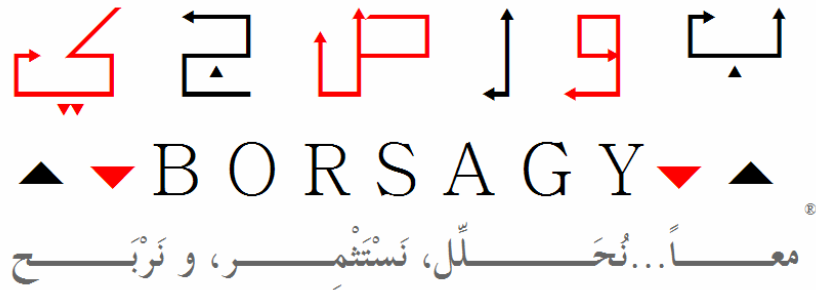


Fundamental analysis

“Value is in the eye of the investor”

Amr El-Alfy
Deputy Research Director | **CI Capital**
Board Member | **CFA Egypt Society**
Founder | **Borsagy.com**

Cairo, Saturday, May 19, 2007
German University in Cairo (GUC)



الجامعة الألمانية بالقاهرة

Disclaimer:

This document is part of an oral presentation and does not constitute a full report of all the information shared during the forum.

Agenda

- I. What is fundamental analysis?
- II. History of fundamental analysis
- III. Value
- IV. Valuation models
- V. Conclusion

I. What is fundamental analysis?

Fundamental analysis

- A method to evaluate a stock by measuring its intrinsic value.
- Analysis approaches:
 - Top-down
 - Bottom-up
- Fundamental analysts study everything from:
 - the overall economy
 - ❖ GDP/Population/FX environment/interest rates/inflation
 - industry conditions
 - ❖ Supply/demand/prices/capacities/exports/imports/regulations
 - ...
 - the companies' financial condition
 - ❖ Profitability/liquidity/operating and financial leverage
 - the companies' management.
 - ❖ Background/prudence/expertise

II. History of fundamental analysis

Market frenzies

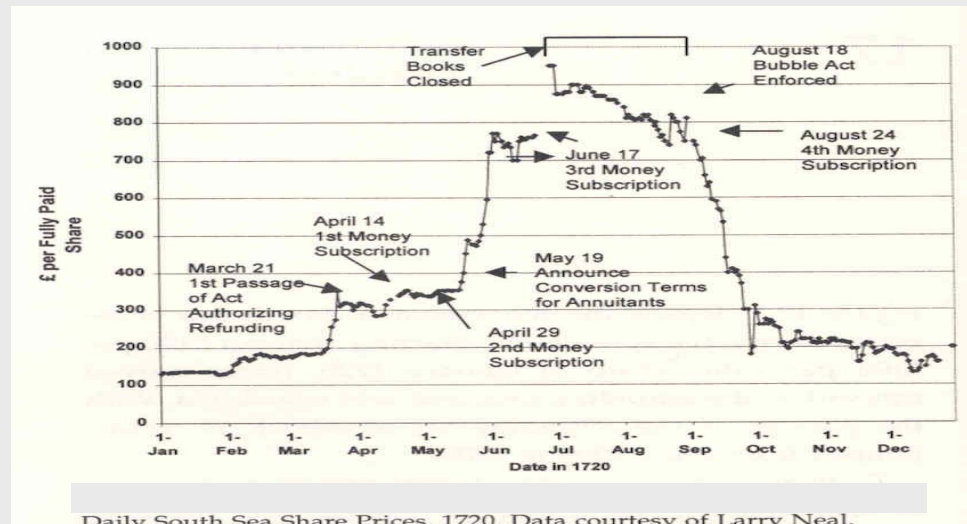
Tulip mania
in the Netherlands in 1637.



Souk Al-Manakh
in Kuwait in 1982.

South Sea Company
in England in 1720.

"I can calculate the movement of the stars, but NOT the madness of men."
— Sir Isaac Newton, after losing a fortune (£20,000) in the bubble.



Daily South Sea Share Prices, 1720. Data courtesy of Larry Neal.

Graham & Dodd

- **Benjamin Graham**

(1894 - 1976):

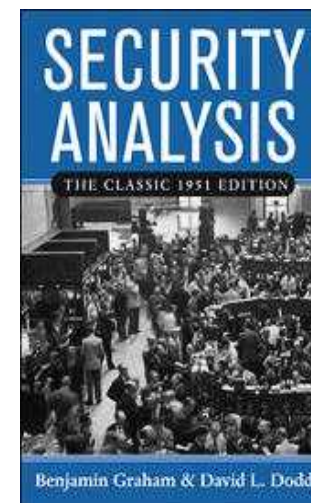
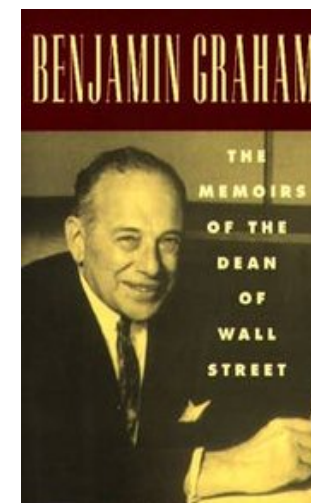
was an influential economist and professional investor who is today often called the "Father of Value Investing" and the "Dean of Wall Street. "

- **David Dodd**

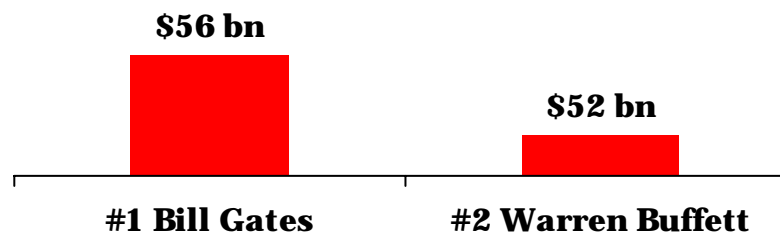
(1895 - 1988):

was an American educator, financial analyst, author, economist, professional investor, and in his student years, a protégé of, and as a postgraduate, close colleague of Benjamin Graham at Columbia University.

- Both co-authored the famous "Security Analysis" book, which spelled out their investment doctrine following the Great Depression.



Who wants to be a “billionaire”?



- Both are:
 - ➔ U.S. citizens
 - ➔ Self made
 - ➔ Own their own companies
 - ➔ Married with 3 children
 - ➔ Friends!
- But Warren Buffett is a fundamental investor

Warren Buffett

- Studied under value-investing guru Benjamin Graham at Columbia
- Was the only student in Graham's security analysis class to earn an A+
- Learned to hunt for undervalued stocks.
- Bought control of textile firm Berkshire Hathaway in 1965
- Today his holding company has insurance, apparel, utilities, and home furnishing companies.
- Has non-controlling stakes in:
 - ➔ Anheuser-Busch
 - ➔ Coca-Cola
 - ➔ Wells Fargo
- Is \$10 billion richer than last year; Berkshire stock up 22% in past 12 months.



**The Oracle
of Omaha**

III. Value

Fair value

- **Fair value** is a concept used in finance and economics, defined as:

A **rational** and **unbiased estimate** of the **potential** market price of a good, service, or asset, taking into account such factors as:

- relative scarcity
- perceived utility
- potential risk/return characteristics
- replacement costs, or costs of close substitutes
- production/distribution costs, including a cost of capital

Fair value vs. market price

- Two schools of thought about the relation between **market price** and **fair value**:
 1. The **efficient market hypothesis** asserts that, in a well organized, reasonably transparent market, the **market price** is generally *equal to* or *close to* the **fair value**, as investors react quickly to incorporate new information available in the market.
 2. **Behavioral finance** asserts that the **market price** often diverges from **fair value** because of various, common cognitive biases among buyers or sellers.

Tools to reach value

- Fundamental analysis studies:

- revenues
- earnings
- future growth
- return on equity
- profit margins
- other data

to determine a company's **underlying value** and **potential for future growth**.

- Main financial statements are:

- Balance sheet
- Income statement
- Cash flow statement

Financial statements

Auditor's Report

Ernst & Young
Allied for Accounting & Auditing
37 El Ahrar St., Mobia Tower
Mohandeseen

KPMG Hazem Hassan
Public Accountants & Consultants
Pyramids heights office park - Km 22
Cairo/El-Dokki

Auditors' Report To The Shareholders Of The Egyptian Company For Mobile Services S.A.E.

We have audited the consolidated financial statements of the Egyptian Company For Mobile Services S.A.E. and its subsidiaries represented in the consolidated balance sheet as at December 31, 2006, the consolidated statements of income, cash flows and changes in shareholders' equity for the year then ended. These consolidated financial statements are the responsibility of the company's management. Our responsibility is to express an opinion on these consolidated financial statements based on our audit.

We conducted our audit in accordance with Egyptian Standards on Auditing and in light of the provisions of applicable Egyptian laws. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the consolidated financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the consolidated financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management as well as evaluating the overall consolidated financial statements presentation. We have obtained the information and explanations, which we deemed necessary for our audit. We believe that our audit provides a reasonable basis for our opinion.

In our opinion, the consolidated financial statements referred to above together with the notes attached thereto present fairly, in all material respects, the consolidated financial position of the company as at December 31, 2006, the results of its operations and its consolidated cash flows for the financial year then ended, in accordance with Egyptian Accounting Standards and in compliance with the related Egyptian laws and regulations.

Ernst & Young
Allied for Accounting & Auditing
37 El Ahrar St., Mobia Tower
Mohandeseen

KPMG Hazem Hassan
Public Accountants & Consultants
Pyramids heights office park - Km 22
Cairo/El-Dokki

Cairo February 6, 2007

Balance Sheet

Egyptian Company For Mobile Services And Subsidiaries
S.A.S.E.

Consolidated Balance Sheet
As at December 31, 2006

	2006/2006	2005/2005
	L.E.	L.E.
Long Term Assets		
Fixed assets (net)	4,026,199,329	3,201,422,471
Fixed assets under construction	1,133,422,164	979,458,400
Leases fee (net)	1,341,298,360	1,429,210,404
Deferred charges (net)	—	1,924,424
Investments	900,000	900,000
Bank deposits	2,709,764	4,272,229
Total long term assets	4,401,429,457	5,532,078,128
Current assets		
Inventory	33,220,985	42,717,112
Accounts receivable	324,414,995	179,369,268
Other debtors	312,094,141	194,999,913
Prepaid expenses	101,968,981	89,661,642
Current taxes and other	200,252,714	469,889,829
Total current assets	1,272,053,816	1,076,537,764
Current liabilities		
Provision for contingencies liabilities	440,808,417	381,114,303
Bank borrowings	123,123,427	45,561,200
Current portion of long term loans	1,078,794,771	468,491,962
Current taxes	1,075,269,642	291,452,768
Other credit balances	86,799,799	82,734,426
Deferred expenses	242,542,365	432,791,296
Reserve	349,000,000	—
Total current liabilities	3,280,337,326	2,137,141,249
Reserve of current liabilities over current assets	(1,008,283,510)	(1,060,603,485)
Net investments	3,393,145,946	3,471,474,643
Shareholders' Equity		
Authorized share	1,000,000,000	1,000,000,000
Issued share	1,000,000,000	1,000,000,000
Reserve (paid in excess Treasury Shares)	30,512,500	—
Legal reserve	200,000,000	197,500,000
Retained earnings	30,292,000	14,240,000
Net profit for the year	1,170,900,000	1,407,000,000
Minority interests	(11,814,242)	(11,802,000)
Total shareholders' equity	3,419,980,258	3,628,240,000
Minority interests	2,442,300	29,584
Long Term Liabilities		
State tax liabilities	—	1,349,374
Long term creditors-current fees	879	364,148,262
Long term loans	1,775,771,704	980,706,582
Reserve	—	349,000,000
Deferred tax liabilities	(38,231)	60,411,473
Total long term liabilities	1,775,743,452	1,732,465,719
Total shareholders' equity & long term liabilities	3,422,422,560	3,651,705,719

The accompanying notes form an integral part of these financial statements and are to be read therewith.

Chief Financial Officer: *[Signature]*
Chief Executive Officer: *[Signature]*
Auditor's report "Attached": *[Signature]*
Ernst & Young
Allied for Accounting & Auditing
KPMG Hazem Hassan

Income Statement

Egyptian Company For Mobile Services And Subsidiaries
S.A.S.E.

Consolidated Income Statement
For the Financial Year
Ended December 31, 2006

	2006/2006	2005/2005
	L.E.	L.E.
Operating Revenue	4,362,200,723	5,363,760,062
Expenses & cost of operation		
Cost of services (including depreciation & amortization)	1,268,330,228	966,710,038
Other operating cost	688,039,477	724,249,000
Depreciation & amortization	1,133,924,226	837,251,837
Selling, general and administrative expenses	1,093,124,012	728,396,638
Research, development and salaries of board members	3,184,247	4,772,892
Impairment losses of accounts receivable	45,349,728	54,463,445
Provisions	(110,181,722)	100,813,344
Total operating costs	3,268,023,136	3,466,477,859
Net operating profit	1,094,177,587	1,897,282,203
Additional		
Finance income	54,719,444	27,274,224
Finance expense	(163,927,883)	(129,219,847)
Capital loss	(1,462,807)	(3,469,440)
Net foreign exchange exchange difference	(2,849,521)	21,725,166
Net profit for the year before income tax and minority interest	1,964,085,720	1,811,300,812
Current tax	(200,000,000)	(200,000,000)
Deferred tax	(25,096,434)	(66,424,473)
Income tax	(225,096,434)	(266,424,473)
Net profit for the year before minority interest	1,738,989,286	1,544,876,339
Minority interest	3,262,548	369,566
Net profit for the year	1,742,251,834	1,545,245,905
Earnings per share	14.18	13.14

The accompanying notes form an integral part of these financial statements and are to be read therewith.

Cash Flow Statement

Egyptian Company For Mobile Services And Subsidiaries
S.A.S.E.

Consolidated Cash Flow Statement
For the Financial Year
Ended December 31, 2006

	2006/2006	2005/2005
	L.E.	L.E.
Cash from operating activities		
Net profit for the year before income tax	1,094,177,587	1,897,282,203
Adjustments to reconcile net profit to cash from operations		
Depreciation & amortization	1,133,924,226	837,251,837
Net change in provisions	(100,000,000)	38,231,473
Net change of accounts receivable	40,700,714	34,963,444
Impairment losses of accounts receivable	1,000,000	—
Net change of inventory	(24,128,444)	(27,029,292)
Income tax expense	(163,927,883)	(129,219,847)
Capital loss	1,462,807	3,469,440
Gain of foreign exchange exchange difference (related to bank)	—	(21,725,166)
Income tax paid	(200,000,000)	(200,000,000)
Change in working capital	(167,017,769)	(192,066,665)
Net income	927,159,818	1,705,215,538
Accounts receivable	(21,000,000)	(97,706,000)
Other debtors	(21,000,000)	(97,706,000)
Prepaid expenses	(11,814,242)	(11,802,000)
Capital loss	1,462,807	3,469,440
Other credit balances	86,799,799	(100,000,000)
Account expense	(200,000,000)	(200,000,000)
Income tax	(225,096,434)	(266,424,473)
Net profit for the year	1,742,251,834	1,545,245,905
Cash from investing activities		
Payments for the purchase of fixed assets and fixed assets under construction	(1,100,000,000)	(1,100,000,000)
Proceeds from sale of fixed assets and fixed assets under construction	2,000,000	—
Income received	(200,000,000)	(200,000,000)
Net cash used in investing activities	(1,100,000,000)	(1,100,000,000)
Cash from financing activities		
Issue of shares	100,000,000	(100,000,000)
Proceeds from loans	100,000,000	100,000,000
Payments from sale of treasury shares	—	—
Dividend paid	(1,000,000)	(1,000,000)
Minority interest	3,262,548	369,566
Net change in cash and cash equivalents	1,742,251,834	1,545,245,905
Cash and cash equivalents at beginning of the year	1,000,000,000	1,000,000,000
Cash and cash equivalents at end of the year	2,742,251,834	2,545,245,905

The accompanying notes form an integral part of these financial statements and are to be read therewith.

Balance sheet (B/S)

Assets = Liabilities + Equity

Current assets

- Cash & cash equivalent
- Accounts receivable
- Inventory

Long-term assets

- Fixed assets
- Goodwill

Current liabilities

- Short-term debt (STD)
- Current portion of long-term debt (CPLTD)
- Accounts payable

Long-term liabilities

- Long-term debt

Equity

- Paid-in capital
- Retained earnings
- Reserves

Operating working capital = Current assets (excl. cash) LESS Current liabilities (excl. debt)

Income statement (I/S) Accrual accounting

Sales

Less: Cost of goods sold

= **Gross profit (GP)**

Less: Selling, general & administrative expenses

= **EBITDA***

Less: D&A

= **EBIT****

Less: Net interest expense

= **Net profit before tax**

Less: Income tax

= **Net income**

EPS = Net income / No. of outstanding shares

*Earnings before interest, taxes, depreciation & amortization

**Earnings before interest and taxes

Cash flow statement (CF/S) Cash accounting

Operating activities (OperCF)

▪ Net income

▪ Change in working capital

Investing activities (InvCF)

▪ Capex

▪ Sale of assets

Financing activities (FinCF)

▪ Change in debt

▪ Dividends

▪ Capital increase

▪ **Change in cash**

= **OperCF + InvCF + FinCF**

Beginning of period cash

+/- change in cash

= **End of period cash → BS**

Selected financial ratios

Profitability

- $\text{ROE} = \text{Net income} / \text{Equity}$
- $\text{Gross margin} = \text{Gross profit} / \text{Sales}$
- $\text{EBITDA margin} = \text{EBITDA} / \text{Sales}$

- $\text{Net margin} = \text{Net income} / \text{Sales}$

Liquidity & financial leverage

- $\text{Debt-to-Equity} = \text{Debt} / \text{Equity}$
- $\text{Interest coverage} = \text{EBITDA} / \text{Net interest expense}$

- $\text{Debt load} = \text{Debt} / \text{EBITDA}$

Compounding & discounting

Compounding

- Future Value = Present Value $(1 + k)^n$

Discounting

- Present Value = $\frac{\text{Future Value}}{(1 + k)^n}$

Note:

k = return to the investor

n = number of years

IV. Valuation models

Dividend discount model

Return to the shareholder

$$\bullet k = \frac{D_1}{P} + g = 5\% + 15\% = 20\%$$

Finding the price

$$\bullet P = \frac{D_1}{(k - g)}$$

$$= \frac{1.10 * (1 + 10\%)}{(20\% - 10\%)}$$

$$= \frac{1.21}{10\%} = 12.1 < 15 \text{ market price} \rightarrow \text{SELL}$$

Note:

k = return to the shareholder

D₁ = dividend payment expected at end of next year

g = growth rate

Discounted cash flow (DCF) model (1/3)

Net income	235
<u>Plus: D&A</u>	<u>12</u>
Gross cash flow (1)	247
<hr/>	
Operating working capital investment	27
<u>Plus: Capex</u>	<u>112</u>
Gross investment (2)	139
<hr/>	
(1) Gross cash flow	247
Less	
<u>(2) Gross investment</u>	<u>(139)</u>
= FCFF	108

Discounted cash flow (DCF) model (2/3)

Weighted Average Cost of Capital (WACC)

$$12\% * (1 - 25\%) = 9\%$$

After-tax cost of debt

20%

Cost of equity

X
30%

Weight of debt

+

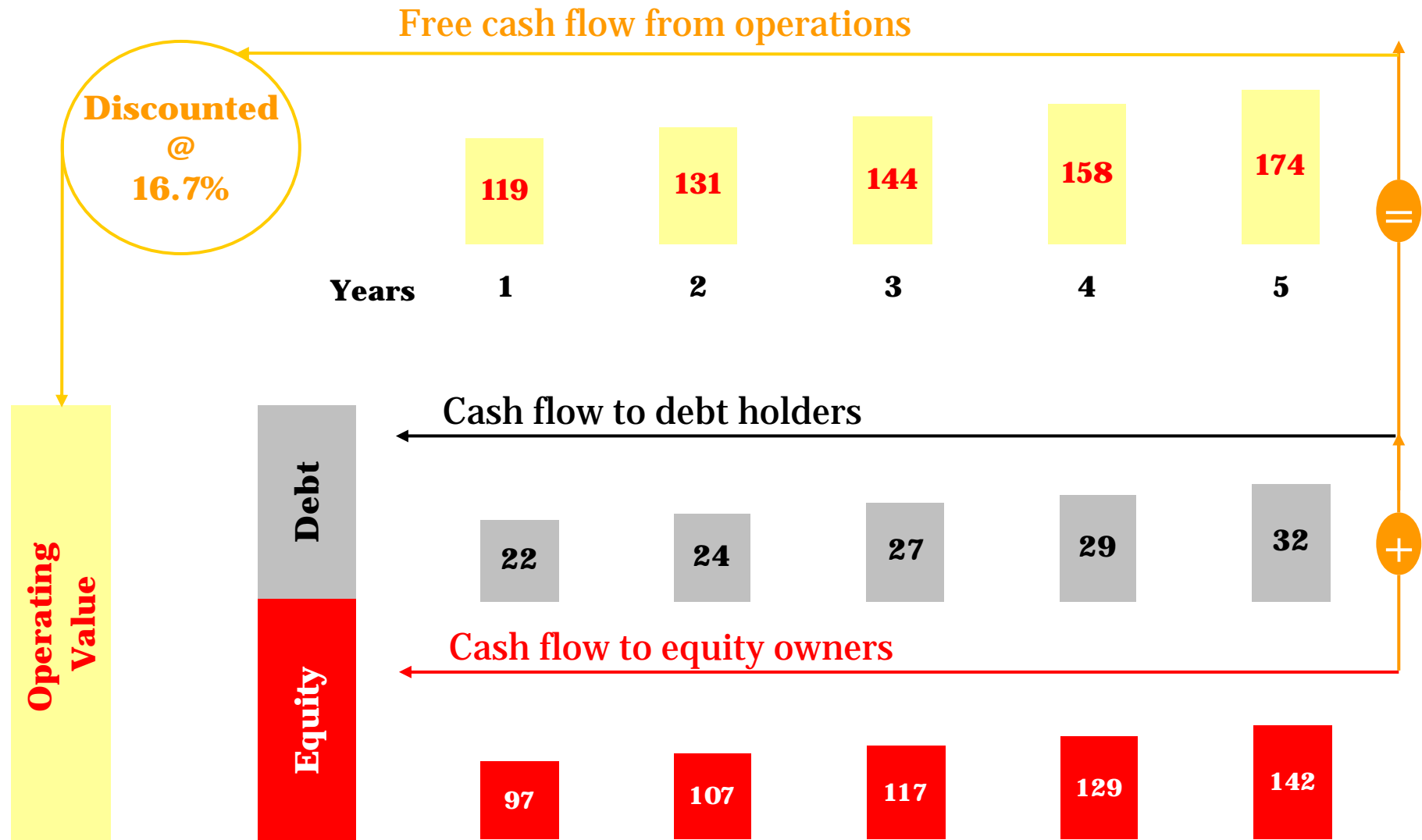
X
70%

Weight of equity

16.7%

WACC

Discounted cash flow (DCF) model (3/3)



Comparable valuation models

P/E multiple

- The number of years it takes investors to recover their investment from the company's annual earnings

P/BV multiple

- The number of times investors are valuing the company's equity in the market vs. its book value on the balance sheet

Enterprise value (EV) multiples

- Enterprise value = market cap + debt – cash

Examples:

- To EBITDA (all companies)
- To capacity (cement and steel companies)
- To number of subscribers (telecom companies)

Note:

Market cap = the number of outstanding shares x market price

V. Conclusion

"Price is what you pay. Value is what you get."

"It's far better to buy a wonderful company at a fair price than a fair company at a wonderful price."

"If a business does well, the stock eventually follows."

"I never attempt to make money on the stock market. I buy on the assumption that they could close the market the next day and not reopen it for five years."

"Great investment opportunities come around when excellent companies are surrounded by unusual circumstances that cause the stock to be misappraised."

- Warren Buffett (1933-)

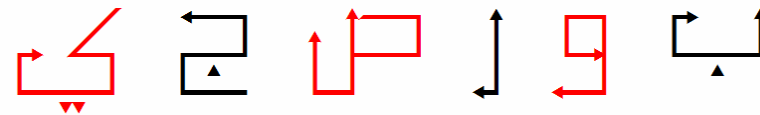
"Mr. Market"

"Margin of Safety"

- Benjamin Graham (1894 - 1976)

End ▲ ▼

This presentation and a sample exam are available on



▲ ▼ B O R S A G Y ▼ ▲

<http://www.borsagy.com>