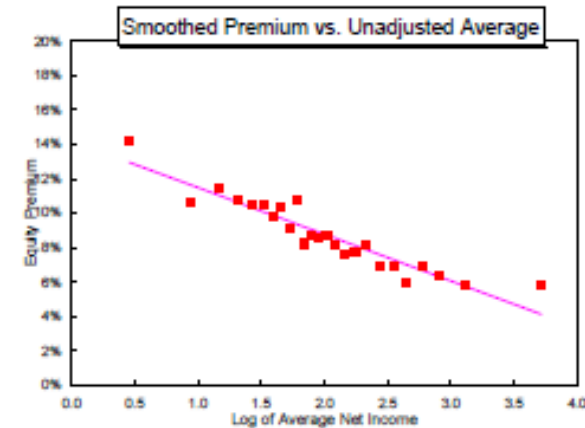
Dependent Variable: Average Premium

Independent Variable: Log of Average Net Income

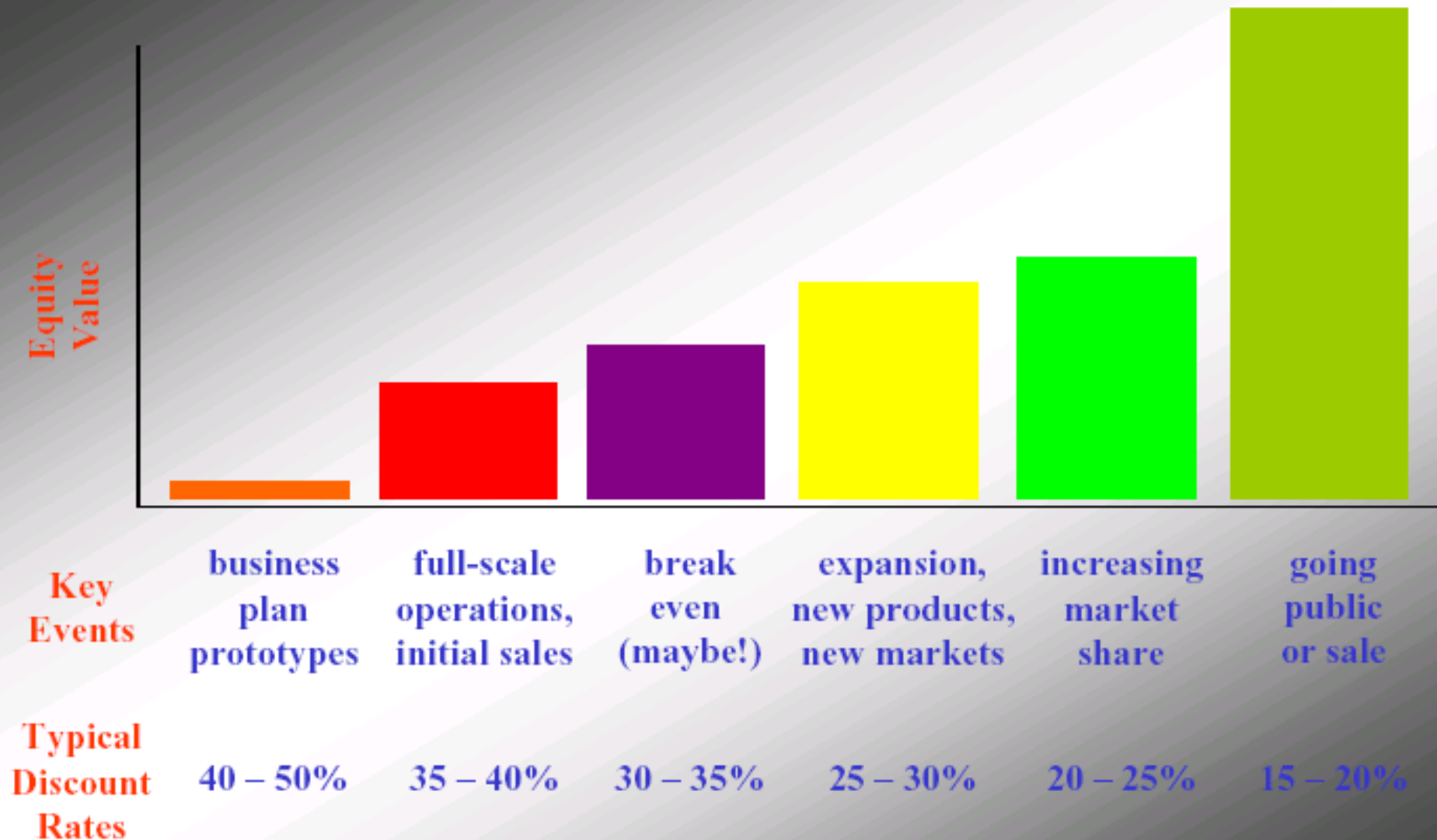
Regression Output:

Constant	14.216%
Std Err of Y Est	0.732%
R Squared	88%
No. of Observations	25
Degrees of Freedom	23
X Coefficient(s)	-2.715%
Std Err of Coef.	0.208%
t-Statistic	-13.04

$$\text{Smoothed Premium} = 14.216\% - 2.715\% \times \text{Log(Net Income)}$$



Value and Risk Change Over Time



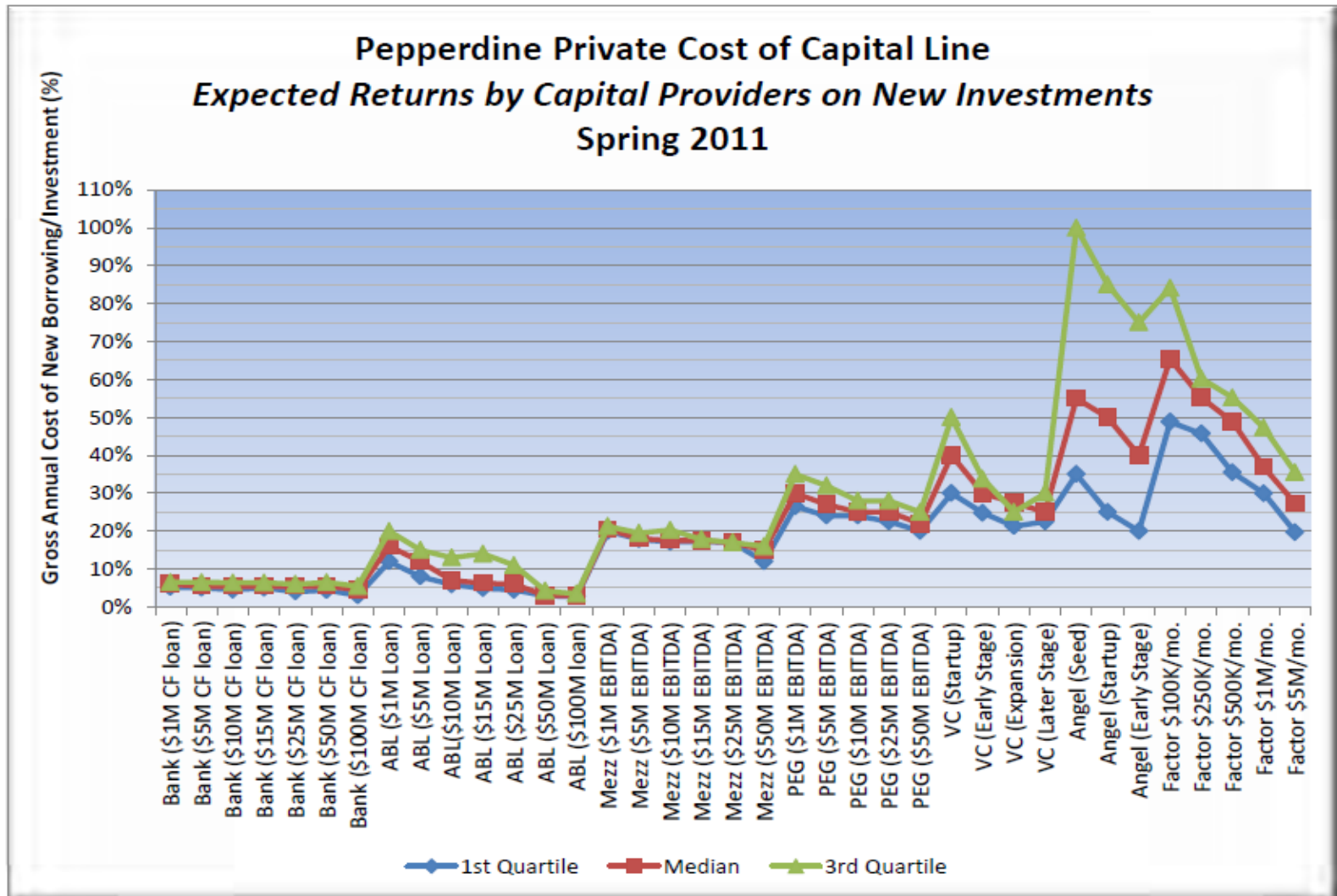
Discount Rates

- Strategic Investors want 20% IRR
- Venture Investors want 30% - 60% IRR,
home runs of 5x - 10x their investment
- Compare to:
 - Home equity - Prime (~ 8%)
 - Asset based loan - (Prime + 1, 2, or 3%) + fees
 - Master Card, Visa - 14% - 32%

If you are 90% certain that you are right, it is very easy to ignore the downsides of increased personal exposure and be seduced by the lower rates of using your own \$.

Other people's money is expensive, but lowers your risk and provides you with motivated partners.

More Recent Rates of Return



Factor in Probability of Success

Value assuming forecasts are met:	2,265,000
Probability of surviving as a going concern:	77.5%
Expected Value of Survival:	<u>1,755,375</u>
Value assuming forecasts are not met:	626,000
Probability of surviving as a going concern:	22.5%
Expected Value of Survival:	<u>140,850</u>
Total Expected Value	<u>1,896,225</u>

Discounted Cash Flow - recap

- Start with business plan projections
- Adjust for excessive optimism
- Discount rate based on return required by investors
- Terminal value is critical (estimate by multiple of EBITDA)
- Projections are speculative

Venture Capital Approach

- 👁 Estimate the required rate of return
- 👁 Determine the horizon of the investment
- 👁 What is the exit strategy—IPO? Sale?
- 👁 Typically assume no interim cash flows
- 👁 Concerned about dilution



V.C. Valuation Method in Practice

- Projected profit or cash flow X years out
- less discount for risk and uncertainty
- = adjusted profit or cash flow.
- less tax = post tax value
- x Multiple
- =Future equity value

V.C. Valuation Method (cont.)

- Future Equity Value
 - x Present Value Discount Factor
 - = Present Value of Equity
-
- $\text{V.C. cash invested} / \text{P.V. of Equity} = \text{V.C.'s percentage of the company.}$
 - What ever is left after the high uncertainty factor, high discount rate, etc. belongs to the entrepreneur.

Pricing Methods (assigning value)

- **Net Worth** - book value or adjusted book value (goodwill, intangibles adjustments)
- **Assets** -
 - liquidation value (auction fire sale)
 - fair market value (professional appraisal)
 - replacement cost (go shopping)
- **Income**
 - historic earnings x a multiple
 - future earnings x a multiple
 - future earnings, new owner, x a multiple

More Pricing Methods

- Cash Flow

- Payback method
- Discounted cash flow
- Adjusted cash flow (include salary, perks, fringes, etc.)
- Cash flow times a multiple

- Market Methods

- Last trading price (if there was one)
- Current competitive bids (or what they would likely be)
- Comparable company prices
- Special formulas in some industries

Still More Pricing Methods

- Sales - trends, multiples, etc.
- Heuristic Methods
 - Intuitive value to buyer (including job, independence, learning, and other personal satisfactions versus sacrifices and risks)
 - Strategic value (synergies with existing ventures)
 - Seller's preconception of price (buyer can yield on this and make it back on terms)

Terms (full buy-out)

- Cash down payment
- Installment payments (interest rates, due dates)
- Guarantees of payment
- Guarantees of performance, contingent payments
- Stock payments
- Options

Additional Terms (investor or lender)

- Fees and expenses - who pays what, when, and how often
- Priority
 - Security, non-subordination, etc. for lenders
 - Preferred, anti-dilution for equity
- Performance collars or incentives - puts, options, warrants, formulas, etc.
- Control
 - Board seats, ownership percentages, etc.
 - Restrictive covenants, asset ratios, etc.

Yet More Terms

- Convertibility between equity and debt
- Liquidity -how fast can interest be sold?
- Exit penalties, repurchase agreements, etc.
- Terms and prices of subsequent money
- Rights of first refusal
- Employment agreements, compensation, scope of duties, etc.
- The dreaded personal guarantee

Other Conditions

- Rights and obligations assumed or not assumed
- Seller's warranties (clear title, valid financials, no undisclosed liabilities, authority to transact, etc.)
- Durations of warranties and representations
- Adjustments to be made at closing
- On going obligations of either party (customer care, etc.)
- Non-competes, employment agreements, etc.
- Arbitration of disputes

Other Factors

- Timing - business condition, market conditions, etc.
- Agents, Brokers, etc.
- Disclosures - potential buyers, employees, vendors, etc.
- Tax structure of the deal

Bottom Line

- Seller and buyer, or owner and investor, have different **needs** and **perceptions**.
- Everything is negotiable.
- A deal is made when each party is comfortable with the **risks** and **rewards** they perceive within the **total package of price and terms**.

How to reduce the uncertainty factor

- Experienced management team
- Well thought-out business plan.
 - Anticipate everything
 - Understand all the interrelationships
 - Detailed yet concise. Lots of back-up available.
 - Assumptions are consistent with reality
- Prove the concept works - projections have a historical basis. Provide tangible evidence.
- Ratchet deals - ownership percentages vary within a collar of ranges based on performance
- Get the money when you don't need it - no impending BK

How to spot another Enron (or how your Enron may be detected)

- Challenge accounting policies
- Analyze key ratios and benchmarks
- Look for insider trading
- Compare management's projections with industry trends
- Be alert to loss of credibility with customers and business partners
- Be alert to loss of human capital

Biggest Mistakes I've Seen

- Turning down deals as too expensive (100% of nothing is nothing). Pigs get slaughtered.
- Waiting until it is too late to get help
- Business Plan not thought through well
- “Nobody else knows / understands this as well as I do” “Only I can see the value in this.”
- Getting hung up on sunk costs. They are history. Don't turn down money for tomorrow just because it ignores what you put in yesterday.

More mistakes

- Not realizing how much time and money it costs to raise money.
- Impatience, giving up too much at the closing strokes (letting the lawyers take over the deal)
- Wasting time with the wrong investors
- Being certain that there is money out there for this project
- Being too afraid that there is no money out there for this project.
- Using advisors with good reputation but questionable skills. Huge fees for little or detrimental help.

Even more mistakes

- Ignoring taxes (should be considered from day 1)
- Not having a walk-away decision point
- Not having a back-up plan that allows you to walk away.
- Becoming a deer in the headlights - too afraid to take any action.
- Being afraid to ask for what you really want.

Biggest Mistake

- Never trying something you really, really, really, really want to do. You'll never know if you don't try.
 - “you gotta be in it to win it”



NO PARKING
11PM - 6AM
NIGHTLY
TOW IN ZONE
2 HOUR
PARKING
6AM - 11PM