An Overview

• What is your purpose?
• What is in your opportunity set?
• What is a good investment?
• What is your investment horizon?
• What is a good company to invest in?
• What do you know, and what you don’t?
• Gathering financial data
• Things to watch for
• Seven financial manipulations
• Assessing what you find
• Deciding on investment
• Was that a good investment or bad?
• What should you expect?
What is Your Purpose in investing in Equity of a Firm?

• Managing your own money
  – Savings for a rainy day
  – Savings for major expenses in the future such as house, education, etc.
  – Secure support for years of retirement
  – Finding if you have the skills or temperament
  – Taking a chance
  – Fun

• Managing others’ money
  – What is their goal
  – What is your goal
  – Is there a difference between the two goals?

• Business
  – Total return
  – Cash flow
  – Tax losses
  – Operational control/synergies/competition
What Is In Your Opportunity Set?

• What is the range of investment opportunities available to you, that you are comfortable with?
  – Regional
  – Domestic
  – International
  – Industry specific
  – Non-equity (corporate and government bonds, derivatives); commodities, currencies, their futures and derivatives; land, housing, and other real estate and related securities; art, antiques, and collectibles, etc.
What is Your Investment Horizon?

• Do you know when you would want to exit (cash out) your investment?
• If not, how uncertain are you?
• How much flexibility do you have in your time horizon?
• Do these answers match up with your answers to questions about the purpose of investment?
• What do you know about the investment horizons of other investors in the market?
Which Is a Better Company to Invest In?

• Highly profitable, well-managed, growing demand, high quality product, innovative, market leader?

• Or,

• Loss-making, poorly-managed, stagnant or shrinking demand, indifferent quality, “also-ran” in the market?
What Do You Know about the Firm?

• How does the firm make money?
• Who manages the firm? Competence? Trust?
• History
• Future prospects
  – Demand
  – Technology
  – Competition
  – Availability of resources
  – Strategy
  – Risks
Gathering Financial Data

• 10-K:
  – auditor’s report: absence of opinion, qualified report, reputation of auditor, audit committee (independent directors act as intermediary with auditors)
  – Footnotes: accounting policies / changes (in policies or estimates), review inventory valuation, (LIFO vs. FIFO / specific id) (except technology), revenue recognition (after sale vs. At sale with risk remaining), depreciation (accelerated vs. Straight line), estimate of warranty (high vs. Low), estimate of bad debts (high vs. Low), treatment of advertising (expense vs. Capitalize), loss contingencies (accrue loss vs. Footnote only), pending or imminent litigation (Item 3, better than footnote in annual), long term purchase commitments (at what price?)
  – Industry specific notes
  – Segment information (showing unhealthy segment)
  – Management discussion and analysis
  – Specific concise disclosures liquidity, capital expenditures, candor
  – consistent with footnotes
More Financial Data

- Annual Report: president’s letter, forthright vs. Always upbeat
- Proxy (for annual meeting): litigation, executive compensation
- Turnover of management
- Related party transactions
- 10-Q: unaudited, consistency with 10-K
- 8-K (special events): auditor changes, disagreements over accounting policies (opinion shopping), change in control of the company, acquisitions, dispositions, resignation of directors, bankruptcy
- Prospectus
- Past performance
- Quality of management and directors
- Conference calls, market history, industry reports, personal experience with products and services of the firm
Things to Watch for

• Executive incentives which encourage managing financial statements
• Poor internal controls
• Quarterly financial statements (they are not audited)
• Companies with weak control environment (board of directors is not independent; auditors not independent)
• Management facing extreme competitive pressure
• Management with questionable character
• Fast growth companies whose real growth is beginning to slow
• Basket case companies struggling to survive
• Newly public companies
• private companies (especially those which aren’t audited)
Seven Financial Manipulations

• Recording Revenue Too Soon
• Recording Bogus Revenues
• Boosting Income With One Time Gains
• Shifting Current Expenses to a Later Period
• Failing to Record or Disclose All Liabilities
• Shifting Current Income to a Later Period
• Shifting Future Expenses to the Current Period
• accelerating discretionary expenses into the current period
Assessing What You Find

• Valuation methods:
• Book value of net assets
• Market value of net assets
• Market value of equity
• Present value of dividends/net cash flows
• Valuation of comparable stocks
• Triangulation

• When you find an over or under-valued security, ask yourself
  – Did others miss something that I know?
  – Did I miss something that others know?

• Is the market efficient? If so, how efficient?
### Discounted Cash Flow

<table>
<thead>
<tr>
<th>Theoretically sound</th>
<th>Depends on assumptions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Forces analyst to think carefully about the future plans, prices, demand, costs</td>
<td>Manipulable (easy to convince yourself of anything you want)</td>
</tr>
<tr>
<td>Where is the beef?</td>
<td>Requires care to avoid double counting</td>
</tr>
<tr>
<td>Protection against investment fads</td>
<td>Requires specification of a discount rate</td>
</tr>
<tr>
<td>Getting off the train before its too late</td>
<td>What do I do if my DCF valuation is different from the market price?</td>
</tr>
<tr>
<td></td>
<td>Stick to my guns or follow the crowd?</td>
</tr>
</tbody>
</table>
Price/Earnings Ratios

<table>
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<tr>
<th>Benefits</th>
<th>Drawbacks</th>
</tr>
</thead>
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<tr>
<td>- A good sense of what others in the market believe of the industry</td>
<td>- P/E could be in line with the industry, yet E could be seriously distorted</td>
</tr>
<tr>
<td>- Safety in company of others</td>
<td>- Requires going into firm’s accounting methods</td>
</tr>
<tr>
<td>- Digging into the footnotes to understand the future of the firm and the</td>
<td>- Susceptibility to accounting shenanigans</td>
</tr>
<tr>
<td>mind-set of the management</td>
<td>- Unreliable as E gets close to zero</td>
</tr>
</tbody>
</table>
### Price to EBIT, EBITDA, Sales

| Focus on the enterprise value | In highly leveraged firms, interest can be an important part of the story |
| Bypass the financing decision | Need care about firms with large tax loss carry forwards |

| Protects from the non-cash effects of depreciation and goodwill amortization | Firm may have overpaid for mergers |
| More stable measure of performance | Firm may not be sustainable, and this problem may go undetected |

| New firms with no earnings/negative cash flow | Profit-less sales |
### Break-Up Value, Mergers and Acquisitions

<table>
<thead>
<tr>
<th>Valuation of each segment of business requires careful thinking about the plans and prospects of each</th>
<th>Ignores any synergies</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sometimes, you can find hidden gems (e.g., real estate values in retailing)</td>
<td>Entrenched management may not be willing to part with the pieces (though it is getting increasingly difficult)</td>
</tr>
</tbody>
</table>

<table>
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<th>Is the business more valuable to someone else?</th>
<th>May not happen</th>
</tr>
</thead>
<tbody>
<tr>
<td>External synergies</td>
<td>Will investors pocket the gain in value from the merger?</td>
</tr>
<tr>
<td>Expert management</td>
<td>New ideas</td>
</tr>
</tbody>
</table>
Management Quality, WACC (discount rate)

<table>
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<th>Ultimately, what matters is the quality of people who run the firm</th>
<th>Even best people may not be able to make money from a bad business</th>
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<td>Leverage</td>
<td>Market sensitivity</td>
<td>Estimation errors, How long a time series, Subjective adjustments</td>
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Ultimately, what matters is the quality of people who run the firm. Even best people may not be able to make money from a bad business. How can you tell which managers are good?

- Leverage
- Market sensitivity
- Estimation errors
- How long a time series
- Subjective adjustments
Market Efficiency?

<table>
<thead>
<tr>
<th>Protection from hubris</th>
<th>Why be in the business of financial analysis?</th>
</tr>
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<tbody>
<tr>
<td>There are values to be discovered</td>
<td>Fool’s gold</td>
</tr>
<tr>
<td>There’s gold in them thar hills!</td>
<td></td>
</tr>
</tbody>
</table>

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Deciding on investment

• Have I found something which is mis-priced?
• Do I understand why it is mispriced?
• Does investment in this opportunity fit my goals, investment horizon, and constraints?
• What is the worst that can happen with this investment? Can I live with that?
Was that a good investment or bad?

- Ex ante vs. ex post evaluation of investments
- Learning from post mortems
- Why did that investment work, or did not work?
- What did I learn from this experience?
What should You expect?

• You are competing with a lot of other smart people
• Most of us cannot expect to be the winners all the time
• If your winning average is slightly more than 50/50, you are doing fine
• But it takes a long time to find out
• Markets makes it tough for the wise to make a lot of money, and for fools to lose a great deal (index funds will earn you the average anyway)
• So, you better do the hard work of research and understanding before choosing equities to invest in
Thank You!