

# Financial Analysis Case study

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## Steps in Analysis

- Establish the Objectives
- Study the Industry and Economic Climate
- Know the Firm
- Evaluate the Financial Statements
- Summarize the Findings

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## Objectives

- Extend Credit
- Management
- Financial Analyst
- Investor

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Broadcom Inc.

- Located in Irvine, CA
- Have been in Business since 1991
- D & B Rating 5A2
- Primary SIC Code 3674
  - Semiconductors and related devices

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Broadcom Inc.

- Morgan Stanley Smith Barney Analyst
  - July 31, 2009
  - Rating – Overweight expected to exceed average Total Return
  - Industry View – Attractive
  - Additional Rating – 4\* Stock expected to outperform S & P 500 in absolute price rising.

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Broadcom Corporation is a global leader in semiconductors for wired and wireless communications. Our products enable delivery of voice, video, data and multimedia to and through out the home, the office and the mobile environment. Broadcom provides the industry's broadest portfolio of state of the art system on a chip and software solutions to manufacturers of computing and networking equipment, digital entertainment and broad band access products, and mobile devices. These solutions support our core mission: Connecting everything.

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## Trends

- Common size
  - Balance Sheet
  - Income Statement
    - Vertical
    - Horizontal

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## Balance Sheet - Assets

Assets	2008	2007	2006	2005
Cash	27.1%	45.2%	44.3%	38.3%
Marketable Securities	16.1%	2.9%	10.7%	7.9%
Accounts Receivable	8.5%	7.8%	7.8%	8.2%
Inventory	8.3%	4.8%	4.2%	5.2%
Prepays	2.6%	2.6%	1.8%	2.7%
<b>Total Current Assets</b>	<b>62.6%</b>	<b>63.1%</b>	<b>68.7%</b>	<b>62.3%</b>
PPE	5.3%	5.0%	3.4%	2.6%
Marketable Securities	0.0%	1.6%	2.5%	3.8%
Goodwill	29.1%	28.5%	24.3%	30.6%
Intangible Assets	1.4%	1.0%	0.6%	0.2%
Other Assets	1.5%	0.9%	0.5%	0.5%
Long Term Assets	37.4%	36.9%	31.3%	37.7%
<b>Total Assets</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>

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## Balance Sheet - Liabilities

Liabilities and Equity	2008	2007	2006	2005
Accounts Payable	7.1%	6.5%	6.3%	7.7%
Wages	3.5%	3.1%	2.2%	1.9%
Deferred Revenue	0.3%	0.3%	0.0%	0.1%
Accrued Liabilities	5.5%	5.2%	5.4%	6.2%
<b>Total Current Liabilities</b>	<b>16.3%</b>	<b>15.1%</b>	<b>13.9%</b>	<b>15.8%</b>
Long Term Deferred Rev	0.1%	0.2%	0.0%	0.0%
Other Long Term Liabilities	1.5%	1.3%	0.1%	0.3%
	1.6%	1.5%	0.1%	0.3%

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### Worksheet

- Comments
- Concerns

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### Return on Equity

- Net Income / Equity
- 214,794 / 3,607,067

2008	2007	2006	2005
5.95%	5.29%	9.04%	13.09%

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### Return on Assets

- Net Income / Total Assets
- 214,794 / 4,393,265

2008	2007	2006	2005
4.89%	4.41%	7.77%	10.97%

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## Worksheet

- Comments
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## Margins

- Gross Profit
- Gross Profit / Net Sales
- 2,445,110 / 4,358,125

2008	2007	2006	2005
52.49%	51.48%	51.05%	52.63%

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## Margins

- Operating Profit
- EBIT / Net Sales
- 172,130 / 4,658,125

2008	2007	2006	2005
3.70%	2.25%	6.64%	12.61%

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## Margins

- Net Profit
- Net Income / Net Sales
- 214,794 / 4,658,125

2008	2007	2006	2005
4.61%	5.66%	10.33%	15.42%

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## Margins

- Stock Price (BRCM)
- December 31 (Closing Price)

2008	2007	2006	2005	2004
16.97	26.59	32.31	31.43	21.52

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## Worksheet

- Comments
  
- Concerns

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### Turnover

- Accounts Receivable in Days
- AR / (Net Sales / 365)

2008	2007	2006	2005
29.17	35.67	38.10	42.00

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### Turnover

- Inventory in Days
- Inventory / (Cost of Goods / 365)

2008	2007	2006	2005
60.38	46.08	41.22	56.21

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### Turnover

- Total Asset Turnover
- Net Sales / Total Assets

2008	2007	2006	2005
0.94	1.28	1.33	1.40

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## Worksheet

- Comments
- Concerns

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## Leverage

- Debt Ratio
- Total Liabilities / Total Assets

2008	2007	2006	2005
5.59	6.03	7.12	6.18

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## Leverage

- Debt to Equity
- Total Liabilities / Equity

2008	2007	2006	2005
21.80%	19.87%	16.34%	19.29%

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## Worksheet

- Comments
- Concerns

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## Current Ratio

- Current Assets / Current Liabilities
- 2,751,213 / 717,103

2008	2007	2006	2005
3.84	4.18	4.94	3.93

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## Working Capital

- Current Assets – Current Liabilities
- 2,751,213 – 717,103

2008	2007	2006	2005
2,034,110	2,323,716	2,673,087	1,741,254

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## Cash

- Cash Flow Statement

Statement of Cash Flows	2008	2007	2006	2005
Operations	919,615	825,317	887,385	446,708
Investing	(745,382)	54,405	(365,480)	(173,081)
Financing	(1,170,160)	(851,260)	198,929	305,057

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## Cash on Hand

- Cash and Marketable Securities

2008	2007	2006	2005
1,898,122	2,328,300	2,680,450	1,732,678

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## Worksheet

- Comments

- Concerns

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## Recommendation

- Credit Line:
- Terms:
- Security:
- Support:

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Z Score

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Z-Score

- ◆ Dr. Robert Altman
- ◆ Developed in the late 1960's
- ◆ Financial Distress Companies
- ◆ Statistical Analysis

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### Uses Seven Ratios

- ◆ Total Assets
- ◆ Total Liabilities
- ◆ Working Capital
- ◆ Retained Earnings
- ◆ Earnings Before interest and Taxes
- ◆ Sales
- ◆ Market Capitalization

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### Five Components

- ◆  $X1 = WC / TA$
- ◆  $X2 = RE / TA$
- ◆  $X3 = EBIT / TA$
- ◆  $X4 = MC / TL$
- ◆  $X5 = S / TA$

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### Component 1

- ◆  $WC / TA$
- ◆ This is considered to be a reasonable predictor of a deepening trouble at a company. A company that experiences repeated operating losses generally will suffer reduction in working capital.

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### Component 2

- ◆ RE / TA
- ◆ This provides the extent to which a company has been able to reinvest its earnings in itself. An older company has more time to accumulate earnings so this is biased toward older businesses.

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### Component 3

- ◆ EBIT / TA
- ◆ This ratio adjusts the companies earnings for various taxing factors and makes adjustments for leverage borrowing.

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### Component 4

- ◆ MC / TL
- ◆ How much can the company's assets decline in value before debts exceed assets. Equity consist of market value of all outstanding preferred and common equity.

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### Component 5

- ◆ S / TA
- ◆ Measures the ability of the firm to generate sales. This is not in the formula for a private company.

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### Formula

- ◆ Manufacturing Companies
  - $(1.2 * X1) + (1.4 * X2) + (3.3 * X3)$
  - $+ (0.6 * X4) + (1.0 * X5)$

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### Formula

- ◆ Non Manufacturing Company
  - $(6.56 * X1) + (3.26 * X2) + (6.72 * X3)$
  - $+ (1.05 * X4)$
- $Z < 1.1$  Bankruptcy candidate
- $Z > 2.6$  Financial Health

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## Discussion

- ◆ Questions
- ◆ Issues

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