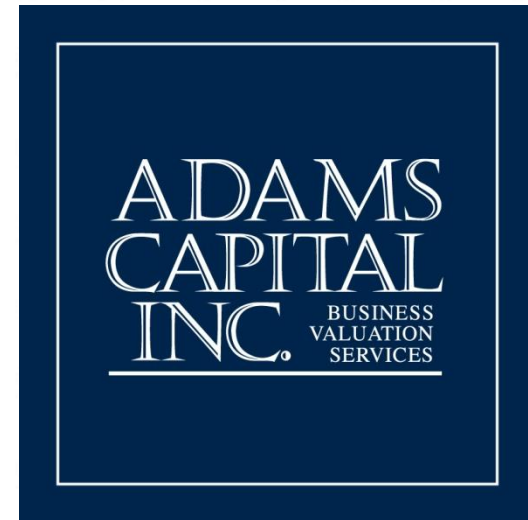


BADM 790: Entrepreneurial Finance and the Dynamics of Emerging Ventures



UNIVERSITY OF
SOUTH CAROLINA
Darla Moore School of Business

David P. Adams III
Adams Capital, Inc.
June 3, 2014



David P. Adams III



- Founded Adams Capital, Inc. in 1996
- Georgia State University, MBA
- Georgia Institute of Technology, BS ME
- Professional accreditations: CPA, ABV, ASA
- Over 20 years of testimony experience



- Independent, third party valuation firm

- We solve problems where valuation matters
 - Accounting compliance
 - Tax compliance
 - Transaction advisory services
 - Dispute resolution

- Experience with over 3,000 transactions



FAIR MARKET VALUE

If appraisers know what everything is worth, why aren't they all gazillionaires?

Outline

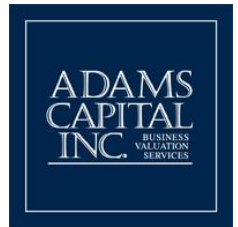


- Practical considerations
- Macro value drivers
- Think – it is easy to model and difficult to implement
- Success depends on significant factors beyond your control
- Somebody else has the same great idea and you are in a race to be successful first
 - They have more money and customers

Rules of thumb

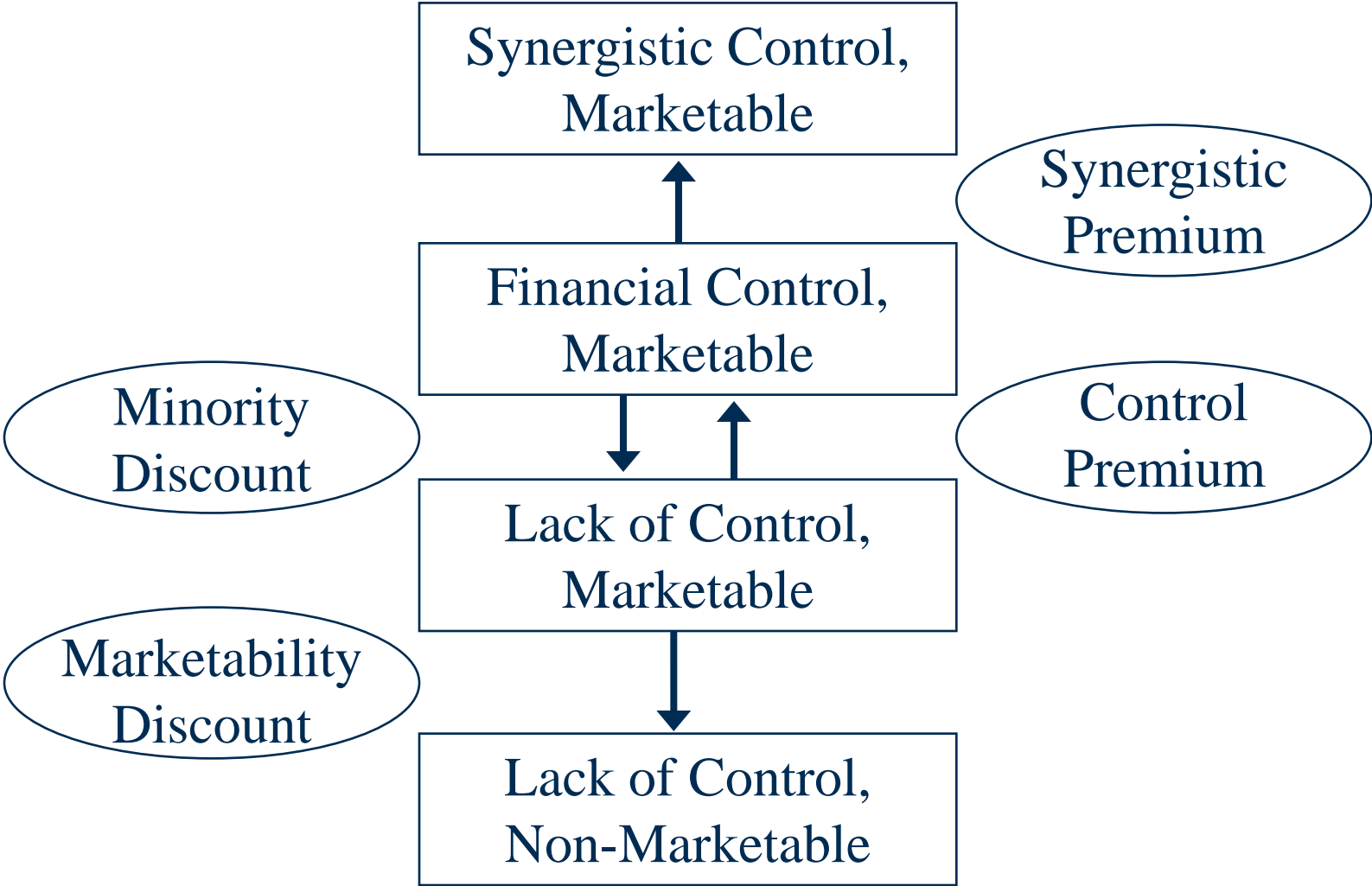
- The Siren's Song of valuation
- Revenue multiples, profit multiples, cash multiples, seller's discretionary earnings multiples, and many, many others
- Dangerously superficial – fails to distinguish more valuable firms from less valuable ones
- Sacrifice “why” a company presents a certain value

Approaches to value



Category	Key Driver	Application
Income	Cash flow or profits, Discount rate	When the target's future performance is expected to differ greatly from its past performance as is the case with start-ups or early stage businesses.
Market	Data on multiples from actual transactions	When information on <u>truly</u> comparable publicly traded companies or recent transactions is readily available.
Asset	Value of individual assets – liabilities	When the assets <u>are</u> the business.

Different levels of value



Income Approach - Discounted Cash Flow Method

Fair market value of the equity on a non-controlling, marketable basis (1)
 Less: Discount for lack of marketability (2)
 Fair market value of the equity on a non-controlling, non-marketable basis

Market Approach - Guideline Company Method

Fair market value of the equity on a non-controlling, marketable basis (1)
 Less: Discount for lack of marketability (2)
 Fair market value of the equity on a non-controlling, non-marketable basis

Market Approach - Similar Transactions Method

Fair market value of the equity on a non-controlling, non-marketable basis (1)
 Less: Discount for lack of control (5)
 Fair market value of the equity on a non-controlling, non-marketable basis

Concluded Value

Concluded fair market value of the equity on a non-controlling, non-marketable basis (6)
 Total shares outstanding (7)
 Concluded fair market value of one share of common equity on a non-controlling, non-marketable basis
 Total diluted shares outstanding (8)
 Concluded fair market value of one share of diluted common equity on a non-controlling, non-marketable basis

Year	Company	Equity Value	Revenue	EBITDA
01/11/2009	Veritas Inc. - Communications	226,200,000	226,200,000	228,000,000
12/31/2009	Veritas Inc. - Communications	147,700,000	926,700,000	355,200,000
07/14/2007	HealthStream Inc.	187,000,000	78,370,000	83,200,000
05/25/2007	Amgen Inc. - Pharmaceuticals	313,000,000	109,600,000	318,000,000
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	2009	2010	2011	2012	2013	2014	2015
Revenue	1,212,229,888.4	1,325,217,888.4	1,440,217,888.4	1,555,217,888.4	1,670,217,888.4	1,785,217,888.4	1,900,217,888.4
EBITDA	1,012,229,888.4	1,125,217,888.4	1,240,217,888.4	1,355,217,888.4	1,470,217,888.4	1,585,217,888.4	1,700,217,888.4
Net Income	812,229,888.4	925,217,888.4	1,040,217,888.4	1,155,217,888.4	1,270,217,888.4	1,385,217,888.4	1,500,217,888.4

	Mean	Median	High	Low	Coefficient of Variation
EV / Revenue	0.8x	0.8x	1.2x	0.7x	0.26
EV / EBITDA	11.4x	10.9x	22.3x	3.2x	0.70
EV / Net Income	8.9x	8.9x	161.3x	16.7x	1.15

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Cost of equity
 $Ke = Rf + Rm + Rs + Re$
 Risk free rate (Rf) (1) 4.20%
 Market premium (Rm) (2) 5.73%
 Small capitalization premium (Rs) (3) 5.81%
 Industry-specific risk (Re) (4) -0.04%
 Company-specific risk (Re) (5) 3.00%

Cost of equity (Ke) 18.70%
After tax cost of debt
 $Kd = Kb (1-t)$
 Borrowing rate (Kb) (6) 10.75%
 Tax rate (t) (7) 39.00%

After tax cost of debt (Kd) 6.56%
Weighted average cost of capital
 Capital Structure (9) 5.0%
 Cost 6.56%
 Weighted Cost 0.33%

Weighted average cost of capital 18.09%
Weighted average cost of capital (rounded) 18.00%

Selected Multiples (2)

	Revenue	EBITDA	Net Income
EV / Revenue	0.8x		
EV / EBITDA		11.4x	
EV / Net Income			8.9x

LTM 2009 company financial parameters

Revenue	\$ 226,200,000
EBITDA	\$ 228,000,000
Net Income	\$ 228,000,000

Indicated enterprise value on a non-controlling, marketable basis

Enterprise Value	\$ 182,568,186
Less: Cash	\$ 0
Less: Interest bearing debt	\$ (193,000)
Equity Value	\$ 182,568,186

Equity value on a non-controlling, marketable basis

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Barriers to value

- Risk
 - Uncertainty of value over time
 - Amount
 - Timing

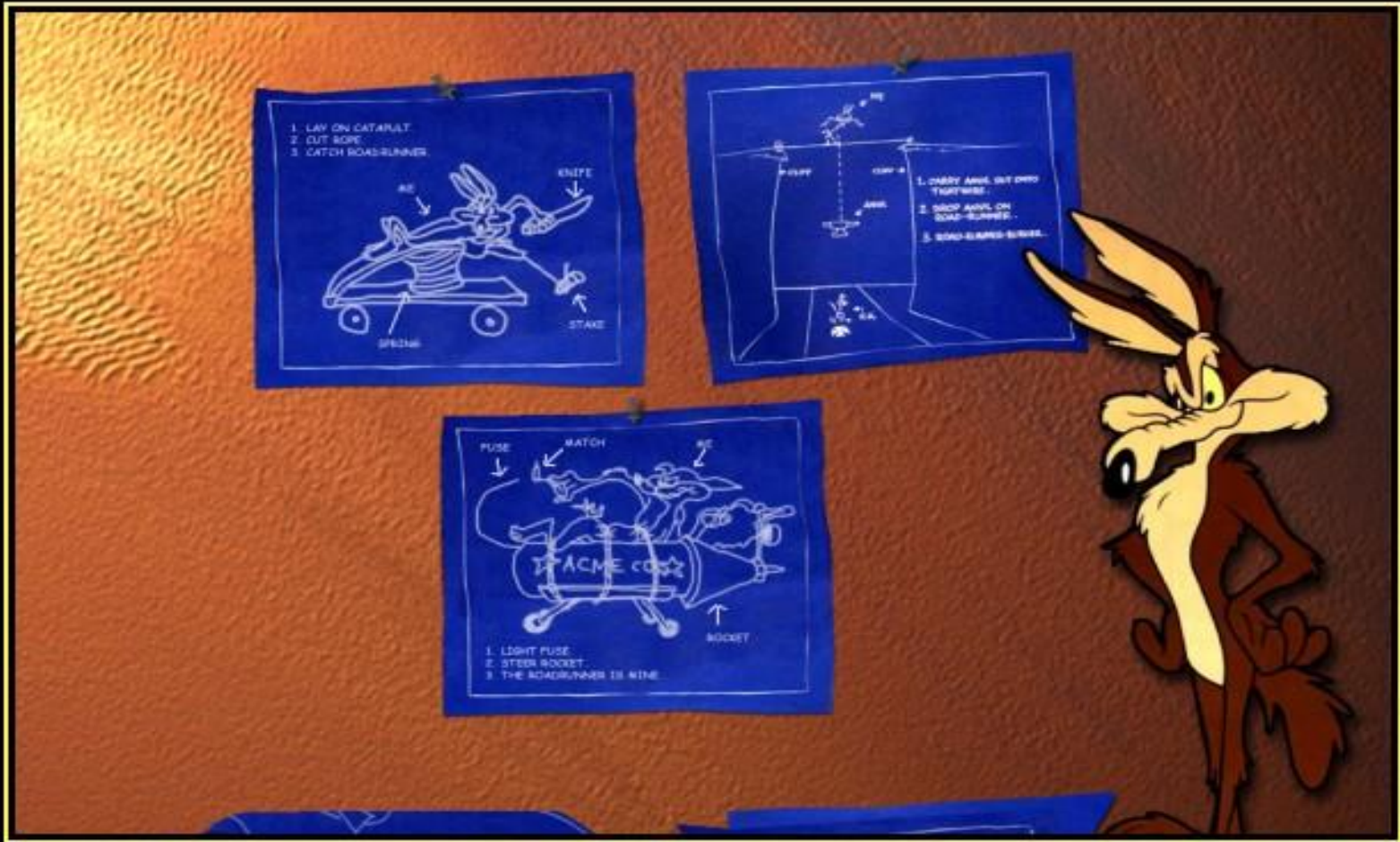
- Marketability
 - The desirability of the company by buyers
 - Controlling vs. Non-controlling interest

- Liquidity
 - The ability to buy and sell the company at will

Managing risk



Demand	Strong, documented sales pipeline
Technology	Patents, R&D budgets and plans
Financial Risk	Hedging instruments, lines of credit, liquid assets, audit
Management Risk	Non-compete agreements, key person insurance, employee ownership
Competition	Sales contracts, recurring revenues
Legal Risk	Contracts, liability insurance, directors' insurance, settle lawsuits/disputes
Safety Risk	Safety audits, crisis contingency plans
Supplier Risk	Supply contracts, facility leases
Regulatory/Tax Risk	Good inspection/compliance records. Good tax records. Make sure all inspections and tax liabilities are current.



BUSINESS RESEARCH

Sure, good business research helps you make better decisions, but winging it leaves me more Guitar Hero time.

Value: What is someone willing to pay?

- Who is “someone” and what are their circumstances?
 - Free to decide to buy/sell or not to buy/sell?
 - Is the asset made available to many buyers?
 - Could the buyer flip the asset at the same price quickly?
 - What was the second highest bid?
 - Is the buyer knowledgeable and privy to all relevant facts?
 - Were the terms of sale all cash?
 - Are non-financial drivers at work?

Comparing debt vs. equity

■ Debt

- Lower cost (as low as 10%)
- Faster decisions
- Easy to find lenders, easy to contact lenders
- Maintain control
- Bank would like you to stay in business
- Growth capital
- Interim payments
- Need collateral

■ Equity

- High cost (20%+)
- Due diligence takes months
- Need introductions and connections to equity providers (or rich relatives)
- You'll be pushed to sell your business
- Development capital
- Share/concede control
- No interim payments
- No collateral
- Financing of last resort

How expensive is equity?

- Say we raise \$1 MM in equity, and total business (post-money) is valued at \$5 MM
 - Sold a 20% stake
 - (No interest payments, no dividends)

- 5 years later, you sell your business at a value of \$20 MM.
 - You get \$16 MM, your investor gets \$4 MM
 - Financing cost you \$3 MM. You paid “interest” of 41%

- Bootstrap is a great option

Qualitative market summary

Supply/Demand dynamics at work

Stock Market Down	➔	Panic Selling	➔	Increased Business Supply
Economy Down	➔	Defensive Selling	➔	
Liquidity Down	➔	Selling to Raise Cash	➔	

Debt Financing Tight	➔	# of Buyers Down	➔	Reduced Business Demand
Stock Market Down	➔	Investable Funds Down	➔	
Economic Perception Down	➔	Risk Tolerance Down	➔	

Increased supply, reduced demand ➔ Downward value pressure

To invest or not to invest?

- What problem are we solving?
- Are we really solving the problem?
- What is the solution worth?
- Does the buyer immediately understand the value proposition?
- How much selling is required?
- Is implementation a hurdle?
- How long is the sales cycle?

Money, money, money

- What will it cost?
 - Time and amount

- How will I get my money back?

- What return will I get on my money?

- How is success defined?

- Will success require additional investment?

Not to invest: Barriers to funding

1. No industry experience
2. No business experience
3. No prior success
4. Poor concept
5. Large competitors
6. Significant capital requirements
7. Poor organization
8. Friends and family
9. Long sales cycle
10. Rosy forecasts

Really better to earn your financing

Who is a successful entrepreneur?

- Most common denominator among Adams Capital clients
 - Previously Bankrupt (or close)

- Extraordinary
 - Can do
 - Motivate/lead
 - Persuasive
 - Smart
 - Unique knowledge

Cash is king



- Surplus cash is safety
 - Not really a cost
 - Most common mistake is running out of money

Wanna get lucky?

- Founder shares
 - Worst part of capital structure
 - Little bargaining leverage
 - Terms dictated by last investor
 - Held hostage by other investors who typically can block new investment

- Initial terms do not really matter as they can be modified at each new round

- Plan to invest proportionately at every round

The numbers

- Venture IRR needs to be 40-50% to meet investor expectations after covering failed investments and fees
- Results are frequently unattainable or unrealistic

Investment perspective

- Global Economy
- US Economy (or primary market economy)
- Industry performance past and expected future
- Prior experience of investments in this area
- Fund style or experience
- Fund size
- Only 1 in 10 startups last 10 years

VC perspective

- Commitment to the VC investors for 20% or more total annual return
 - Consistent industry, style, size
- Complex terms designed to earn a return
- Commitment to invest consistent with style and within 1-3 years
- Harvest within 5-7 years
- Wrap up in 10 years (average 12)

Wanted: Economic catalyst

Time	Negative Shock	Rebound Catalyst
1930s-1940s	Great Depression	Government Spending, Manufacturing Export Boom
1950s-1960s	Manufacturing Bubble	Aerospace, Infrastructure, Great Society
1970s-1980s	Oil Embargoes	Lifting of oil embargo, Computing technology, pharmaceuticals
1990s	Savings & Loan Failure	Internet, Wireless Telecom, Asian markets, Venture Capital
2000s	Internet, real estate bubbles, accounting meltdowns	??? (Financial engineering) (Alternative Energy? Aerospace? Genetics/Stem Cells? Medical devices?)

Capital structure considerations¹



- Who has control and leverage of firm policy?
- Is the composition concentrated or diffuse?
- Do any investors have veto capabilities?
- Who are the holders of the securities? (banks, individuals, venture capitalists, hedge funds, friends & family)
 - Are they likely to have different objectives?
- How do they impact the overall risk of the company?

¹ Lurvey, David et al., *Hidden Treasures: Techniques for Valuing Distressed Enterprises*, [The Journal of Corporate Renewal](#), October, 2008 (www.turnaround.org)



SEED CAPITAL

I'll give you the capital you need to generate revenue just as soon as you start generating revenue.

What are equity investors looking for?

- Very high returns
 - \$1 billion market potential and exit in 5 years
- Management with experience
- Management with financial commitment
- Recurring revenue business model
 - People pay you over and over again
- “Unfair” competitive advantage
- Customer validation (sales, letters of intent, orders)
- Plan B – positive cash flow – no cost to hold



STOCK DEALS

Nothing says "our stock is valuable" like a company that doesn't have enough cash to pay you.

Valuing early stage ventures

- Potential market size
- Competitor capability
- Probability of success
- Management team prior experience
- Management “all in”
- Industry knowledge

How to increase business value

- Current earnings
- Maximize sale price
- Make money immediately
- Endure long sales/business cycle
- Customer contracts
- Patented technology
- Non-compete agreement with employees
- Make your business the most attractive in your industry
 - Competitor recognition

What are angel investors looking for?

- Return on investment
- Short investment horizon
- Specific accomplishments
- Energetic partners
- To be part of something important
- Enable success
- A challenge/job

Lessons from investors

- Do not focus on value
 - Focus on successfully capturing the market and profit

- Success is valued
 - Recovering from failure is a success

- Focus on problem solving

- Plan to fail a few times
 - Avoid guarantees to friends and family
 - Pivot

Lessons from investors (cont)

- Leverage your experience or expertise
 - Riskier to depend on others for core technology

- Do it yourself
 - Do not ask others to do things you would not do yourself (includes investing)

- Negotiate for win-win
 - Avoid win-lose

Entrepreneurs

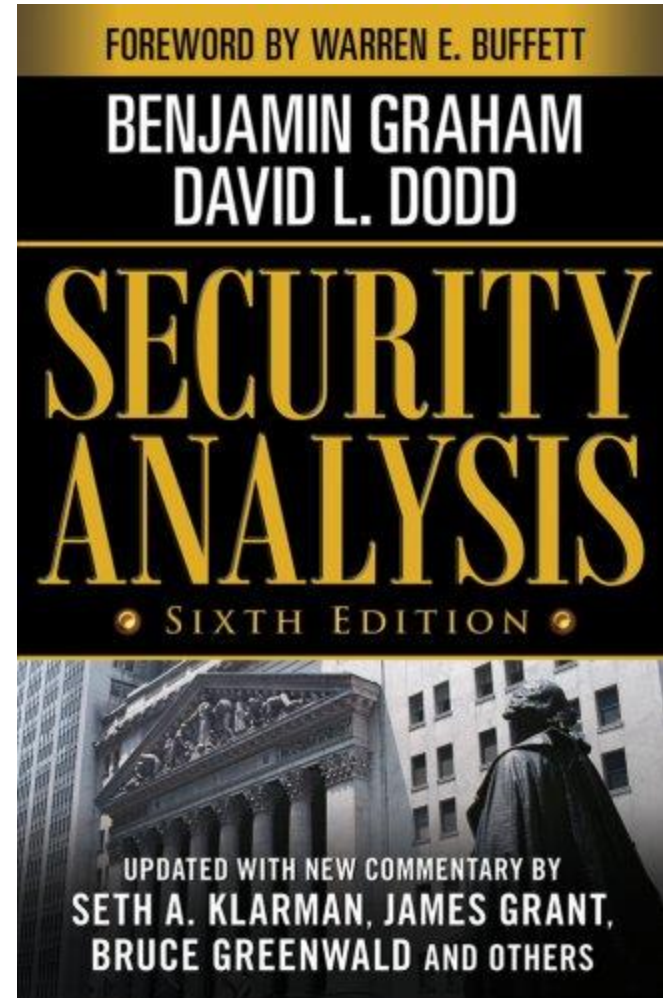


- “I need your money to see if my idea works and I expect to be paid a significant salary while trying...”
- Coachability of entrepreneur
- Likeability of entrepreneur
- Break even in 24 months or less
 - Think revenue – get to market quickly
- Small, fast-growing niche
- Bootstrap

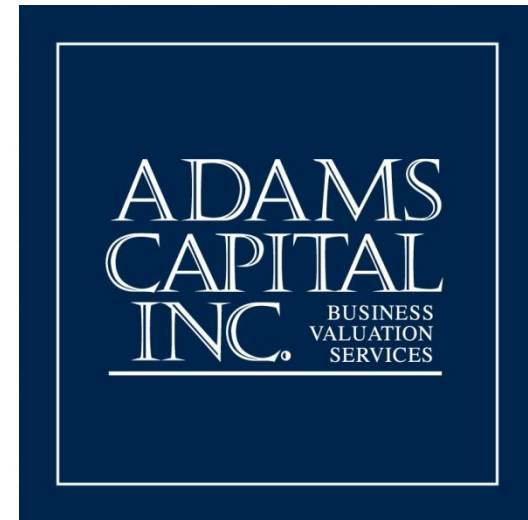
Recommended reading



- Security Analysis: Sixth Edition
 - Graham and Dodd



Thanks!



Questions or
Comments?

Appendix



Macro Investment Drivers

- $GDP = C + I + G + \text{Net exports (exports - imports)}$
 - C = Total consumption personal and business
 - I = Investments
 - G = Government spending

- Identity equation – true for all governments at all times

Macro Economic Growth

- $\Delta \text{GDP} = \Delta \text{Population} + \Delta \text{Productivity}$
 - Increase working age population
 - Increase productivity

- Increasing working age population (demographic shifts) is demographically understood 20 to 30 years in advance
 - No real surprises expected here

- Increasing productivity (technology improvements) takes time and frequently results in lower prices which may add to deflationary pressure

Macro Economic Balancing Trends

- Deflation
 - Good – increased productivity
 - Bad – lack of pricing power/lower final demand

- Inflation
 - Always and everywhere a monetary phenomenon (Milton Friedman)
 - Printing too much money

- Not inevitable but significant implications

Deflation



- Associated with massive wealth destruction
 - Trillions in wealth has evaporated

- Implications:
 - Massive deleveraging, reduced lending, default, bankruptcy, restructuring, financial distress, reduces nominal value of collateral, reduces credit worthiness, and forces asset sales into falling prices



CHANGE

WHEN THE WINDS OF CHANGE BLOW HARD ENOUGH,
THE MOST TRIVIAL OF THINGS CAN TURN INTO DEADLY PROJECTILES.

Inflation



- Central bank can print too much money
 - Brings inflation
 - Destroys currency

- With deflation there is potential for printing money and still not causing inflation



INFLATION

BECAUSE THE EASIEST WAY TO STEAL YOUR WEALTH IS BY CHEAPENING YOUR MONEY.

Keynes's Paradox of Thrift

- While good for one person to save, when everyone saves it decreases consumer spending
 - Less pricing power

Minsky Journey (2008)

- Hedge unit – investment is its own source of repayment
- Speculative unit – investment only pays the interest
- Ponzi unit – only way to pay the debt is for the value of the investment to rise (Greece)
 - Ends in violent markets and unwanted volatility
 - Stability brings instability
- Hyman Minsky



TERM SHEETS

We want you to know we see this as an equal partnership.

Balance Sheet Depression

- Private sector balance sheets
 - More liabilities than assets

- To credibly pay debt off the debtor has to have a well defined present value
 - Debt should be repaid if you look far enough in the future

- Problem with having more liabilities than you can service is that someone has to take a loss
 - Financial oppression (squeeze down/cram down)