



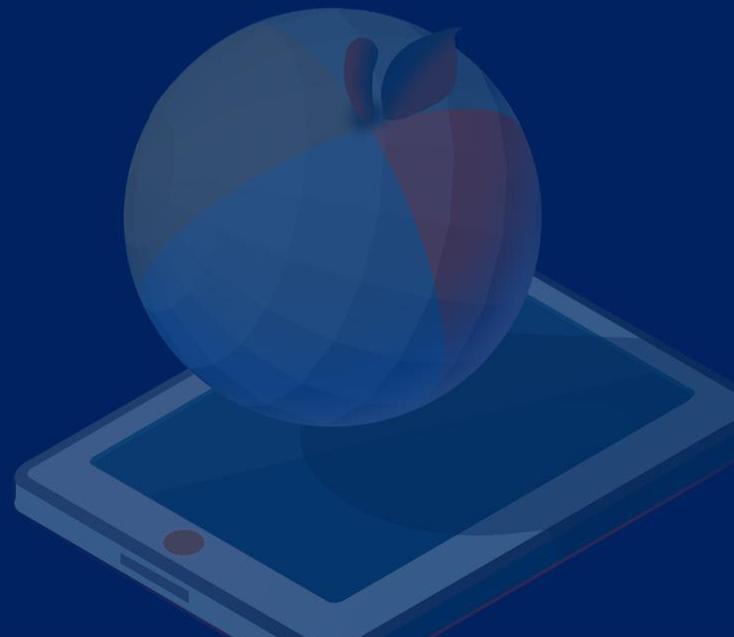
FINANCIAL EVALUATION AND STRATEGY:

CORPORATE FINANCE

with Heitor Almeida

MODULE 1

The Objective of the Corporation and Analysis of
Financial Ratios





VIDEO LESSON 1-1

Objectives and Overview



OBJECTIVES OF THIS MODULE

Understand the goal and the language of corporate finance



Unfortunately, the language of corporate finance is not Portuguese!

LANGUAGE



We will learn how to use financial statements to measure key corporate finance concepts using financial ratios.

Leverage, liquidity, profitability, cash flows

WHAT IS THE GOAL OF THE CORPORATION?

In corporate finance, we study financial and investment decisions made by companies.



But what is their objective?

(flickr.com/c___, 2009)

SHAREHOLDER VALUE MAXIMIZATION

In this module, we will discuss the concept of shareholder value maximization and its potential problems.

MODULE 1 OBJECTIVES

(1 OF 3)

You will learn:

Why maximizing the stock price is a reasonable goal for companies and is better than most alternative goals

Potential conflicts between stock price maximization and social responsibility, employees, and the government

What the “agency problem” is and how corporate governance can help

MODULE 1 OBJECTIVES

(2 OF 3)

You will learn:

How to use information from the balance sheet to measure liquidity and solvency and compare across companies

How to use information from the income statement to measure profitability and compare across companies

How to use information from the cash flow statement to understand how a company is generating and spending cash

MODULE 1 OBJECTIVES

(3 OF 3)

You will learn:

The calculation and meaning of valuation ratios such as market-to-book ratios

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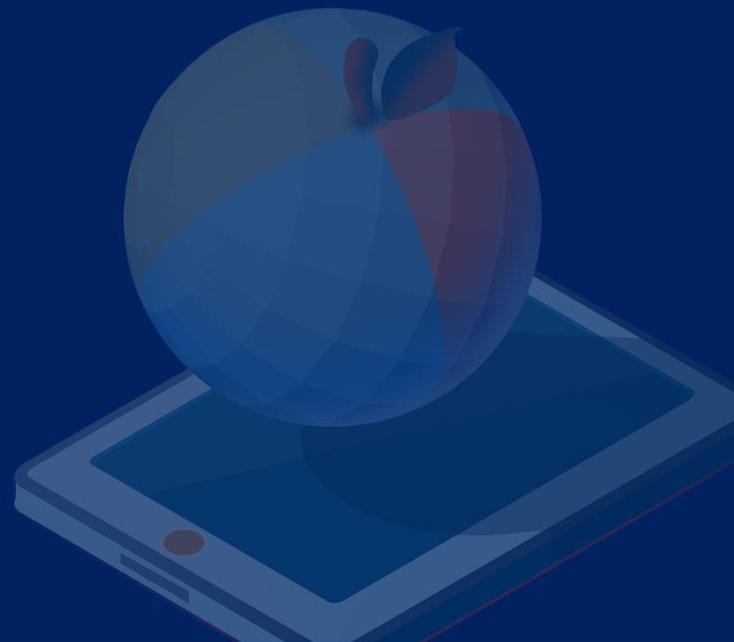
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MODULE 1

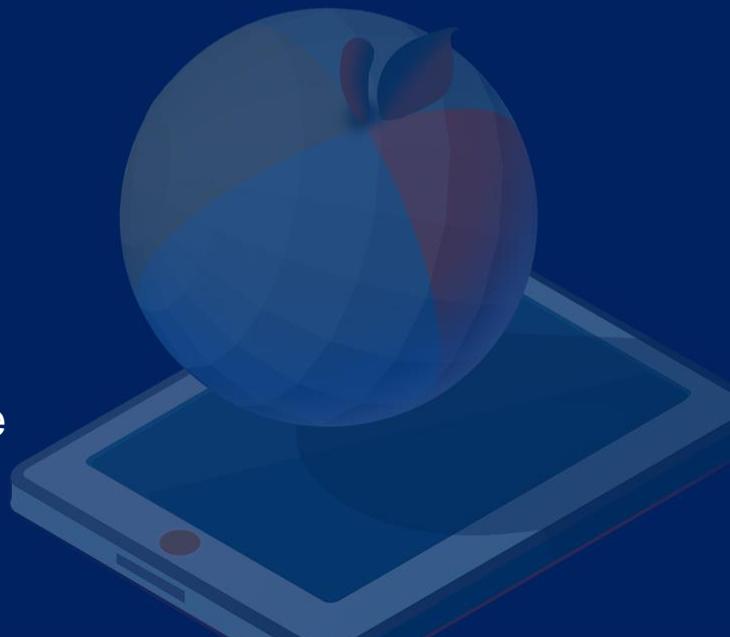
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VIDEO LESSON 1-2

Why Maximizing the Stock Price Is a Reasonable
Goal for a Company



OBJECTIVE OF THE CORPORATION

“Maximize Current Shareholder Wealth”



IS THE STOCK PRICE THE RIGHT VARIABLE TO LOOK AT?

Why stock price? Don't shareholders care about the future?

Think about the following: What determines a stock price?

Stock price is the discounted sum of all future cash flows, so it reflects all consequences of any decision a company takes today.

DO STOCK PRICES REALLY REFLECT INFORMATION ABOUT THE FUTURE? (1 OF 2)

On Sep 4, 2001, Hewlett-Packard announced to the press that it was buying Compaq.

The merger was highly contested by the shareholders of HP, and was completed almost a year later.

But check out what happened to HP's stock price when the merger was announced on September 4.

DO STOCK PRICES REALLY REFLECT INFORMATION ABOUT THE FUTURE? (2 OF 2)



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THE ROLE OF EFFICIENT MARKETS

Stock price is the discounted sum of all future cash flows, so it reflects all consequences of any decision a company takes today.

Under efficient markets, the statement is exactly true.

Since markets are not perfectly efficient, stock price is not always a perfect measure of value.

Are there good alternatives?

ALTERNATIVE 1 – EARNINGS-PER-SHARE

(1 OF 2)

Earnings-per-share (current earnings divided by shares outstanding)

Will maximizing earnings-per-share maximize current shareholder wealth?



(Maxwell, 2007)

ALTERNATIVE 1 – EARNINGS-PER-SHARE

(2 OF 2)

Will maximizing earnings-per-share maximize current shareholder wealth?

No. Earnings-per-share measure current profits; ignore the future completely

Maximizing EPS can lead to short-termism

In fact, there are better measures of profitability (coming up soon ...)

EXAMPLE – EPS AND MERGER ANNOUNCEMENT

On July 14, 2015, the biotech company Celgene announced a 7.2 billion deal to buy Receptos, which is developing a new drug for autoimmune diseases.

The stock market reacted positively to the deal. Celgene stock price went up from \$115 to \$135.

But management also announced that the deal will reduce EPS until at least 2019.

ALTERNATIVE 2 – BOOK VALUE-PER-SHARE

Book value of equity (rather than market)

Will maximizing book value per share maximize current shareholder wealth?

No.

Book values reflect mostly the past, not the future.

BOTTOM LINE

Maximizing stock prices is the “lesser evil,” as long as we are concerned mostly with shareholder wealth.

The real problems arise when maximizing shareholder wealth creates conflicts with society and other stakeholders.

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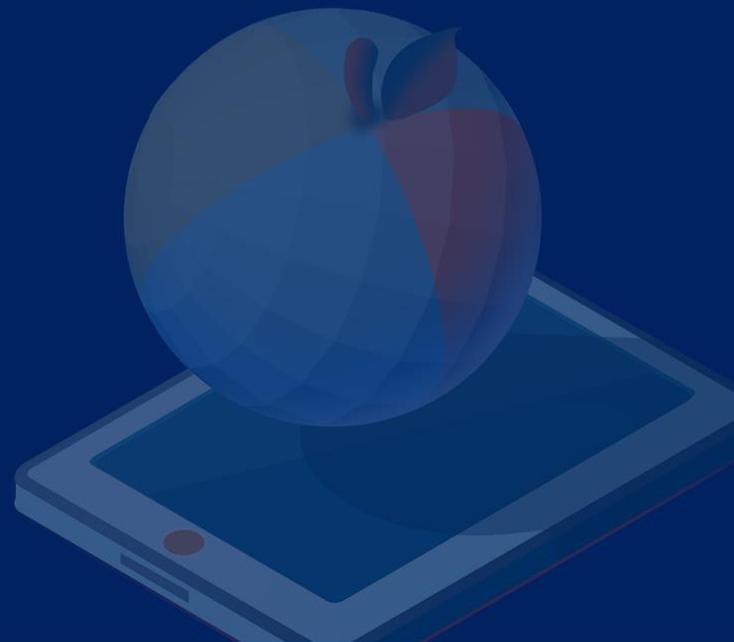
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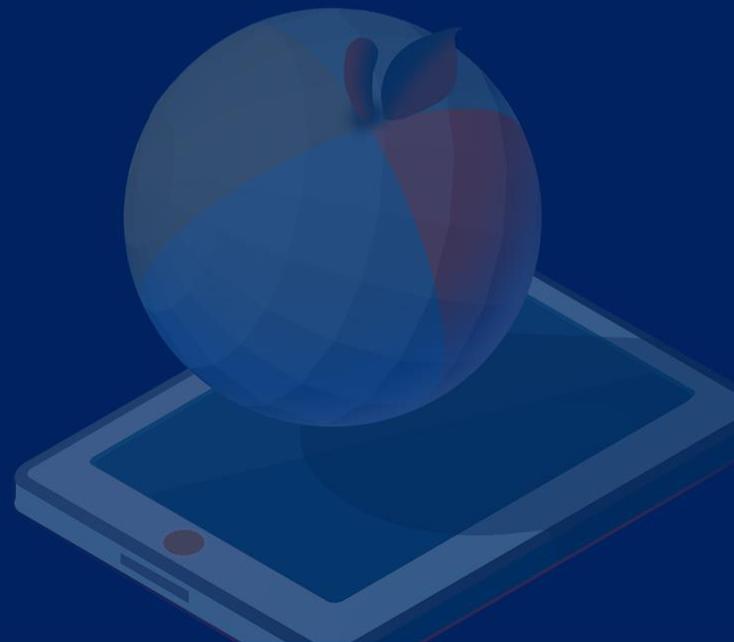
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MODULE 1

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Financial Ratios





VIDEO LESSON 1-3

Conflicts between Shareholder Value
Maximization and Society

CORPORATE SOCIAL RESPONSIBILITY

Examples of socially responsible corporate actions

Investments in human capital

Investments in sustainability

Corporate philanthropy

POTENTIAL CONFLICTS

Is maximizing stockholder wealth consistent with social responsibility?

Can you think of some examples in which there may be conflicts?

Products that are bad for health
(tobacco, junk food)

Pollution

Outsourcing of labor

SHOULD COMPANIES MINIMIZE THEIR TAX BILLS?

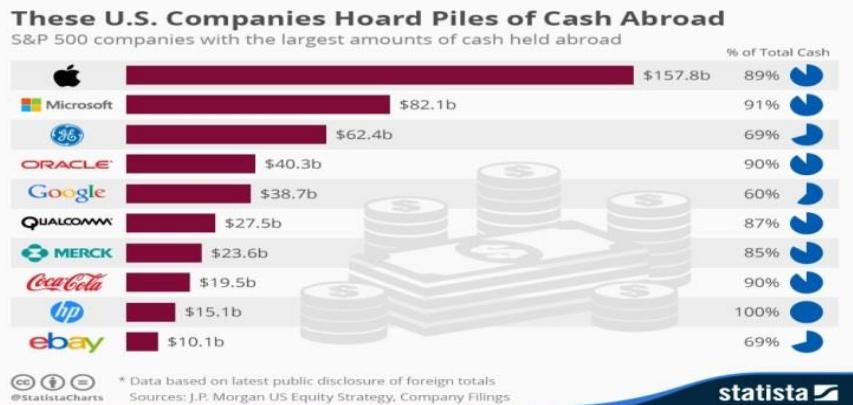


Minimizing taxes increases profits and stock prices.

But it reduces tax collection by the government and increases budget deficits.

REAL CONSEQUENCES OF TAX AVOIDANCE

S&P 500 multinational companies may hold more than 1 trillion dollars of cash outside the US (2013 data)



Why is this related to taxes?

(Statista, 2015)

REPATRIATION TAXES

Suppose profits are generated in Ireland, where the corporate tax rate is 10% for manufacturing firms.

\$1 billion of profits generated in Ireland generates a tax bill of \$100 million (Irish tax)

US tax rate is 35%

US firm would pay an extra \$250 million to bring the cash back home!

REPATRIATION TAXES AND INVESTMENT

Foreign cash cannot be used for dividends or for investments in the US without generating repatriation tax.



Barack Obama sets out plan to tax US companies on \$2tn profits held abroad.

SHAREHOLDER WEALTH VS. OTHER STAKEHOLDERS

(1 OF 2)

Does a high stock price also benefit employees, suppliers, and debtholders?



(Maxwell, 2007)

SHAREHOLDER WEALTH VS. OTHER STAKEHOLDERS

(2 OF 2)

Does a high stock price also benefit employees, suppliers and debtholders?

Yes – more valuable firms can pay higher wages, improve career prospects, increase profits for suppliers, and lower risk for debtholders.

But this congruence may not always hold.

EXAMPLE OF POTENTIAL CONFLICT (1 OF 2)

Mergers and acquisitions (M&A)

M&A can make some jobs obsolete and induce firms to cut employment to improve operating efficiency.



(Caskin, 1908)

EXAMPLE OF POTENTIAL CONFLICT (2 OF 2)

Mergers and acquisitions (M&A)

M&A is sometimes financed with large amounts of new debt (leveraged buyouts, or LBOs). This new issuance can hurt existing bondholders.

We will discuss this issue in greater detail later in the course.

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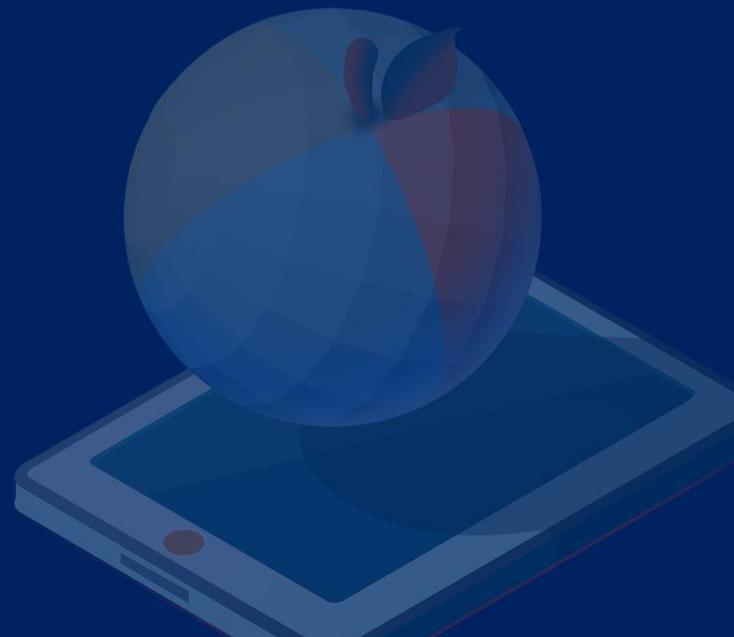
FINANCIAL EVALUATION AND STRATEGY:

CORPORATE FINANCE

with Heitor Almeida

MODULE 1

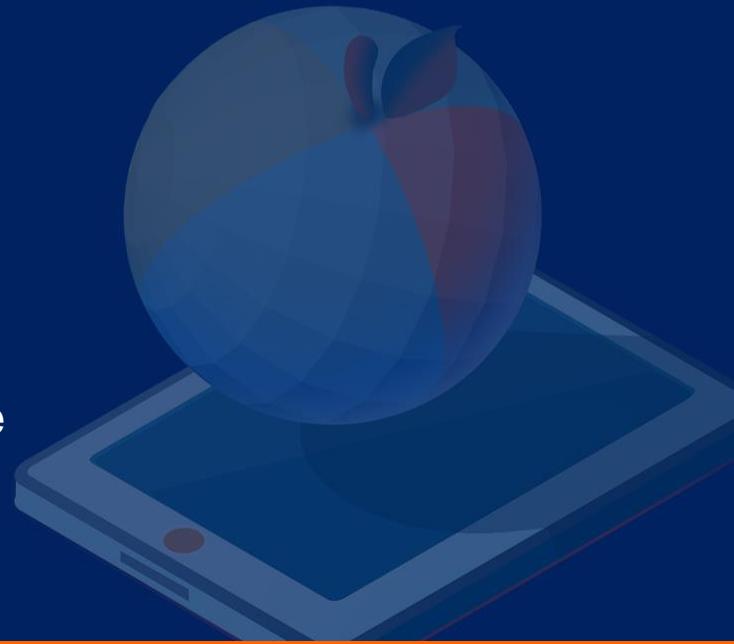
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Financial Ratios





VIDEO LESSON 1-4

The Agency Problem and Corporate Governance



CORPORATE GOVERNANCE AND SHAREHOLDER WEALTH

Managers maximize their own wealth and may not always act in the interests of shareholders.

We call this the “agency” problem.

EXAMPLES OF GOVERNANCE ISSUES/AGENCY PROBLEM

Stealing from company

Employing family members

Not working hard enough

Overspending the company's money
(corporate jets)



(Brossard, 2008)

ALIGNING MANAGERIAL INCENTIVES

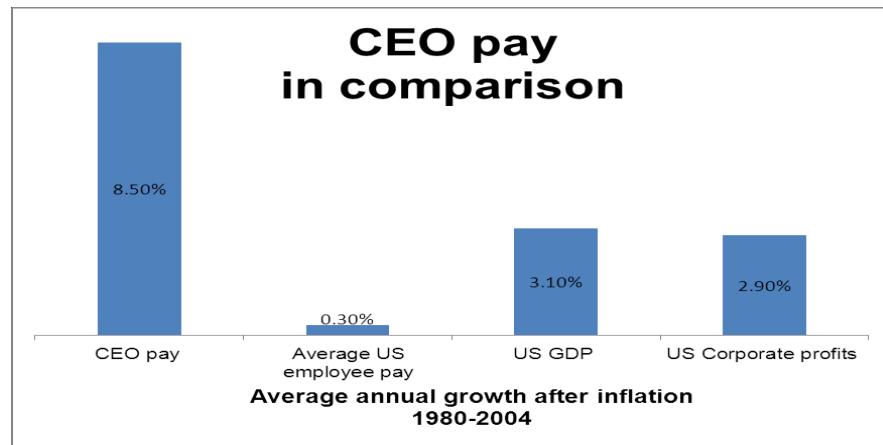
How can companies align incentives of managers and shareholders?

Executive compensation – stocks, options

If managers own stock, they will maximize the stock price!

THE DEBATE ON EXECUTIVE COMPENSATION

Has stock compensation gone too far?



Are top executives paid too much?

(commons.wikimedia.org/BoogaLouie, 2012)

TWO VIEWS ON EXECUTIVE COMPENSATION

Two sides in this debate

Executive pay is determined by the market. High pay is just a consequence of high demand for talent.

But pay is determined by the board of directors, which may not work independently from the CEO.

THE ROLE OF CORPORATE GOVERNANCE

A possible solution is to rely on other governance mechanisms.

Truly independent board of directors

Institutional investors with large stakes in firms (activists)

Pressure from M&A market – inefficient companies will die out!

“SAY ON PAY”



Following the financial crisis of 2007-2009, the US introduced a new “say-on-pay” provision, according to which shareholders must vote to approve executive compensation.

But in a vast majority of cases (98% in 2012), shareholders approved compensation proposed by the board.

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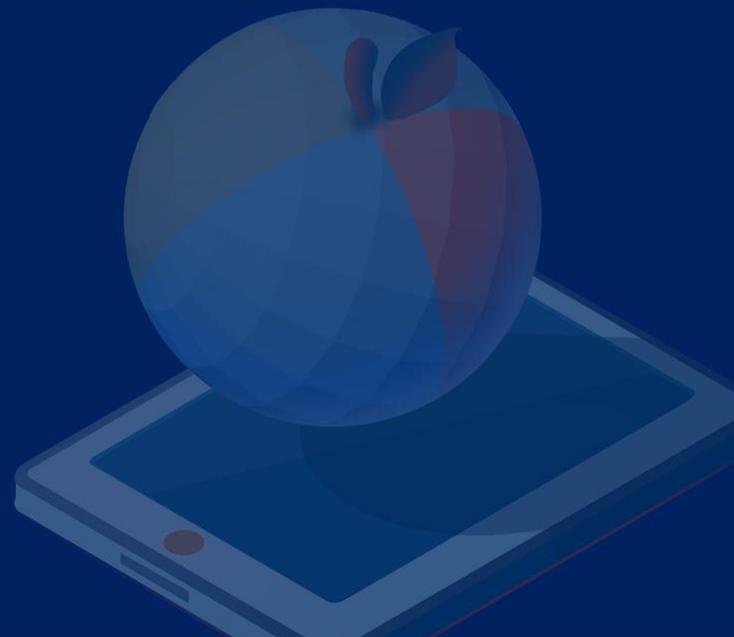
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MODULE 1

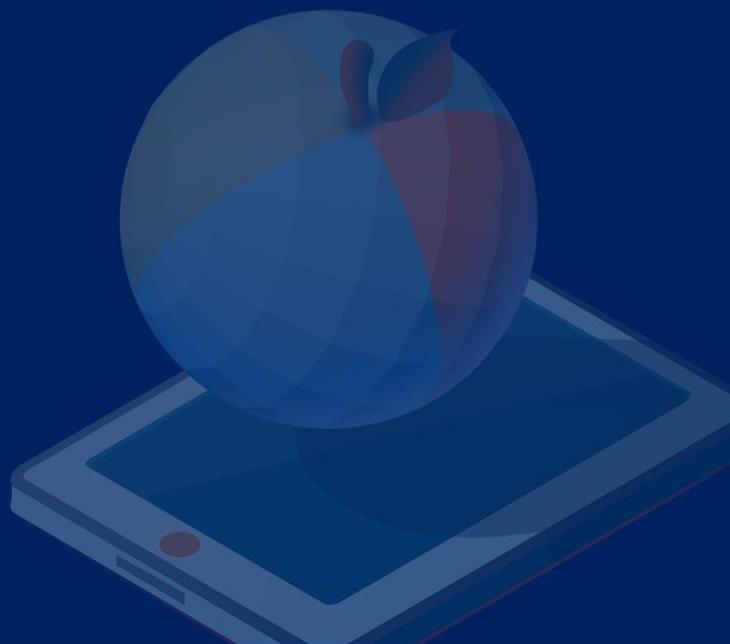
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Financial Ratios





VIDEO LESSON 1-5.1

Balance Sheet Ratios: Introduction



FINANCIAL RATIOS USING ACCOUNTING DATA

Accounting is the language of corporate finance.

We will now learn how to use financial ratios to measure key corporate finance concepts.

BALANCE SHEET EXAMPLES

Firm A			
Current Assets	\$100000	Current Liabilities	\$200000
Non-Current Assets	\$400000	Non-Current Liabilities	\$100000
		Equity	<u>\$200000</u>
Total Assets	\$500000	Total	\$500000
Firm B			
Current Assets	\$100000	Current Liabilities	\$50000
Non-Current Assets	\$400000	Non-Current Liabilities	\$250000
		Equity	<u>\$200000</u>
Total Assets	\$500000	Total	\$500000
Firm C			
Current Assets	\$100000	Current Liabilities	\$50000
Non-Current Assets	\$400000	Non-Current Liabilities	\$0
		Equity	<u>\$450000</u>
Total Assets	\$500000	Total	\$500000

TWO KEY BALANCE SHEET CONCEPTS

Liquidity

Solvency (leverage)

We will use data from three real world companies to illustrate the calculation of financial ratios.

CABLEVISION



Cablevision Systems Corporation is a leading telecommunications and media company with a portfolio of operations that includes a full suite of advanced digital television, voice and high-speed Internet services, and valuable local media and programming properties.

DIRECTV



DirecTV is one of the world's leading providers of digital television entertainment services delivering a premium video experience through state-of-the-art technology, unmatched programming, and industry leading customer service to more than 37 million customers in the US and Latin America.

(The DirecTV Group, n.d.)

B/E AEROSPACE



B/E Aerospace, Inc. is an S&P 400 and NASDAQ listed manufacturer of aircraft passenger cabin interior products for the commercial and business jet aircraft markets.

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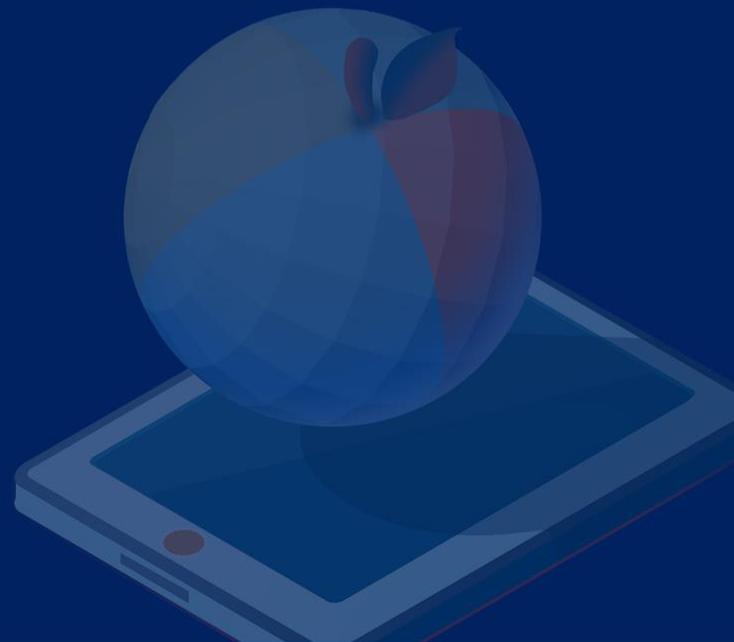
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CORPORATE FINANCE

with Heitor Almeida

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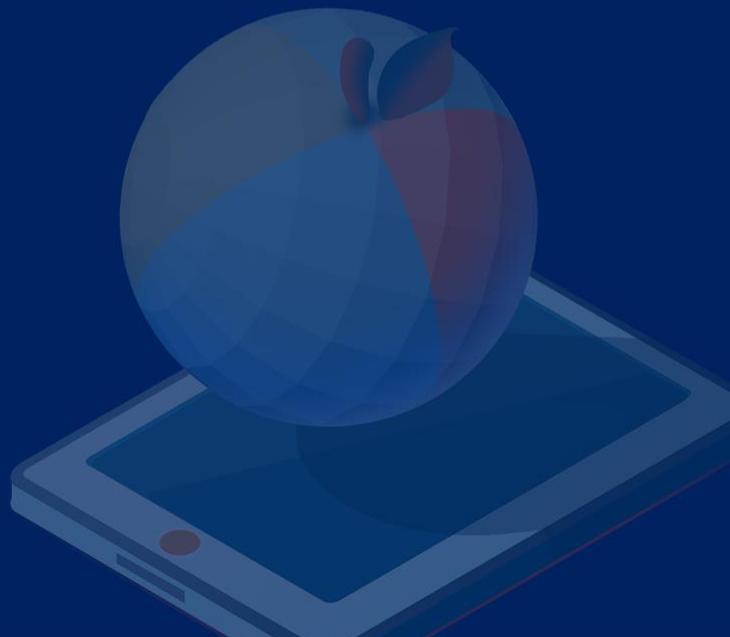
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Financial Ratios





VIDEO LESSON 1-5.2

Balance Sheet Ratios: Liquidity



BALANCE SHEET RATIOS – LIQUIDITY

Current ratio

(Current assets/ Current liabilities)

Compute the ratio for

Cablevision

BE Aerospace

CABLEVISION BALANCE SHEET

	Dec-31-2013	Dec-31-2014	Mar-31-2015
Assets			
Total Cash & ST Investments	702.2	850.4	884.4
Total Receivables	284.6	279.3	250.9
Prepaid Exp.	158.4	140.1	159.3
Deferred Tax Assets	159.8	37.9	41.6
Other Current Assets	419.4	623.0	452.1
Total Current Assets	1724.4	1930.7	1788.4
Liabilities			
Accounts Payable	422.9	431.8	420.0
Accrued Exp.	500.9	584.2	534.6
Current Port. of LT Debt	327.4	541.2	626.3
Current Port. of Cap. Leases	12.0	17.2	17.4
Unearned Revenue, Current	47.2	52.9	55.0
Other Current Liabilities	130.5	122.9	84.4
Total Current Liabilities	1441.1	1750.2	1737.6

(S&P Capital IQ, 2015)

B/E AEROSPACE INC. BALANCE SHEET

	Dec-31-2013	Dec-31-2014	Mar-31-2015
Assets			
Total Cash & ST Investments	637.8	292.5	295.4
Accounts Receivable	484.1	289.0	353.7
Other Receivables	6.2	82.6	-
Total Receivables	490.3	371.6	353.7
Inventory	1943.8	925.2	970.6
Deferred Tax Assets, Current	29.4	17.6	14.3
Other Current Assets	58.4	48.1	89.0
Total Current Assets	3159.7	1655.0	1723.0
Liabilities			
Accounts Payable	357.9	275.1	298.7
Accrued Exp.	272.6	282.1	488.6
Current Portion of LT Debt	-	20.6	16.1
Current Income Taxes Payable	28.7	14.6	-
Unearned Revenue, Current	152.9	112.9	-
Other Current Liabilities	67.0	75.4	-
Total Current Liabilities	879.1	780.7	803.4

(S&P Capital IQ, 2015)

ANALYSIS OF CURRENT RATIOS

BE current ratio = 2.15

Why is BE's ratio so high?

Inventory!

Is inventory a liquid asset?



LIQUIDITY

Liquid Asset



Adapted from *Money Hand Holding Bankroll Girls February 08, 20117 [Online image]* by Depolo, 2011, and *J Sainsbury's regional distribution centre at Waltham Point [Online image]* by Saltmarsh, 2008

IS INVENTORY A LIQUID ASSET?

Companies can try to sell inventory to raise cash but ...

Liquidating inventory to raise cash may disrupt the business.

Companies may not get a good price when liquidating inventory.

INVENTORY LIQUIDITY

Berger, Ofek, and Swary (Journal of Financial Economics, 1996) gathered data on the amounts that firms were able to obtain when discontinuing operations for different types of assets.

Cash and short term investments = 1

Receivables = 0.72

Inventory = 0.55

LIQUIDITY RATIOS THAT ADJUST FOR INVENTORY

Quick ratio (cash + short term investments + receivables) / current liabilities

Cash ratio (cash + short term investments) / current liabilities

Recalculate ratios

Compare Cablevision with DirecTV

DIRECTV BALANCE SHEET

	Dec-31-2013	Dec-31-2014	Mar-31-2015
Assets			
Total Cash & ST Investments	2180.0	4635.0	4284.0
Accounts Receivable	2547.0	2800.0	2635.0
Inventory	283.0	299.0	334.0
Prepaid Exp.	373.0	542.0	715.0
Deferred Tax Assets, Current	140.0	68.0	71.0
Restricted Cash	7.0	10.0	7.0
Other Current Assets	423.0	465.0	-
Total Current Assets	5953.0	8819.0	8046.0
Liabilities			
Accounts Payable	1070.0	1584.0	4527.0
Accrued Exp.	392.0	411.0	112.0
Short-term Borrowings	200.0	-	-
Current Portion of LT Debt	1056.0	1327.0	2355.0
Unearned Revenue, Current	589.0	584.0	570.0
Other Current Liabilities	3223.0	3053.0	-
Total Current Liabilities	6530.0	6959.0	7564.0

(S&P Capital IQ, 2015)

SUMMARY OF LIQUIDITY RATIOS

	Current Ratio	Quick Ratio	Cash Ratio
Cablevision	1.0	0.7	0.5
DTV	1.1	0.9	0.6

Example

DTV quick ratio = $(4,284 + 2,635) / 7564 = 0.9$

WHAT IS A GOOD CURRENT/QUICK/CASH RATIO?

Can the company pay for short-term liabilities without relying on cash flow?

Current ratios should be above 1

Quick ratios should also be above or at least close to 1

Desirable cash ratio depends on how liquid the receivables are, and other considerations (Module 2)

HOW DOES LIQUIDITY DETERIORATE?



Increase short debt to invest in long-term assets

Use cash to invest in long-term assets

Poor performance

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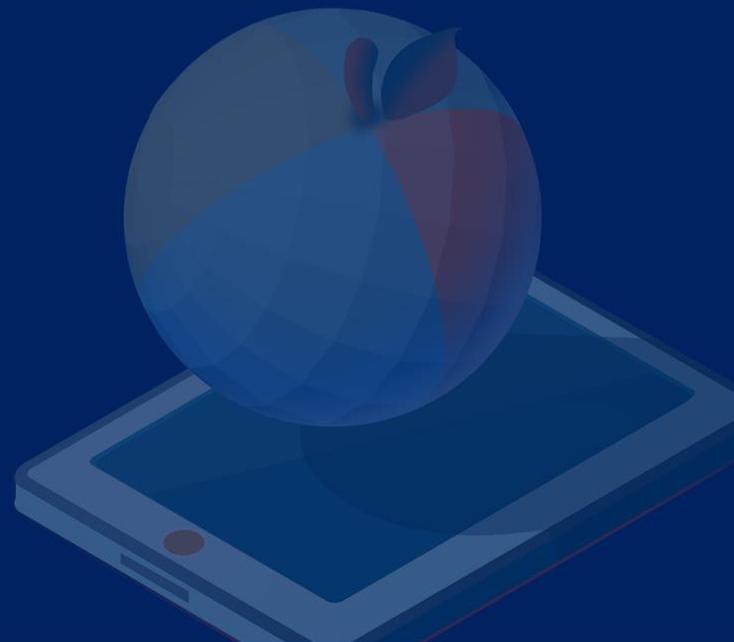
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CORPORATE FINANCE

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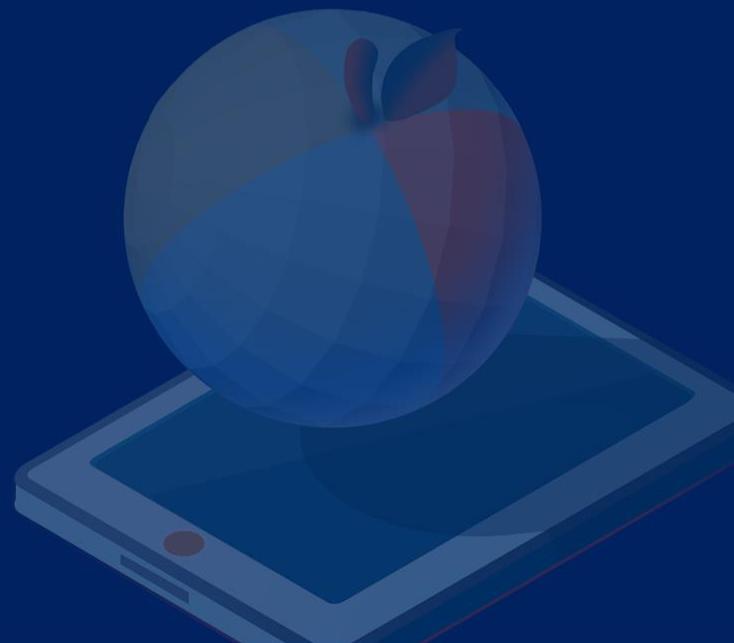
The Objective of the Corporation and Analysis of
Financial Ratios





VIDEO LESSON 1-5.3

Balance Sheet Ratios: Solvency



SOLVENCY (LEVERAGE) RATIOS

Debt Ratios

(Careful – Many different definitions)

Debt = Short-term debt + Long-term
debt

1. Debt / Assets
2. Debt / (Debt + Equity)
3. Liabilities / Assets

WHAT IS THE DIFFERENCE AMONG THESE RATIOS?

Simplified Balance Sheet	
<u>Assets</u>	<u>Liabilities</u>
Total assets	Debt
	(+) Other liabilities (e.g., accounts payable, pensions)
	(=) Total liabilities
	Equity = Total assets – Total liabilities
So:	
Total assets = Debt + Other liabilities + Equity	

DIFFERENT RATIOS

1. Debt / Assets ignores other liabilities such as pensions
2. Debt / (Debt + Equity) considers only financial liabilities
3. Total liabilities / Total assets

I prefer to look at 2 and 3

Debt / Assets may underestimate leverage for some companies

CABLEVISION MARKET DATA

Current Capitalization (Millions of USD)	
Share Price as of Jun-09-2015	\$23.81
Shares Out.	275.6
Market Capitalization**	6561.7
-Cash & Short-Term Investments	884.4
+ Total Debt	9719.4
+ Pref. Equity	-
+Total Minority Interest	9.2
= Total Enterprise Value (TEV)	15405.8
Book Value of Common Equity	(5031.8)
+ Pref. Equity	-
+ Total Minority Interest	9.2
+ Total Debt	9719.4
= Total Capital	4696.8

Balance Sheet			
	Dec-31-2013	Dec-31-2014	Mar-31-2015
Assets			
Total Assets	6591.1	6765.2	6701.2
Liabilities			
Total Liabilities	11865.3	11797.2	11723.8
Total Equity	(5274.3)	(5032.0)	(5022.6)

Cablevision (NYSE:CVC)

(S&P Capital IQ, 2015)

ANALYSIS

Debt seems to be larger than assets
for Cablevision and DTV

Can a company have negative
equity?



(Maxwell, 2007)

NEGATIVE EQUITY

Can a company have negative equity?

A company with negative equity is effectively bankrupt.

Debt > Assets so debtholders own the entire company

Are Cablevision and DTV bankrupt?

BOOK VERSUS MARKET EQUITY

The problem is **book** equity.

Book value reflects the past, and not the current value of the firm (which depends on future cash flows).

To measure leverage, you need to use the **market** value of equity rather than the book value.

Stock Price * Shares Outstanding

LEVERAGE RATIOS BASED ON MARKET VALUES

1. Debt / (Debt + Market value of equity)
2. Total liabilities / Market value of assets

Where

Market Value of Assets = Market value of equity + Total liabilities

Let us compute the ratios for both companies.

DTV MARKET DATA

Current Capitalization (Millions of USD)	
Share Price as of Jun-09-2015	\$91.9
Shares Out.	504.1
Market Capitalization**	46323.3
-Cash & Short-Term Investments	4284.0
+ Total Debt	19413.0
+ Pref. Equity	-
+ Total Minority Interest	367.0
= Total Enterprise Value (TEV)	61819.3
Book Value of Common Equity	(4647.0)
+ Pref. Equity	-
+ Total Minority Interest	367.0
+ Total Debt	19413.0
= Total Capital	15133.0

DIRECTV > Balance Sheet			
	Dec-31-2013	DEC-31-2014	Mar-31-2015
Assets			
Total Assets	21905.0	25459.0	24301.0
Liabilities			
Total Liabilities	28074.0	30287	28581.0
Total Equity	(6169.0)	(4828.0)	(4280.0)

DIRECTV (NasdaqGS:DTV)

Market value of equity = 46,323 (market cap.)

Market value of assets = 28,581 + 46,323 = 74,904

LEVERAGE RATIOS BASED ON MARKET VALUES

	Debt / (Debt + Equity)	Liabilities / Assets
DTV	0.30	0.38
Cablevision	0.60	0.64

Cablevision market value of assets =
11,724 + 6,562 = 18,285

WHAT IS A GOOD LEVERAGE RATIO?

Certainly below 1

Leverage > 1 means that company is effectively bankrupt

Average leverage ratio in US companies is between 25%-30%

Optimal leverage ratio depends on many considerations (topic for next course!)

HOW DOES LEVERAGE GET HIGH?



1. Issue debt to repurchase equity
2. Issue debt to invest in projects
(maybe)
3. Poor performance (reduces equity value)

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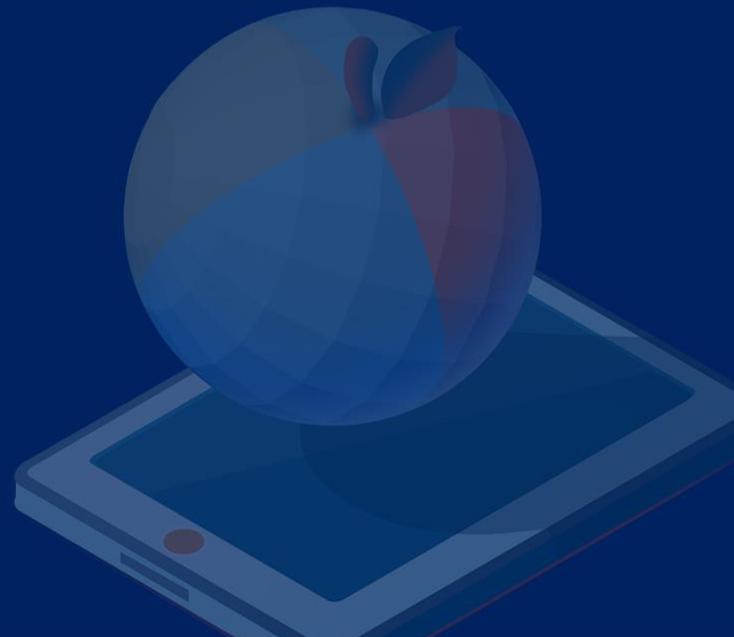
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CORPORATE FINANCE

with Heitor Almeida

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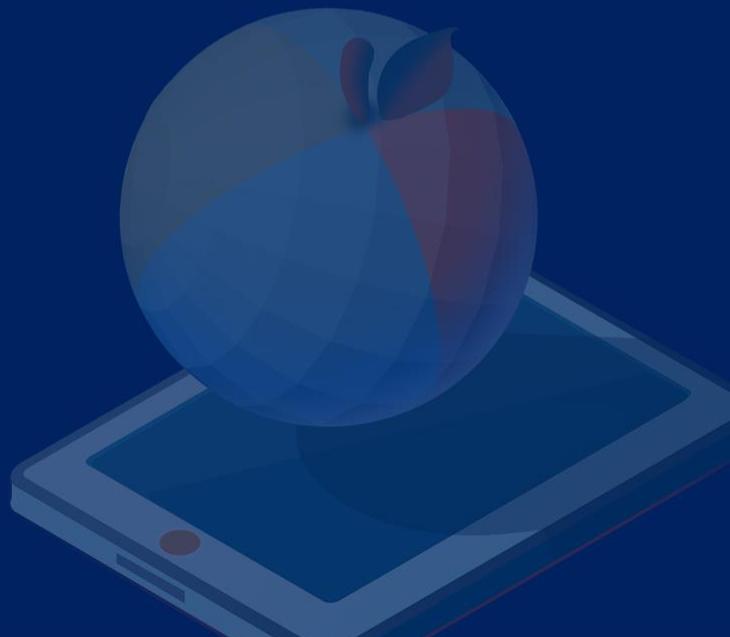
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VIDEO LESSON 1-6

Income Statement Ratios: Profitability



INCOME STATEMENT DTV

DIRECTV > Income Statement

	12 months Dec-31 2013	12 months Dec-31 2014	LTM Mar-31 2015
Total Revenue	31754.0	33260.0	33548.0
Cost of Goods Sold	16642.0	17680.0	17923.0
Gross Profit	15112.0	15580	15625.0
Other Operating Exp., Total	9803.0	10102.0	10244.0
Operating Income	5309.0	5478.0	5381.0
Interest Expense	(840.0)	(859.0)	(870.0)
Interest and Invest. Income	72.0	68.0	77.0
Net Interest Exp.	(768.0)	(791.0)	(793.0)
EBT Incl. Unusual Items	4488.0	4448.0	4554.0
Income Tax Expense	1603.0	1673.0	1618.0
Net Income to Company	2885.0	2775.0	2936.0

(S&P Capital IQ, 2015)

LTM = latest twelve months (April-March)

KEY INFORMATION ON INCOME STATEMENT



Profitability

PROFITABILITY RATIOS

1. Revenues-to-Assets (Asset turnover)
2. Net Profit Margin = OPAT / Revenues
3. Return on Assets (ROA) = OPAT / Assets
4. Return on Assets (ROE) = Net income / Equity

OPAT (Operating profits after taxes) is

OPAT = Operating income – taxes

OPAT VS. NET INCOME

Cablevision > Income Statement

	12 months Dec-31 2013	12 months Dec-31 2014	LTM Mar-31 2015
Total Revenue	6232.2	6460.9	6500.1
Cost of Goods Sold	3079.2	3139.8	3161.0
Gross Profit	3152.9	3321.1	3339.1
Operating Exp., Total	2381.7	2395.1	2395.0
Operating Income	771.2	926.1	944.2
Interest Expense	(601.1)	(576.0)	(579.5)
Interest and Invest. Income	0.5	0.4	0.4
Net Interest Exp.	(600.6)	(575.6)	(579.1)
EBT Incl. Unusual Items	193.0	425.2	454.8
Income Tax Expense	65.6	115.8	180.6
Net Income	465.7	311.4	266.3

(S&P Capital IQ, 2015)

$$\text{OPAT} = 944.2 - 180.6 = 764$$

Net income is approximately OPAT - Interest

PROFITABILITY RATIOS – EQUITY OR ASSETS? (1 OF 2)

OPAT and ROA measure profitability for the company as a whole.

Net income and ROE measure profitability from the perspective of shareholders only.

PROFITABILITY RATIOS – EQUITY OR ASSETS? (2 OF 2)

Net income is at the bottom of the income statement, easily affected by accounting manipulation and one-time items.

ROA is usually a better measure of profitability (see example below).

PROFITABILITY RATIOS – MARKET OR BOOK VALUES

(1 OF 2)

Should we use the market value of assets in the denominator to compute profitability ratios?



(Maxwell, 2007)

PROFITABILITY RATIOS – MARKET OR BOOK VALUES?

(2 OF 2)

Here you want to use book values!

You want to compare profitability to capital invested in the company, not the company's total value.

If you use market value, this is what you will be doing:

PROFITABILITY RATIOS FOR CABLEVISION AND DTV

Let us compute profitability ratios for Cablevision and DTV.

Cablevision > Balance Sheet			
	Dec-31-2013	Dec-31-2014	Mar-31-2015
Assets			
Total Assets	6591.1	6765.2	6701.2
Liabilities			
Total Liabilities	11865.3	11797.2	11723.8
Total Equity	(5274.3)	(5032.0)	(5022.6)

(S&P Capital IQ, 2015)

For example: Cablevision ROA =
764 / 6,701 = 0.11

PROFITABILITY RATIOS – SUMMARY

	Asset Turnover	Net Profit Margin	ROA	ROE
Cablevision	0.97	0.12	0.11	?
DTV	1.38	0.11	0.15	?

Can you compute ROE?

WHAT ABOUT EPS (EARNINGS-PER-SHARE)?

(1 OF 2)

EPS = net income / shares
outstanding

Net income on numerator, as in
ROE (same problems)

WHAT ABOUT EPS (EARNINGS-PER-SHARE)?

(2 OF 2)

Additional problem: number of shares outstanding can be easily manipulated

Stock splits

Share repurchases

Do not use EPS to compare profitability across firms.

REFERENCE

- S&P Capital IQ. (2015). [Data file]. Retrieved from <http://www.spcapitaliq.com/>
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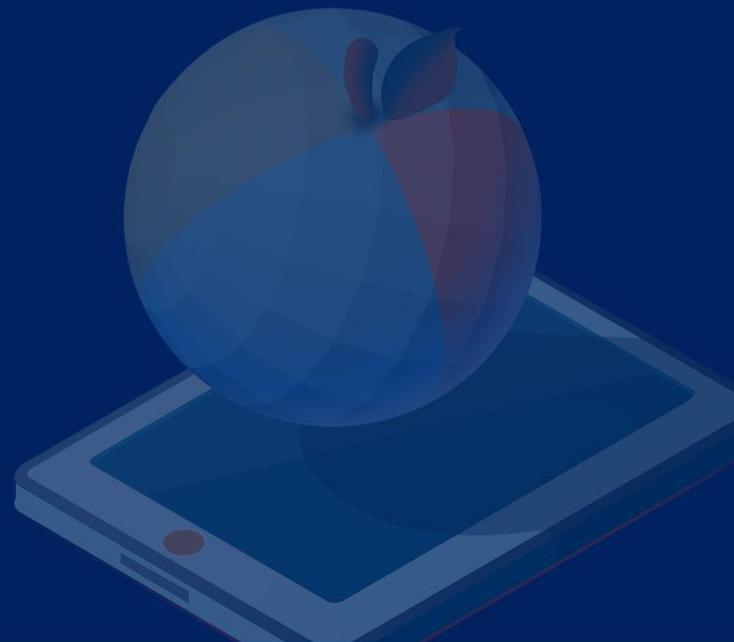
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VIDEO LESSON 1-7

Cash Flow Statement Ratios



STATEMENT OF CASH FLOWS

Three major sections

Cash from operating activities

Cash from investing activities

Cash from financing activities

What does the statement of cash flow measure?

DTV CASH FLOW STATEMENT

DIRECTV > Cash Flow Statement

	12 months Dec-31-2013	12 months Dec-31-2014	LTM Mar-31-2015
Net Income	2859.0	2756.0	2925.0
Depreciation & Amort., Total	2497.0	2552.0	2568.0
Change in Acc. Receivable	-	(242.0)	(189.0)
Change in Inventories	118.0	(16.0)	(17.0)
Change in Acc. Payable	272.0	361.0	400.0
Cash from Ops.	6394.0	6369.0	6415.0
Capital Expenditure	(3786.0)	(3225.0)	(3230.0)
Cash from Investing	(3753.0)	(3363.0)	(3372.0)
Total Debt Issued	2665.0	2951.0	1513.0
Total Debt Repaid	(739.0)	(1567.0)	(2582.0)
Issuance of Common Stock	-	21.0	21.0
Repurchase of Common Stock	(4000.0)	(1386.0)	(491.0)
Total Dividends Paid	-	-	-
Cash from Financing	(2176.0)	(168.0)	(1706.0)
Net Change in Cash	278.0	2455.0	1270.0

(S&P Capital IQ, 2015)

CASH FLOW STATEMENT AND THE COMPANY'S LIFECYCLE

Cash flow statement contains a lot of information about what is going on in the company

	Companies			
	A	B	C	D
Cash from Operating	200	300	-400	-400
Cash from Investing	-400	300	-200	-200
Cash from Financing	200	-600	600	0
Net Change in Cash	0	0	0	-600

Which of these companies is likely to be a startup?



(Maxwell, 2007)

WHAT IS HAPPENING TO THESE COMPANIES? (1 OF 2)

Which of these companies is likely to be a startup?

Company C is likely a startup that is generating negative cash, investing, and raising money from investors.

Company B is a mature company that is downsizing (selling off investments) and paying back investors.

WHAT IS HAPPENING TO THESE COMPANIES? (2 OF 2)

Company A is a profitable company that requires additional financing.

Company D has a negative change in cash – what will happen to the company?

CASH PROFITABILITY RATIOS

Similar to profitability ratios, but based on cash profits

$\text{CFOA} = \text{Operating Cash Flow} / \text{Assets}$

Compute cash profitability for Cablevision and DTV

CABLEVISION CASH FLOW STATEMENT

	12 months Dec-31 2013	12 months Dec-31 2014	LTM Mar-31 2015
Net Income	465.7	311.4	266.3
Depreciation & Amort., Total	860.7	860.2	864.9
Change in Acc. Receivable	(25.7)	(42.4)	(42.4)
Change in Acc. Payable	(1.7)	25.5	25.5
Change in Unearned Rev.	(9.5)	5.2	5.2
Cash from Ops.	1365.9	1377.1	1308.9
Capital Expenditure	(951.7)	(891.7)	(872.2)
Cash from Investing	(302.5)	(882.0)	(870.3)
Total Debt Issued	3866.3	1166.6	1316.7
Total Debt Repaid	(4339.7)	(1386.8)	(1487.8)
Issuance of Common Stock	18.1	55.4	45.3
Repurchase of Common Stock	(12.3)	(160.5)	(162.9)
Common Dividends Paid	(159.7)	(160.5)	(162.9)
Cash from Financing	(693.8)	(346.9)	(322.4)
Net Change in Cash	369.6	148.2	116.3

(S&P Capital IQ, 2015)

Cablevision CFOA = 1,308 / 6,701 = 0.20

CABLEVISION AND DTV, CASH FLOW STATEMENT ANALYSIS

	Cash Profitability
Cablevision	0.20
DTV	0.26

Both companies have negative cash flow from investments and negative cash flow from financing.

What does this mean?

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- S&P Capital IQ. (2015). [Data file]. Retrieved from <http://www.spcapitaliq.com/>
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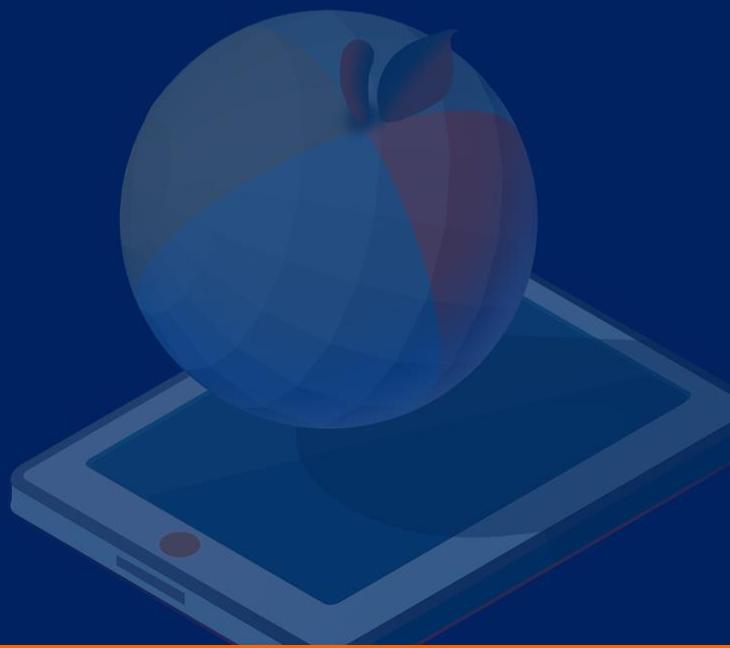
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VIDEO LESSON 1-8

Valuation Ratios



OVERALL SUMMARY SO FAR

Cablevision has higher leverage and lower profitability than DTV.

Liquidity ratios are higher for DTV.

Both companies are investing in operations and returning cash to investors.

How have the companies performed in recent years?

5-YEAR STOCK PRICE PERFORMANCE

6/10/2015

CVC Interactive Stock Chart | Yahoo! Inc. Stock - Yahoo! Finance

Cablevision Systems Corporation (CVC) ★ Watchlist

23.99 +0.18 (+0.76%) NYSE - As of 03:51pm EDT

VALUATION RATIOS

Ratios that summarize a company's market valuation

Market value on numerator, book value or profits on denominator

These ratios measure:

MARKET-BOOK (M/B) RATIOS

Market-book ratio = Market value /
book value

This ratio can be based on assets or
equity.

As we already saw, book equity can
be very small or negative!

Thus I prefer to use assets to
compute M/B ratios.

VALUE OVER PROFITS

1. Market value of assets / OPAT
2. Price-earnings (PE ratio) = Market value of equity / Net income

PE ratios are based on equity values and net income (income to shareholders).

I prefer to look at ratio 1., which is based off asset values and profits to the entire company.

EXAMPLE – CABLEVISION

Book value of assets = 6,701

OPAT = 763.5

Market value of assets = 18,285

All computed before in previous
slides

EXAMPLE – DIRECTV

Book value of assets = 24,301

OPAT = 3,763

Market value of assets = 74,904

DIRECTV VS. CABLEVISION, VALUATION RATIOS

	Market/Book	Value/OPAT
Cablevision	2.7	23.9
DTV	3.1	19.9

Cablevision has higher Value/OPAT multiple than DirecTV

Is this finding consistent with our previous analysis?



(Maxwell, 2007)

ANALYSIS OF VALUATION RATIOS

Is this finding consistent with our previous analysis?

Remember, valuation ratios measure future/present or future/past.

DTV is more profitable and has performed better in recent years.

A greater portion of Cablevision's value lies in future profits.

CABLEVISION MERGER RUMOURS

Perhaps future profits to Cablevision investors will be the result of a merger

Recent rumors that Cablevision may be acquired by the French Telecom company Altice (Wall Street Journal, July 10th 2015)

REFERENCE

Yahoo. (2015). *Cablevision Systems Corporation (CVC) Interactive Stock Chart (January 3, 2011 through January 5, 2015)* [Image, screen capture]. Retrieved June 10, 2015, from <http://finance.yahoo.com/>

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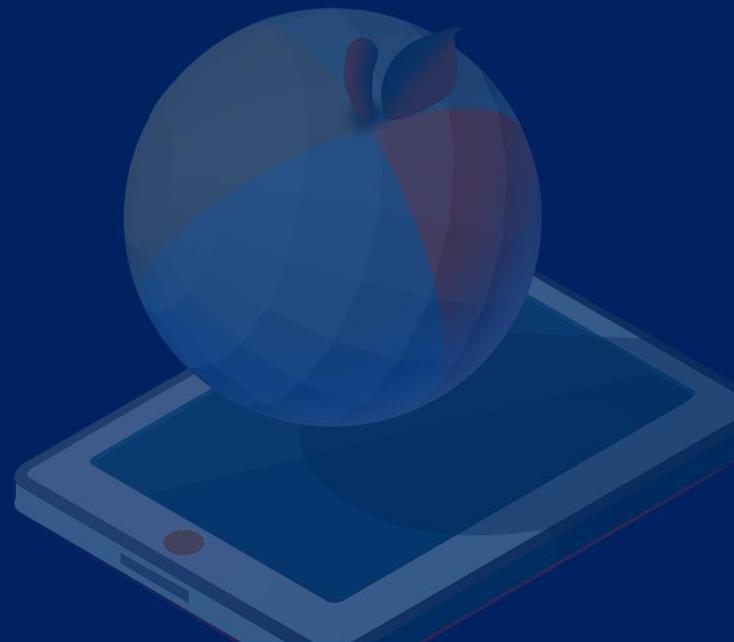
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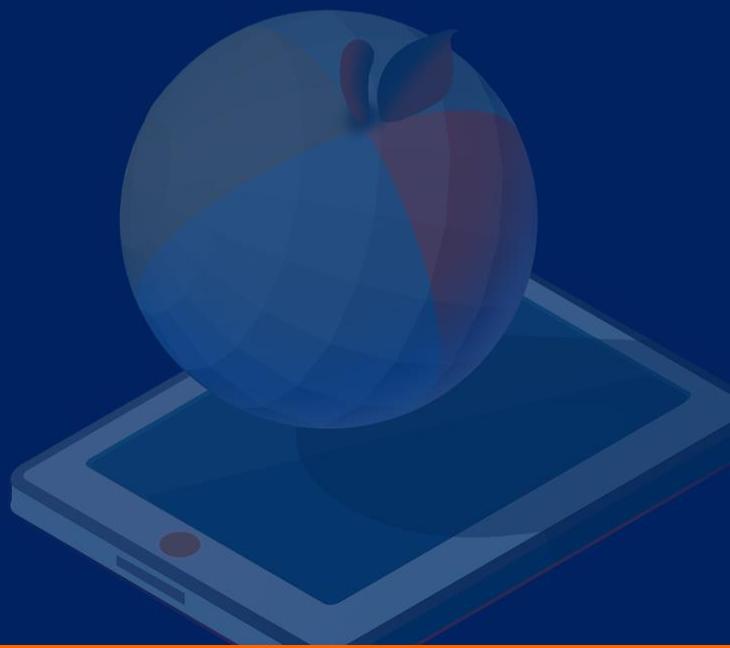
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VIDEO LESSON 1-9

Module 1 Review



WHAT WE'VE LEARNED IN MODULE 1 (1 OF 3)

Why maximizing the stock price is a reasonable goal for companies and why it is better than alternative goals

Potential conflicts between stock price maximization and social responsibility, employees, and the government

What the “agency problem” is and how corporate governance can help

WHAT WE'VE LEARNED IN MODULE 1 (2 OF 3)

How to use information from the balance sheet to measure liquidity and solvency and compare across companies

How to use information from the income statement to measure profitability and compare across companies

WHAT WE'VE LEARNED IN MODULE 1 (3 OF 3)

How to use information from the cash flow statement to understand how a company is generating and spending cash

The calculation and meaning of valuation ratios such as market-to-book ratios