

# The Numbers Game: Financial Projections and Valuation Analysis

Getting Ready for  
Equity™

New York, NY

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Durham, NC

New York, NY

San Francisco, CA

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*SJF invests in and assists high-growth companies that positively impact the world*



## *Session Goals*

- Learn how to present financial projections to investors
- Learn what techniques investors use to form valuation guidance
- Learn how your financial projections factor into your valuation
- Understand the effects of pre-money and post-money valuations on you and the investor



## *Financial Projections: Should tell a Story*

- Tell a compelling story of the progress to date and the anticipated growth going forward
- Quickest way for investors to understand the business and gauge the fit
  - Growth trends
  - New products, services, acquisitions
  - Margin growth
  - Capital intensity
  - Working capital needs
- Projections demonstrate your thorough understanding of the business model



## *Financial Projections: Building the Model*

- Realistic Projections
  - Include your desired financing – forecasts post capital infusion
  - 3- 5 years of income statements, balance sheets, cash flows, by month for first 2 years, then annual
  - Include historical statements alongside projections when available
- Summary of Statements with Key Metrics
  - Revenue, Month-over-Month or Year-over-Year growth
  - COGS and Operating expenses – delineate key categories for your business
  - Gross, EBITDA and Net margin and key industry metrics
- Have Backup Detail and Pipeline Information Ready
  - Additional worksheets describing top down or bottom up approach
  - Explanation of assumptions, consistent with plan



## Financial Projections: Typical P&L for the Business Plan

- **Revenue**
- **COGS** – Costs of Goods Sold
  - Includes direct product costs: manufacturing, shipping, direct labor
- **Operating Expenses**
  - R&D, sales, marketing, corporate overhead, depreciation, amortization
- **EBITDA** – Earnings before Interest, Tax, Depreciation and Amortization
  - Common term used by investors to gauge cash flow
- **EBIT** – Earnings before Interest and Taxes
  - Also called Operating Profit

Revenue	\$	50.0	100%
Cost of Goods Sold	\$	20.0	40%
Gross Margin	\$	30.0	60%
	Sales & Marketing	\$ 15.0	30%
	R&D	\$ 5.0	10%
	G&A	\$ 2.5	5%
Operating Expenses	\$	22.5	45%
EBITDA	\$	7.5	15%
Depreciation/Amortization	\$	3.0	6%
Operating Profit/EBIT	\$	4.5	9%
	Interest	\$ 1.0	2%
	Taxes	\$ 1.4	3%
Net Income	\$	2.1	4%

Avoid too much detail, stick with key metrics and business drivers!

## *Financial Projections: What to Avoid*

- Avoid ultra-conservative projections; they do not make a compelling case for investment

	<u>2009</u>	<u>2010</u>	<u>2011</u>	<u>2012</u>	<u>2013</u>
Sales	\$2,000,000	\$3,000,000	\$4,000,000	\$5,000,000	\$6,000,000
EBITDA	(\$1,500,000)	(\$1,000,000)	\$100,000	\$350,000	\$600,000

- Avoid implausibly optimistic projections; they raise credibility issues

	<u>2009</u>	<u>2010</u>	<u>2011</u>	<u>2012</u>	<u>2013</u>
Sales	\$2,000,000	\$20,000,000	\$80,000,000	\$150,000,000	\$235,000,000
EBITDA	(\$1,500,000)	\$5,000,000	\$27,000,000	\$50,000,000	\$75,000,000

- No need to calculate an investor's return; we like to do that ourselves



## *Financial Projections: Year to Date vs. Budget*

- Investment process can take anywhere from 3 to 6 months allowing time for investors to plot your actuals
  - On track, exceeding or behind – understand drivers
  - Better to exceed conservative projections than to significantly miss aggressive projections
  - Several months of missing projections may cause investors to rethink investment
- Make sure you are updating financial model and business plan with revised numbers



## *Financial Projections: Cash Flow Projections*

- **Burn Rate**
  - Monthly operating loss plus capital expenditures
- **Total Cash Required**
  - Cumulative operating losses PLUS
  - Cumulative capital expenses (including working capital requirements) UNTIL your business is consistently cash flow positive
- **Complete Cash Flow Statement**
  - Net income
  - Change in A/P, A/R, inventory, depreciation, other op. accts
  - Capital expenditures
  - Financing – new equity, debt, repayments, interest





## Financial Projections: Example

### "AgTech" - Agricultural Products Manufacturer and Distributor

	Actual	YTD 2008	Forecast					
	2007	August	2008	2009	2010	2011	2012	2013
Sales								
Branded Products	\$ 2,405,800	\$2,782,767	\$4,210,150	\$ 7,788,778	\$16,356,433	\$26,170,292	\$ 39,255,439	\$ 51,032,070
Private Label	221,000	191,167	276,250	400,563	1,201,688	1,826,565	2,648,519	3,310,649
Services	51,000	28,700	53,550	62,654	187,961	229,312	268,295	313,905
<b>Net Sales</b>	<b>\$ 2,677,800</b>	<b>\$3,002,633</b>	<b>\$4,539,950</b>	<b>\$ 8,251,994</b>	<b>\$17,746,081</b>	<b>\$28,226,169</b>	<b>\$ 42,172,253</b>	<b>\$ 54,656,624</b>
<i>Growth %</i>			70%	82%	115%	59%	49%	30%
Costs of Goods Sold	1,789,200	2,077,760	3,041,640	5,474,952	11,497,399	18,395,839	27,225,841	34,849,077
Gross Profit	\$ 888,600	\$ 924,873	\$1,498,310	\$ 2,777,042	\$ 6,248,682	\$ 9,830,330	\$ 14,946,411	\$ 19,807,547
<i>Gross Margin</i>	33%	31%	33%	34%	35%	35%	35%	36%
Operating Expenses	1,455,000	1,136,000	1,891,500	2,837,250	5,958,225	8,341,515	11,261,045	12,950,202
<b>EBITDA</b>	<b>\$ (541,400)</b>	<b>\$ (186,127)</b>	<b>\$ (368,190)</b>	<b>\$ (35,209)</b>	<b>\$ 315,457</b>	<b>\$ 1,513,815</b>	<b>\$ 3,710,366</b>	<b>\$ 6,882,345</b>
<i>EBITDA Margin</i>	-20%	-6%	-8%	0%	2%	5%	9%	13%
Net Income	\$ (749,250)	\$ (305,158)	\$ (532,738)	\$ (79,227)	\$ 218,838	\$ 1,237,443	\$ 3,104,511	\$ 5,800,693



## Financial Projections: Connect with the Story

	2008				2009				2010				2011			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
<b>Development</b>	<ul style="list-style-type: none"> <li>✓ Irrigation product prototype demonstrated               <ul style="list-style-type: none"> <li>✓ Rain collection prototype demonstrated                   <ul style="list-style-type: none"> <li>✓ Fully integrated solution demonstrated                       <ul style="list-style-type: none"> <li>✓ Offer accessory components</li> </ul> </li> </ul> </li> </ul> </li> </ul>															
<b>Financials</b>	<ul style="list-style-type: none"> <li>✓ First sales from irrigation product               <ul style="list-style-type: none"> <li>✓ First sales from rain collection product</li> <li>✓ Achieve profitability</li> <li>✓ First sales from full solution</li> <li>First sales from accessories ✓</li> </ul> </li> </ul>															
<b>Funding</b>	<ul style="list-style-type: none"> <li>↩ Family and Friends - \$500k               <ul style="list-style-type: none"> <li>✓ Series A (\$2 mm)                   <ul style="list-style-type: none"> <li>✓ Series B (\$5 million)                       <ul style="list-style-type: none"> <li>✓ \$2 million debt facility</li> </ul> </li> </ul> </li> </ul> </li> </ul>															



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*So What Do Investors Do  
with your Projections?*



## *Financial Projections Inform Valuation Discussions*

### Entrepreneurs

### Investors

#### Goal:

Minimize dilution of ownership  
/ Increase the value of your  
equity and the company

Determine a range of  
valuations that meet required  
investment return needs

#### Process:

Create believable projections  
that can be backed up with  
credible assumptions and  
historical metrics

Forecast exit values based  
on company's financial  
projections

#### Data:

Know M&A or  
other data points  
that help support  
your own valuation  
assumptions

Exit strategy: Who  
are logical  
acquirers and what  
they would pay

IPO Potential of  
Industry Sector –  
public company  
comparables

M&A Activity –  
Who is buying,  
what are they  
paying

## *Common Terms in Valuation Analysis*

- Enterprise Value (EV)
  - Market cap (share price x shares outstanding) plus long term debt, minus cash (not including working capital)
  - Often the value used for M&A and public company comparison
- Equity Value
  - Enterprise value minus debt
  - Your dilution will likely be based off the Equity Value of your business
- EV / Revenue
  - Metric most often used for early stage companies or ones not generating significant EBITDA yet
- EV / EBITDA
  - Metric most often used as a measure of how long it would take to pay back the investment
  - Higher multiples paid to high growth businesses



# M&A Transaction Comparables

## Agricultural Product Manufacturers, Distributors and Retailers

Closing Date	Seller	Seller Description	Buyer	Enterprise Value	Seller LTM Financials:			Acquisition Enterprise Value to:	
					Revs.	EBITDA		Revs.	EBITDA
16-Mar-08	Plastro Irrigation Systems	Israel-based drip irrigation systems manufacturer	Deere & Co	\$93.3	\$146.7	-		0.6x	NA
28-May-07	Naan-Dan	Provide irrigation systems-services; manufacture PVC-pipes and plastic sheets	Jain Irrigation Systems Ltd	\$43.0	\$75.0	-		0.6x	NA
7-May-07	LESCO Inc	Manufacture and wholesale golf course and lawn care products including fertilizers, hand tools and other garden machinery	Deere & Co	\$162.7	\$550.6	(\$15.3)		0.3x	NM
15-Feb-07	Aquarius Brands Inc.	Manufacturer of drip irrigation products for the agricultural, turf, greenhouse, nursery, industrial and landscape markets	Jain Irrigation Systems Ltd	\$21.5	\$30.0	\$3.6		0.7x	6.0x
2-May-06	Chapin Watermatics	Field crop, nursery and green house drip irrigation systems.	Jain Irrigation Systems Ltd	\$6.0	\$8.0	-		0.8x	NA
11-Nov-05	Dels Farm Supply Inc	Own and operate farm supply stores	Tractor Supply Co	\$19.0	\$34.0	-		0.6x	NA
27-Oct-05	Ferry-Morse Seed Co	Retail garden and lawn seeds	Jiffy Products of America Inc	\$24.6	\$43.0	-		0.6x	NA
26-Jul-04	Gehl Co	Manufacture and wholesale agricultural and light industrial equipment	Manitou BF	\$132.9	\$297.5	\$19.8		0.4x	6.7
29-Oct-03	Easy Gardener Inc	Retails gardening products	Easy Gardener Inc /Private Investor	\$18.7	\$20.4	-		0.9x	NA
27-Mar-02	IIC Industries Inc	Distributes tractors and related heavy machinery	CP Holdings Ltd.	\$60.7	\$188.2	-		0.3x	NA
30-May-01	Richton International Corporation	Wholesale distributor of sprinkler irrigation systems, outdoor lighting, and decorative fountain equipment; systems integrators,	Deere & Co.	\$178.2	\$255.5	\$15.0		0.7x	11.8

# Public Company Comparables

## Agricultural Product Manufacturers and Distributors

Company Name	Stock Price	Shares Outstanding	Market Cap	TEV	LTM Revenue	NTM Revenue Est.	LTM EBITDA	YOY Revenue Growth	Gross Margin	EBITDA Margin	EV/Rev	EV/EBITDA
Deere & Co. (NYSE:DE)	\$ 71.01	430.9	30,602	51,282	27,177	28,815	4,039	6%	28%	15%	1.9x	12.7x
Jain Irrigation Systems Ltd. (BSE:500219)	\$ 9.38	72.4	679	NA	506	487	77	-4%	38%	15%	NA	NA
The Scotts Miracle-Gro Co. (NYSE:SMG)	\$ 27.02	64.6	1,746	2,900	2,947	3,192	340	8%	33%	12%	1.0x	8.5x
Toro Co. (NYSE:TTC)	\$ 41.61	37.5	1,561	1,735	1,869	NA	252	NA	36%	13%	0.9x	6.9x
Tractor Supply Company (NasdaqGS:TSCO)	\$ 42.94	36.4	1,564	1,504	2,827	3,145	213	11%	31%	8%	0.5x	7.1x

Average	5%	33%	13%	1.1x	8.8x
Median	7%	33%	13%	1.0x	7.8x





## Backing into Current Valuation from Forecast

- Investors take your projections in Year 5 and likely adjust them in some way
- Usually a complicated task for the investor and requires modeling many assumptions based off company guidance and due diligence discoveries

	Company's Projection	Investor's Projection
	2013	
<b>Net Sales</b>	<b>\$ 54,656,624</b>	<b>\$ 40,992,468</b>
<i>5 Yr Growth CAGR</i>	64%	55%
<b>EBITDA</b>	<b>\$ 6,882,345</b>	<b>\$ 4,129,407</b>
<i>EBITDA Margin</i>	13%	10%

<b>Expected Exit Value</b>	Rev. Multiple	0.8x	\$ 40,992,468	\$ 32,793,975		
	EBITDA Multiple	8.0x	\$ 4,129,407	\$ 33,035,257		
	<b>Average</b>			<b>\$ 32,914,616</b>		
<b>Pre Valuation</b>	3,000,000	4,000,000	5,000,000	6,000,000	7,000,000	8,000,000
Equity Invested	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000
Post Valuation	4,000,000	5,000,000	6,000,000	7,000,000	8,000,000	9,000,000
<b>Investor Ownership</b>	25%	20%	17%	14%	13%	11%
Dollars Returned	\$ 8,228,654	\$ 6,582,923	\$ 5,485,769	\$ 4,702,088	\$ 4,114,327	\$ 3,657,180
<b>Return on Investment</b>	8.2x	6.6x	5.5x	4.7x	4.1x	3.7x



## *Understand the Effects of the Capital Raise on Valuation*

- Investors will always look at the post deal valuation when calculating their returns
- If the post is much higher than their expectations due to a large capital raise, they will likely pass

This can often be avoided by raising less money at the current time by raising capital in phases

- Investors start with a \$6 million post valuation instead of \$10 million and entrepreneur achieves less dilution
- In second example, two rounds raised, \$2MM in A round at \$1/share and \$4MM in B round at \$2/share, less dilution for founder

Series A - \$6 mm raise; \$10 MM Post

	\$	Shares	%
Founder Stock	4,000,000	4,000,000	40%
Preferred A Stock	6,000,000	6,000,000	60%



Series A - \$2 mm raise; \$6 MM Post

	\$	Shares	%
Founder Stock	4,000,000	4,000,000	67%
Preferred A Stock	2,000,000	2,000,000	33%

Series B - \$4 mm raise; \$16 MM Post

	\$	Shares	%
Founder Stock	4,000,000	4,000,000	50%
Preferred A Stock	2,000,000	2,000,000	25%
Preferred B Stock	4,000,000	2,000,000	25%



## *Valuation Resources for Entrepreneurs*

- Mergerstat ([www.mergerstat.com](http://www.mergerstat.com))
- SEC Filing ([www.sec.gov/edgar/searchedgar/companysearch.html](http://www.sec.gov/edgar/searchedgar/companysearch.html))
- Analysts' Research Reports (<http://screen.yahoo.com/reports.html>)
- Alacra – ala carte pricing for company info and M&A (<http://www.alacra.com>)
- Yahoo Finance (<http://finance.yahoo.com>)
- Alumni database resources - business schools
- Boutique investment banks often provide free newsletters covering various sectors
- Ask VC funds for their comps & analysis



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## Determine Valuation and Ownership

		Prospect's 2008 Financials	Prospect's Enterprise Valuation	Less: Net Debt	Prospect's Equity Valuation	Weight
<b><u>M&amp;A Industry Multiples</u></b>						
Revenue	0.6x	\$ 4,539,950	\$ 2,723,970	\$ (250,000)	\$ 2,473,970	0.3
EBITDA	7.8x	\$ (368,190)	NM	\$ (250,000)	NM	
<b><u>Public Comparables</u></b>						
Revenue	1.0x	\$ 4,539,950	\$ 4,539,950	\$ (250,000)	\$ 4,289,950	0.3
EBITDA	8.4x	\$ (368,190)	NM	\$ (250,000)	NM	
<b><u>Exit Value Forecast</u></b>						
			\$ 5,000,000	\$ (250,000)	\$ 4,750,000	0.4

### Pre Money Valuation

**Average \$ 3,900,000**

VC Investment

\$ 1,000,000

### Post Money Valuation

**\$ 4,900,000**

### VC Ownership

**20%**

