

Accounting Analysis

Process of evaluating the extent to which a company's accounting numbers reflect economic reality

- Precondition for an effective financial analysis: the <u>quality of financial analysis</u> and the inferences drawn depend on the quality of the underlying accounting information
- It is the process an analyst uses to identify and assess <u>accounting distortions</u> in a company's financial statements

Accounting Analysis

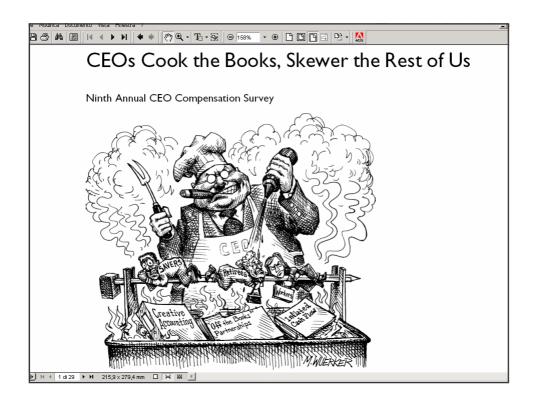
Demand for Accounting Analysis

- Adjust for accounting distortions so financial reports better reflect economic reality
- Adjust general-purpose financial statements to meet specific analysis objectives of a particular <u>user</u>

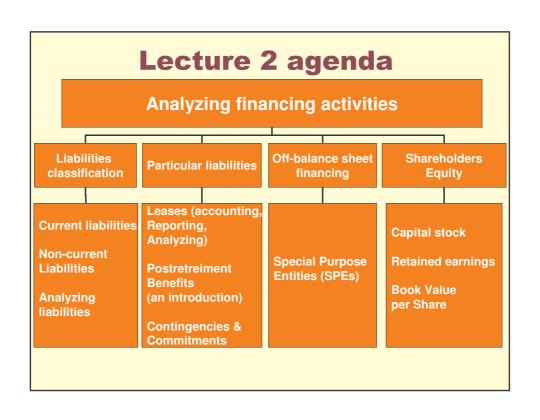
Accounting Analysis

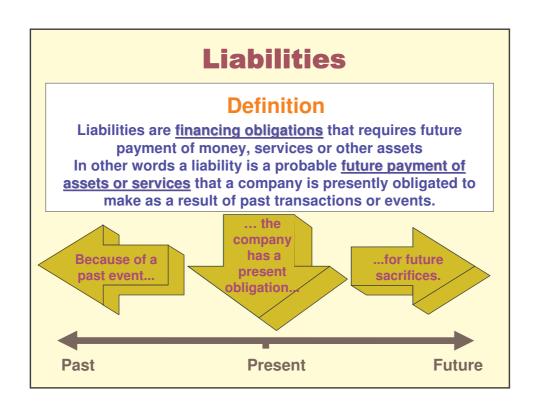
Sources of Accounting Distortions

- Accounting Standards attributed to (1) political process of standard-setting, (2) accounting principles and assumptions, and (3) conservatism
- Estimation Errors attributed to estimation errors inherent in accrual accounting
- Reliability Vs. Relevance attributed to overemphasis on reliability at the loss of relevance
- Earnings Management attributed to windowdressing of financial statements by managers to achieve personal benefits

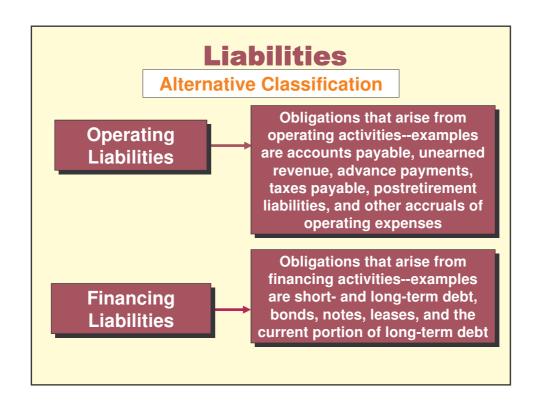


Would you invest in this company?								
Assets	MIn euro	Liabilities & Equity	MIn euro					
Operating Assets (Plants & Equipments, Working Capital)	2.223	Shareholders' Equity: Main Shareholder Other Shareholders Minor Shareholders	792 749 114					
Financial Assets Financial Investments, Marketable securities Others	3.364	Post retirements Liab. Pref. shares e associate	558 595					
Goodwill and other capitalized expenses	2.163	Debts (long & short term)	5.745					
Total	8.553	Total	8.553					
Source: Mediobanca								









Liabilities

Analyzing liabilities

- Since liabilities are claims against companies, we need assurance that companies account for them!!
- This includes disclosure of their <u>amounts</u> and <u>due dates</u> (including any conditions, encumbances and limitations they impose on a company)
- Many companies <u>attempt to reduce the amount of</u> <u>liabilities</u> reported on their financial statements
- Certain liabilities are more apt to be <u>misclassified</u> or <u>inadequately described</u>
- Results of our analysis of liabilities can <u>impact our</u> assessment of both risk and return for a company

Liabilities

Features in analyzing liabilities

- <u>Terms of indebtedness</u> (e.g. maturity, interest rate, payment pattern, amount)
- <u>Restrictions</u> (covenants) on deploying resources and pursuing business activities
- · Ability and flexibility in pursuing further financing
- Obligations for working capital, debt to equity, and another financial figures
- · Prohibitions on disbursements as dividends.

Liabilities

Accounting-Based Liability Restrictions (Covenants)

Aim: Safeguard creditors' investments

Common restrictions include:

- Dividend distribution restrictions
- Working capital restrictions
- Debt-to-equity ratio restrictions
- Seniority of asset claim restrictions
- Acquisition and divestment restrictions
- Liability issuance restrictions

Potential information sources: Liability prospectus, annual report, SEC filings, and creditor information services (e.g., *Moody's*)



Leasing Facts

Lease – contractual agreement between a lessor (owner) and a lessee (user or renter) that gives the lessee the right to use an asset owned by the lessor for the lease term

MLP – minimum lease payments In return, the lessee makes rental payments (MLP), according to the lease contract

Leases

Lease Accounting and Reporting

(1) <u>CAPITAL LEASE ACCOUNTING</u> For leases that transfer substantially all benefits and risks of ownership—accounted for as an asset acquisition and a liability incurrence by the lessee, and as a sale and financing transaction by the lessor

A lessee <u>classifies and accounts</u> for a lease as a <u>capital lease</u> if, at its inception, the lease meets *any* of four criteria:

- (i) lease transfers ownership of property to lessee by end of the lease term
- (ii) lease contains an option to purchase the property at a bargain price
- (iii) lease term is 75% or more of estimated economic life of the property
- (iv) present value of rentals and other minimum lease payments at beginning of lease term is 90% or more of the fair value of leased property less any related investment tax credit retained by lessor
- (2) <u>OPERATING LEASE ACCOUNTING</u> For leases other than capital leases—the lessee (lessor) accounts for the minimum lease payment (MLP) as a rental expense (income)

Accounting rules

Recording rules

When a lease is classified as a capital lease, the lessee records it (both asset and liabilities) at an amount equal to the present value of the MLPs over the lease term, excluding executory costs (such as insurance, maintenance, taxes, paid by the lessor that are included in the MLPs)

Leases disclosure

Lessee must disclose, usually in notes of financial statements: (1) future MLPs separately for capital leases and operating leases — for each of five succeeding years and the total amount thereafter, and (2) rental expense for each period an income statement is reported

Leases

Off-Balance-Sheet Financing

Off-Balance-Sheet Financing

Off-Balance-Sheet financing is when a lessee structures a lease so it is accounted for as an operating lease when the economic characteristics of the lease are more in line with a capital lease—neither the leased asset nor its corresponding liability are recorded on the balance sheet

Implications for financial analysis

The decision to account for a lease as a capital or a operating lease can significantly impact financial statements.

Analyst must take care to examine the economic characteristics of a company's leases and reclassify them when necessary

Accounting for Leases – An Illustration

Lease Facts

- A company leases an asset on January 1, 2000 -- it has no other assets or liabilities
- Estimated economic life of leased asset is 5 years with no salvage value -- company will depreciate the asset on a straight-line basis over its life
- Lease has a fixed non-cancelable term of 5 years with annual MLPs of \$2,505 paid at the end of each year
- Interest rate on the lease is 8% per year

Leases

Accounting for Leases – Illustration (continued)

Lease Amortization Schedule

Vasu	Beg. Year Liability	Inter Con	Year- end		
Year	Liability	Interest	Liability		
2000 2001 2002 2003 2004 Totals	\$10,000 8,295 6,454 4,466 2,319	\$ 800 664 517 358 <u>186</u> \$2,525	\$ 1,705 1,841 1,988 2,147 <u>2,319</u> \$10,000	\$ 2,505 2,505 2,505 2,505 2,505 -2,505 \$12,525	\$8,295 6,454 4,466 2,319 0

Present Value of annual MLPs = 10.000 \$

Straight-line depreciation

\$2,000 per year ([\$10,000 - \$0]/5 years)

Accounting for Leases – Illustration (continued)

Income Statement Effects of Alternative Lease Accounting

	Operating Lease			Capi	tal Lease			
Year	Rent Expense		Interest Expense		reciation		_	otal
2000			\$ 800	\$	2,000		\$	2,800
2001	2,505		664	Ψ	2,000		Ψ	2,664
2002	2,505		517		2,000			2,517
2003	2,505		358		2,000			2,358
2004	2,505		186		2,000			2,186
Total	\$ 12,525)	\$ 2,525	\$	10,000	(\$	12,525

Leases

Accounting for Leases – Illustration (continued)

Balance Sheet Effects of Capitalized Leases

			Leased		Lease	
Date	Cash	Asset			Liability	Equity
1/1/2000	0		\$ 10,000		\$ 10,000	\$ -
12/31/2000	(2,505)		8,000		8,295	(2,800)
12/31/2001	(5,010)		6,000		6,454	(5,464)
12/31/2002	(7,515)		4,000		4,466	(7,981)
12/31/2003	(10,020)		2,000		2,319	(10,339)
12/31/2004	(12,525)		0		0	(12,525)

Effects of Lease Accounting

Impact of Operating Lease when Capital Lease is Apt:

- Operating lease <u>understates liabilities</u>—improves solvency ratios such as debt to equity
- Operating lease <u>understates assets</u>—can improve return on investment ratios
- Operating lease <u>delays expense recognition</u>—overstates income in early term of the lease and understates income later in lease term
- Operating lease <u>understates current liabilities</u> by ignoring current portion of lease principal payment—inflates current ratio & other liquidity measures
- Operating <u>lease includes interest with lease rental</u> (an operating expense)—understates both operating income and interest expense, inflates interest coverage ratios, <u>understates operating cash flow</u>, & <u>overstates</u> financing cash flow

Leases

Converting Operating Leases to Capital Leases

Determining the Present Value of Projected Operating Lease Payments and Lease Amortization

		Discount	Present	Interest	Lease	Lease
Year	Payment	Factor	Value	Value (9%) Obligation		Balance
≛ 001						\$ 2,381
2002	\$ 388	\$ 0.917	\$ 356	\$ 214	\$ 174	2,207
2003	377	0.842	317	199	178	2,029
2004	346	0.772	267	183	163	1,866
2005	315	0.708	223	168	147	1,719
2006	289	0.650	188	155	134	1,585
2007	289	0.596	172	143	146	1,438
2008	289	0.547	158	129	160	1,279
2009	289	0.502	145	115	174	1,105
2010	289	0.460	133	99	190	915
2011	289	0.422	122	82	207	708
2012	289	0.388	112	64	225	483
2013	289	0.356	103	43	246	238
2014	259	0.326	84	21	238	0
Total	3997		2381			

Restated Financial Statements after Converting Operating Leases to Capital Leases—Best Buy 2002

Be	efore		After				Т	
\$ 1	15.327	\$	15.327				Т	
1	14.723		14.518	٠	388 rent expenses +183 depr	eciation exp	. (2	381 /13)
	604		809				Т	
	(37)		177		Interest expenses increases	by 214	Τ	
	246		243					
\$	395	\$	389				Т	
Ве	efore		After			Before		After
\$	2.929	\$	2.929		Current liabilities	\$ 2.715	1	2.889
	1.911		4.292		Long-term liabilities	303	Т	2.510
					Stockholders' equity	1.822	Т	1.822
	4.840		7.221		Total liabilities and equity	4.840	,	, 7.221
	\$ \$ Be	14.723 604 (37) 246 \$ 395 Before \$ 2.929 1.911	\$ 15.327 \$ 14.723 604 (37) 246 \$ 395 \$ Before \$ 2.929 \$ 1.911	\$ 15.327	\$ 15.327 \$ 15.327 14.723 14.518 604 809 (37) 177 246 243 \$ 395 \$ 389 Before After \$ 2.929 1.911 4.292	\$ 15.327	\$ 15.327	\$ 15.327

Total assets and liabilities both increase by 2.381 (present value of operating lease liability)

Leases

Effect of Converting Operating Leases to Capital Leases on Key Ratios-Best Buy 2002

Financial Ratio	Before	After
Current Ratio	1.08	1.01
Total Debt to equity	1.66	2.96
Long-term debt to equity	0.17	1.38
Return on common equity	21.7%	21.4%
Return on assets	8.16%	5.39%

Postretirement Benefits

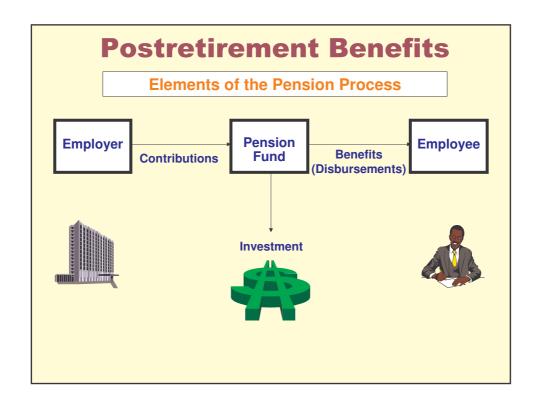
Postretirement Benefits Facts

Defined -- Employer-provided benefit(s) to employees after retirement

Two kinds of Postretirement Benefits

Pension benefits -- Employer-provided monetary pension benefits to employees after retirement, e.g., monthly stipend until death

Other Postretirement Employee Benefits (OPEB) -- Employerprovided non-pension (usually nonmonetary) benefits after retirement, e.g., health care and life insurance



Contingencies

Basics of Contingencies

Contingencies -- potential losses and gains whose resolution depends on one or more future events.

Contingent liabilities - loss contingencies: potential claims on a

- loss contingencies: potential claims on a company's resources
- -- to record a contingent liability (and loss) two conditions must be met:
 - (i) it must *probable* that an asset is impaired or a liability incurred, and
- (ii) the amount of loss is reasonably estimable;
- to disclose a contingent liability (and loss) there must be at least a reasonable possibility of incurrence

Examples of loss contingencies

- -- litigation
- -- threat of expropriation
- -- uncollectibility of receivables
- -- claims arising from warranties of products or products defects
- -- possible catastrophe losses of property

Contingencies

Analyzing Contingencies

Sources of useful information:

Notes, MD&A, and Deferred Tax Disclosures

Useful analyses:

- Analyze management estimates
- · Analyze notes regarding contingencies, including
- □ Description of contingency and its degree of risk
- ☐ Amount at risk and how treated in assessing risk exposure
- ☐ Charges, if any, against income
- Recognize a bias to not record or underestimate contingent liabilities
- Beware of big baths loss reserves are contingencies
- Analyze deferred tax notes for undisclosed provisions for future losses

Note: Loss reserves do not alter risk exposure, have no cash flow consequences, and do not provide insurance

Off-Balance-Sheet Financing

Basics of Off-Balance-Sheet Financing

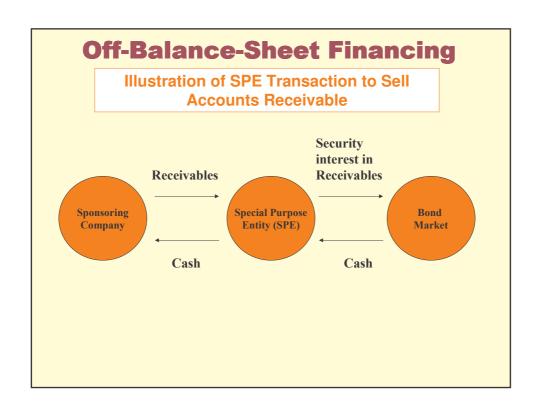
Off-Balance-Sheet Financing -- is the non-recording of financing obligations

Motivation

To keep debt off the balance sheet

A well known "Infamous example" (see the bankrupt of Enron and Pamalat): the financing mechanism using Special Purpose Entities (SPEs)

- A SPE is formed by the sponsoring company and is capitalized with equity investment
- The SPE leverages this equity investment with borrowings from the credit markets and purchases earning assets from or for the sponsoring company
- The cash flow from the earning assets is used to repay the debt and provide a return to the equity investors



Basics of Equity Financing



Equity — refers to owner (shareholder) financing; its usual characteristics include:

- Reflects claims of owners (shareholders) on net assets
- Equity holders usually subordinate to creditors
- Variation across equity holders on seniority
- Equity holders are exposed to maximum risk and return

Equity Analysis — involves analyzing equity characteristics, including:

- Classifying and distinguishing different equity sources
- · Explaining the changes in the number of capital shares
- Examining rights for equity classes and priorities in liquidation
- · Evaluating legal restrictions for equity distribution
- · Reviewing restrictions on retained earnings distribution
- · Assessing terms and provisions of potential equity issuances

Equity Classes — two basic components:

- Capital Stock
- Retained Earnings

Shareholders' Equity

Reporting Capital Stock

Includes the explanation of changes in the number of capital shares

Sources of increases in capital stock outstanding:

- · Issuances of stock
- Conversion of debentures and preferred stock
- Issuances pursuant to stock dividends and splits
- · Issuances of stock in acquisitions and mergers
- · Issuances pursuant to stock options and warrants exercised

Sources of decreases in capital stock outstanding:

- Purchases and retirements of stock
- Purchases of treasury stock
- · Reverse stock splits



Components of Capital Stock

Contributed (or Paid-In) Capital — <u>total</u> financing received from shareholders in return for capital shares; usually consists of two parts:

Treasury Stock (or buybacks) — shares of a company's stock re-acquired after having been previously issued and fully paid for. Acquisition of treasury stock by a company reduces both assets and shareholders' equity. It is typically recorded at *cost*.

Shareholders' Equity

Two Types of Capital Stock

Preferred Stock — capital stock with features not possessed by common stock; typical preferred stock features include:

- Dividend distribution preferences
- Liquidation priorities
- Convertibility (redemption) into common stock
- Call provisions
- Sinking fund provisions

Common Stock — capital stock with ownership interest and bearing ultimate risks and rewards (residual interests)

Analyzing Capital Stock

- The more relevant information for analysis relates to the composition of capital accounts and to their applicable restrictions.
- Composition of equity is important because of provisions that can affect residual rights of common shares and, accordingly, the risks and returns of equity investors

Shareholders' Equity

Basics of Retained Earnings

Retained Earnings — earned capital of a company; reflects accumulation of undistributed earnings or losses since inception; retained earnings is the main source of dividend distributions

Cash and Stock Dividends

- Cash dividend distribution of cash (or assets) to shareholders • Stock dividend — distribution of capital stock to shareholders on a pro-rata basis. It represents a permanent capitalization of earnings: shareholders receive additional shares in return for reallocation of retained earning to capital accounts.
- Restrictions (or Covenants) on Retained Earnings constraints or requirements on retention of a certain retained earnings amount. An important restriction involves limitations on a company's distribution of dividends.

Book Value per Share

Book Value – refers to net asset value, that is the total assets reduced by claims against them

Book Value per share – is the per share value amount resulting from a company's liquidation at amounts reported on its balance sheet

Book value of common stock is equal to the total assets less liabilities and claims of securities senior to common stock (such as preferred stock) at amounts reported on the balance sheet

Shareholders' Equity

Shareholder's Equity Section of Kimberly Corp. for periods ending in Year 4 and 5

	Year 5	Year 4
Prefered stock, 7% cumulative, par		
value \$100 (authorized 4,000,000;		
outstanding 3,602,811)	\$ 360,281,100	\$ 360,281,100
Common Stock, par vaulue \$16.67		
(authorized 90,000,000 shares;		
outstanding 54,138,137 shares at		
December 31, Year 5 and 54,129,987		
shares at December 31, Year 4	902,302,283	902,166,450
Retained earnings	2,362,279,244	902,166,450
Total shareholder's equity	\$3,624,862,627	\$ 2,220,298,288

Cumulative

Refers to the right of some preference shares to receive a dividend for each financial period even though no dividend has been declared. When such a dividend has been omitted it becomes an arrear.

Calculated Book Value per Share (end of Year 5)

	Preferred	Common	Total
Preferred stock* (at \$100 par)	\$ 360,281,100		\$ 360,281,100
Dividends in arrears (7%)	25,219,677		25,219,677
Common stock		\$ 902,302,283	902,302,283
Retained earnings (net of amount attributed			
to dividend in arrears		2,337,059,567	2,337,059,567
Total	\$ 385,500,777	\$ 3,239,361,850	\$ 3,624,862,627
Divided by number of shares outstanding	3,602,811	54,138,137	
Book value per share	\$ 107.00	\$ 59.84	

*The call premium does not normally enter into computation of book value per share because the call provision is at the option of the company