



Corporate Governance in Ukraine



TRANSPARENCY AND DISCLOSURE

**FINANCIAL STATEMENTS – KEY TOOL FOR
DECISION-MAKING**

Kyiv

2003

FOREWORD

Ukraine has faced many challenges in the recent ten years. The transformation of ownership from state to private sector, the start-up of the capital market and the new community of investors requires a new way of operation for joint stock companies.

In modern market economies effective corporate governance is essential for joint stock companies to be successful. In 1999 the international business community and many European government officials recognized basic principles of corporate governance. These are commonly called the OECD principles of corporate governance.

The Government of Ukraine has undertaken several initiatives to promote the acceptance and implementation of good corporate governance in Ukraine. In March 2002, President Kuchma signed the “Decree on Corporate Governance Development” which established guidelines for corporate governance development in Ukraine including shareholder protection, information disclosure and enforcement. In January 2003, the Cabinet of Ministers adopted an Action Plan with concrete measures to implement international norms of good corporate governance in Ukraine. The Securities and Stock market Commission issued Recommendations on Good Corporate Governance in June 2002 to assist joint stock companies in adopting these norms as part of their internal procedures.

To support and implement the Government Corporate Governance Program, the USAID International Business Standards and Corporate Governance Project, implemented by FMI, Inc. has developed an intensive and comprehensive program for members of Supervisory Councils of joint stock companies and banks. These programs build on basic concepts with practical examples and case studies to relate these concepts to the day-to-day issues faced by the Supervisory Councils.

This manual has been prepared for the members of Supervisory Council and Management board attending the corporate governance program as additional reference material for the topics discussed during the program. It is focused on the importance of the financial statements for the decision making process. It provides the Council and board members that have no financial background with the key principles of financial statements, analysis of the warning signals (“red flags”) evident from financial statements and basic approaches to the business valuation.

We hope that you will find the seminar and the material included in this manual interesting and helpful in performing your duties as a Council or a board member.

It is hoped that by understanding these general concepts and taking steps to implement them the Supervisory Council will be a key player in the transformation of Ukraine to a competitive market economy. The successful implementation of these principles will advance the public-private partnership and the economic development of Ukraine.

October, 2003



USAID International Business Standards - Corporate Governance Project



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SOURCES OF FINANCIAL INFORMATION

FINANCIAL STATEMENTS – KEY TOOL FOR DECISION MAKING

SOURCES OF FINANCIAL INFORMATION

An annual report is one of the most important documents a company produces and is often the first document someone consults when researching a company. It reports how the company did financially and often explains the scope of its business mission and management philosophy.

***Annual report
as a key tool to
promote
transparency***

One of the tools to promote the business and financial development is for the company to produce a comprehensive good quality annual report. A public company produces an annual report for its shareholders, the people and institutions who own the company.

Together with the management, the Supervisory Board should be responsible for ensuring that the company's annual report provides the complete and transparent disclosure of all relevant business matters. Other interested parties, such as customers and potential investors, also expect this report to provide an objective and reliable source of information for their decision making.

Additionally, capital market regulators in many countries, require a public company to keep shareholders informed regularly on the state of its business. Such requirements often result in mandatory disclosures that companies must include in their annual reports.

Below is presented an interesting survey that was conducted in 1999. The results of this survey reflect the general tendencies in the relation to the usefulness and reliability of financial reports produced by the companies.

***What analysts
expect from
the annual
report***

Strategic Finance Magazine, the official magazine of the Institute of Management Accountants, has surveyed 140 sell-side star analysts to find out what analysts really want in doing their work.¹

The financial analysts came from a group honored as All-Star Analysts by The Wall Street Journal or as members of the All-America Team by Institutional Investor magazine.

Half the star analysts believe that the current disclosures by corporations are inadequate to facilitate an increased role of investors in corporate governance.

An overwhelming majority of the analysts, **91%**, believe they are getting the information they **need to forecast future financial performance**, but only **41%** believe that they receive the information necessary **to diagnose the source of any company problems** if the strategy is ineffective

Most analysts do find annual reports an important source of information. The management discussion and analysis (MD&A) section and most other parts are well read and used. One notable exception is the balance sheet that analysts often perceive as irrelevant because of its reliance on historical costs and arbitrary write-offs of intangible assets.

¹ source: <http://www.strategicfinancemag.com/1999/04b.htm>

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More than **85%** of the analysts said they **would like more information on key business risks and uncertainties, financial liquidity and flexibility**, the competitive strategy of the significant business units, and an identification of the corporate strategy. Another item that star analysts want is a budgeted income statement for the coming year with an earnings forecast included in the MD&A section. This result is also consistent with other results related to the importance of MD&A.

35 % of the analysts have difficulty understanding the footnotes, and 55% would like further explanation of the footnotes. 18% of the analysts had trouble understanding the statement of cash flows, and 34% would like further explanation of this financial report. Some 49% would like further explanation of the MD&A.

The bottom line is that financial analysts want companies to be more forthcoming with their financial information and provide more voluntary disclosures that "tell the corporate story" to external users.

While most annual reports contain many optional elements, all reports should contain certain information that is essential to understand the company's business.

***Annual report
– required
elements and
optional
information***

In many countries the list of **required elements** of the annual report include:

- Report of management
- Independent auditors' report
- Management discussion and Analysis (MD&A) or sometimes called Financial review
- Financial statements together with notes to financial statements
- Selected financial data – one or two page summary of the key financial figures, ratios and trends for the last 3-5 years.

Optional elements would usually include:

- Financial highlights
- Letter to shareholders
- Corporate message
- Information about Supervisory Board and management board
- Shareholder information

This report, usually from the Supervisory board's chairperson and the chief financial officer, takes responsibility for the validity of the financial information in the annual report, and states that the report complies with requirements of securities laws and other legal requirements.

***Report of
management***

The report attests to the presence of internal accounting control systems that cover effectiveness of operations, reliability of financial reporting, and compliance with laws.

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Market demands more than disclosure of information in the annual report and looks for some form of independent verification of the disclosed information.

***Auditors’
report***

Investors must feel confident about the numbers. Financial statements have to represent a true and fair statement of the health and wealth of a company. Accounting and audit firms have a key role in ensuring that this happens.

Every annual report and each financial statements should have this summary of the findings of an independent firm of certified auditors presented as the opinion whether the financial statements are true and fair and prepared in accordance with generally accepted accounting principles (using the existing accounting framework – e.g. IAS or UK GAAP). Such audit opinion gives the financial statements the credibility as for their reliability and consistency.

Regulation of the audit profession is important to ensure accounting standards are properly followed. In many countries regulations on auditor independence were revised, targeting potential conflicts of interest by requiring that audit firms should not provide non-audit services where this would compromise the auditor's ability to take an independent view of the financial statements.

Particularly, after Enron scandal, the auditors’ independence has been heavily criticized. Until recently, in some countries like USA, audit fees comprised only about 25% of large audit firms’ revenues. More money, more interesting work and more growth lay in the consulting area that accounting firms could gain once they received the audit work from the client. As a result, the audit was blamed to become an industry rather than a profession because auditors’ ability to say ‘no’ to the client was diminished.

“Management Discussion and Analysis” (MD&A) or some times referred as “Financial Review” disclosure provides a context within which the financial results and financial position portrayed in the financial statements can be interpreted. It also provides material historical and prospective disclosure in the text of a document that enables shareholders and other users of information to assess the financial condition, changes in financial condition and results of operations of a public company, especially the prospects for the future.

***Management
discussion and
analysis***

In the MD&A, companies disclose the potential impact of currently known trends, events and uncertainties that are reasonably likely to have material effects on a company’s financial condition or results of operations. Irrespective of the

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terminology used in different countries to describe this type of disclosure, this qualitative information about operations and financial conditions is a critical component of information that public entities provide to the markets.

Under all of the approaches this disclosure is viewed as fulfilling several important objectives:

- First, MD&A-type disclosure enables shareholders and investors to see the company “through the eyes of management.”
- Second, MD&A-type disclosure improves financial disclosure overall and provides the context within which financial statements should be analyzed.
- Third, MD&A-type disclosure provides information about the different components of earnings and cash flow and the extent to which they are recurring elements, thereby enabling shareholders and investors to make a better prediction about the sustainability of earnings and cash flow in the future.
- Fourth, MD&A-type disclosure provides information about the risks to a company’s earnings and cash flow.

The following principles are the useful guidance for companies in preparing MD&A-type disclosure and for regulators in reviewing such disclosure:

- MD&A-type disclosure should highlight the most relevant information.
- MD&A-type disclosure should be clear, concise and meaningful, and in plain language.
- MD&A-type disclosure should be presented in a format that will enhance the comprehensibility of the financial statements to shareholders, as well as to other users of this information, such as investment advisors and rating agencies.
- Irrespective of whether it is provided as a separate report or included as part of a periodic report, MD&A-type disclosure should be provided at the same time as the presentation of the relevant financial statements.

Precautions when preparing MD&A-type disclosure in order to satisfy these objectives:

- Care should be taken to avoid the use of complicated language that appears to be in technical compliance with disclosure requirements, but that nonetheless fails to provide shareholders/investors with appropriate information they need to make valuation and investment decisions.
- MD&A-type disclosure should be properly crafted to address a company’s specific situation. This will increase the overall quality of financial reporting, and assure material correctness and completeness of financial reporting regardless of the detailed accounting and financial requirements applied.

***MD&A
improves
financial
information
overall***

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- MD&A-type disclosure should provide an objective analysis that may require the disclosure of information that could reflect negatively on the company's financial condition, changes in financial condition and results of operations.

Below is the extract from the MD&A of Lucent Technologies 2000 annual report. This **example** is a good illustration of honest and forthright disclosure of negative and adverse trends in the company's operations.

Key Business Challenges

Lucent is in the process of reorganizing its business to become more focused and better positioned to capitalize on market opportunities. This reorganization includes the recent spin-off of Avaya, the expected sale of the power systems business and the announced IPO and spin-off of Agere Systems, as well as a comprehensive review and restructuring of Lucent's internal systems and processes. Specific initiatives include performing a comprehensive product and service portfolio review aimed at aligning research and development and effective redeployment of sales and marketing teams and other investments as appropriate, consolidating corporate infra-structure and improving supply chain management. Lucent expects to take a significant business restructuring charge in the quarter ending March 31, 2001. Lucent expects to give details of the charge in late January, 2001. A review of our internal processes will continue throughout 2001 and may result in additional restructuring and associated charges. The reorganization, including the spin-off of Agere Systems, is expected to be completed by September 30, 2001.

A limited number of large customers provide a substantial portion of Lucent's revenues. These customers include Verizon, AT&T and certain incumbent and competitive local exchange carriers. The spending patterns of these customers can vary significantly during the year. An elimination or change in the spending patterns of, or a significant reduction in orders from, any one of these customers could negatively affect Lucent's operating results. Lucent's fiscal year 2000 results were negatively affected by the decline in sales to one large U.S. customer and one large non-U.S. customer.

The communications industry has recently experienced a consolidation of both U.S. and non-U.S. companies. As a result, Lucent's operating results could become more dependent on a smaller number of large carriers. Lucent continually endeavors to diversify its customer base by adding new and different types of customers. Lucent, however, is often required to provide or arrange for long-term financing for customers as a condition to obtain or bid on infrastructure contracts. Thus, our ability to develop certain customer relationships may be dependent upon our ability to raise capital and extend credit.

Lucent operates in a highly competitive industry and expects the level of competition relating to pricing and product offerings will intensify. Lucent expects that new competitors will enter its markets as a result of expansion by market participants and advancements in technology. These competitors may include entrants from the telecommunications, soft-ware, data networking, cable television and semiconductor industries, and may have strong financial capabilities, technological expertise and established name recognition. Lucent attempts to direct the Company's resources to meet market needs and competitive challenges based on ongoing assessments of market conditions. However, due to misjudgment of the market demand for specific product offerings, Lucent's results for fiscal year 2000 were adversely affected by a larger than expected reduction in revenue and gross margin for its traditional circuit switching products and related software, and lower revenues and gross margins for specific optical net-working products.

For the first fiscal quarter of 2001, Lucent anticipates a substantial decline in revenues compared to the year-ago quarter, and a substantial loss from continuing operations. This reflects a significant sales decline in North America due to an overall softening in the competitive local exchange carrier market, slowdown in capital spending by established service providers, lower software sales and a more focused use of vendor financing by Lucent.

On December 21, 2000, Moody's Investors Service lowered Lucent's credit rating on senior unsecured long-term debt from A2 to A3 and on commercial paper from Prime-1 to Prime-2; the A3 rating remains on review for possible further downgrade, and Moody's concluded the review of the commercial paper rating. Also on December 21, 2000, Standard & Poor's lowered Lucent's credit rating on senior unsecured long-term debt from A to BBB+ and the commercial paper rating from A-1 to A-2, both of which remain on CreditWatch with the possibility of further downgrades. Lucent believes that it will have sufficient capital resources to fulfill its own operational and capital needs, as well as to extend credit to customers when appropriate, although there can be no assurance that this will occur.

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The financial statements and their accompanying notes - are the heart of the financial disclosure. They explain a company's financial performance and recent financial history. These statements are used in several ways: to evaluate a company's overall performance, identify strengths and weaknesses, anticipate future successes or problems, and ultimately may help make decision if the company is a good investment opportunity.

Financial statements and notes - heart of the disclosure

It is a common belief that the financial statements, financial ratios, and other comparative measures offer the best starting points for measuring success and evaluating a company's performance.

Financial statements are only a starting point

But in order to have a complete picture, the Supervisory Board is only able to perform such analysis, in the course of their fiduciary duties, when they possess the full knowledge of the company's products, people, technology, and other resources that give the company a competitive advantage in the marketplace.

That is why the Supervisory Board and the management spend a great deal of efforts and time on preparing the supplemental information or non-financial section of the annual report. This section, usually in front, often tells a lot about views of the Board on the company's future and ability to compete. It adds a great value to the annual report overall and in particular, can provide the key to understand the main results as displayed by the company's financial statements.

INTRODUCTION TO FINANCIAL STATEMENTS

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INTRODUCTION TO FINANCIAL STATEMENTS

The statement of financial position reports a company's financial status at a set date. The statement is like a snapshot because it shows:

- what the company owns
- what the company owes
- what belongs to the owners

Statement of **financial position** is also commonly called **balance sheet** because one part — assets — must balance with the sum of the other two parts — liabilities and shareholders' equity.

In an annual report, the statement of financial position includes information for at least the last two years to allow comparison of changes between years.

The statement of financial position shows three main categories of information for each year covered. To interpret this information, analysts look at three key numbers related to these categories:

- assets (what the company owns)
- liabilities (what the company owes)
- shareholders' equity (what belongs to the owners)

Assets are either current or non-current. **Current assets** are things a company expects to convert to cash within one year. Examples are accounts receivable or inventories of products to sell. Finally, current assets include cash and cash equivalents. Cash equivalents are the securities such as treasury bills and certificates of deposit that the company holds for short term investment purposes but thanks to the liquid capital market can be converted to cash within a few days without significant loss in value).

Non-current assets are things a company does not intend to convert to cash or that would take longer than a year to convert. Non-current assets include fixed assets, often listed as "Property, plant, and equipment" because that's what they usually are. Companies use fixed assets to manufacture, display, store, and transport products.

On the statement of financial position, any debts are liabilities. All companies have liabilities. Examples of liabilities include:

- money owed to banks and other lenders
- money owed to suppliers of goods and services (accounts payable)
- taxes owed to government authorities
- rents owed to owners of land and buildings

Statement of financial position

Assets

Liabilities

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Liabilities are either current (short term) or long term.

***Short term,
long term
liabilities***

Current liabilities are due within one year. **Long-term** liabilities are due after one year. Although liabilities are a necessary part of doing business, companies must manage their liabilities carefully.

Shareholders' equity is the amount owners invested in shares plus the earnings the company retained since it started. (Retained earnings is the amount of profit kept after dividends are paid). On the statement of financial position the amount of shareholders' equity always equals the value of all the assets minus all the liabilities. For example, if a company's assets are \$10,000 and liabilities total \$6,000, the equity is \$4,000.

***Shareholders'
Equity***

Although the term – retained earnings - may suggest a large pool of cash, that image is misleading. Retained earnings is actually part of shareholders' equity and represents the portion of a company's assets that is financed from profitable operations rather than from selling shares to investors or borrowing from external sources. If the company reinvests those earnings profitably, the shareholders benefit from that reinvestment over the long term.

***Retained
earnings***

A second way shareholders benefit from retained earnings is through dividends. A company's Supervisory Board, with the advice of management (or Management board), decides on the amount of dividends per share to pay. Companies usually pay dividends quarterly or annually; however, many companies don't pay dividends at all, and a few pay dividends irregularly.

There might be many reasons why the companies choose not to pay dividends every year. One is the tax reasons. This happens in cases when the majority of shares is concentrated within the hands of a few shareholders and payment of dividends will result in payment significant amount of personal taxes.

Example is the Microsoft Corp. that became public in 1986, but has announced its first ever payment of dividends only in January 2003. This announcement coincided with the new legislation coming into effect from 2003 that exempted dividends from the personal income taxes.

But the most common reason why the companies do not pay dividends is that for many companies the Retained Earnings are the single most important source of finance. Why to retain earnings rather than pay out the dividends and raise new equity funds? It is a common belief that retained earnings do not cost anything, that is to say they do not lead to a payment of cash; it does not involve shareholders or lending institutions for

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investment; it avoids issue costs associated with issues of shares or debt securities; it avoids the possibility of a change in control as a result of a new issue of shares; shareholders may prefer a capital gain rather than current income (i.e. dividend).

On the next page we provide the examples of a typical balance sheets: one of the Ukrainian company “Galakton” (milk and dairy products) and second belongs to multinational corporation “Danone” (dairy products).

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EXAMPLE OF THE BALANCE SHEET

Joint stock company “GALAKTON”

BALANCE SHEET as at 31 December 2002 (thousands of UAH)

ASSETS	2002	EQUITY	2002
Intangible assets, net	514.3	Share capital	8 788.2
-Intangible assets, gross	1 542.9	Additional paid in capital	
-Intangible assets, amortization	1 028.6	Other additional capital	18 728
Construction in Progress	352.3	Reserve capital	961.9
Fixed assets, net	49 428.5	Retained earnings (accumul. deficit)	16 754
- Fixed assets, gross	76 318.4	Un-paid capital	
- Fixed assets, depreciation	26 889.9	Treasury shares	-14.1
Long term investments:		TOTAL EQUITY	45 218.6
-equity method of accounting	1 449.3		
-other investments	5 105.9	LIABILITIES	
Long term accounts receivable	-	Provisions for staff compensation	-
Deferred tax assets	-	Other provisions	-
Other long term assets	-	Special purposes financing	1 500
Inventory		Long term bank loans	3 324.4
- production raw materials	9 046.1	Other long term financial obligations	-
- live stock	-	Deferred tax liabilities	293.6
- work in progress	-	Other long term liabilities	-
- finished goods	890.6	Short term bank loans	6 413.3
- goods	93.9	Short term portion of long term liabil.	-
Notes payable received	-	Notes payable issued	267
Accounts receivable		Accounts payable	16 948.3
- net amount	6 015.4	Current creditors	
- gross amount of receivable	6 116.7	- advances received	509.5
- allowance for doubtful debts	101.3	- budget settlements	376.8
Other receivables	-	- out of budget settlements	99.8
- budget settlements	7.8	- social insurance	273
- advances paid	1 589.7	- payroll	454.2
- accrued income	-	- shareholders	-
- intercompany receivable	31.7	- intercompany	45.5
Other current debtors	1 086	Other current liabilities	252.5
Short term investments	-	Deferred income	-
Cash and cash equivalents		TOTAL LIABILITES	75 976.5
- in national currency	303		
- in foreign currency	16.5		
Other short term assets	-		
Prepaid (deferred) expenses	45.2		
TOTAL ASSETS	75 976.5		

Ukrainian Accounting Rules

Balance sheet under Ukrainian accounting standards has the predetermined layout and format. Small value and even zero balances are still shown on the face of the balance sheet as line items. Items of similar nature are shown as separate line items on the face of balance sheet instead of detailing them in the notes.

DANONE GROUP

BALANCE SHEET as at 31 December 2002 (€ million)

ASSETS	2002	LIABILITIES AND STOCKHOLDERS' EQUITY	2002
Plant, Property and Equipment, net	2 992	Capital stock	137
Brand names	1 259	Capital surplus	649
Other intangible assets (net)	234	Retained earnings	6 568
Goodwill	3 140	Translation adjustments	(1 441)
Long term loans	388	Treasury stock	(826)
Long term investments	634	Stockholders' equity	5 087
Equity in affiliated companies	660	Minority interests	729
Other	284	Convertible bonds	1 000
Non current assets	9 591	Long-term debt	3 092
Inventories	592	Retirement indemnities, pension and post retirement healthcare benefits	272
Trade accounts	947	Provisions and long tem liabilities	492
Other accounts receivable and prepaid expenses	863	Trade accounts and notes payable	1 516
Short term loans	128	Accrued expenses and other current liabilities	1 756
Marketable securities	2 801	Short term debt and bank overdrafts	1 546
Cash and cash equivalents	568	TOTAL LIABILITIES AND STOCKHOLDERS EQUITY	15 490
Current assets	5 899		
TOTAL ASSETS	15 490		

International Standards

Balance sheet under internationally recognized reporting standards is more summarized and condensed. Balances of similar nature are grouped and further broken down in the notes. Usually, amounts less than 10% of total balance sheet are not shown as a separate line item.

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INTRODUCTION TO FINANCIAL STATEMENTS

The statement of earnings shows how much revenue a company brings into the business by providing goods or services, or both, to its customers for a set time (usually one year). It also shows the costs and expenses associated with earning that revenue during that time.

Statement of earnings

In an annual reports the statement of earnings shows sales revenue and expenses for at least the last two years (companies in the US present this statement for the last three years). The net earnings (or loss), often literally the “bottom line” on the statement, shows how much the company earned (or lost).

The statement of earnings shows two main categories of information for each year covered:

- the revenue from products and services sold
- the expenses, or costs, of doing business

It has several key numbers:

- revenue
- gross profit
- operating income/ (loss) or operating profit/(loss)
- net earnings (net income, net profit) or net loss
- earnings or loss per share

A company earns revenue and reports as sales those revenues that are received from its core business activities. Depending on the nature of their business, companies may receive revenue in one or more of the following ways:

- by selling products or services, or both
- by leasing and renting equipment or property to others
- by receiving interest from loans to other companies or individuals

Revenue

Some companies have only one source of revenue; others have several. For example, Ford Motor Co. reports revenue from two business sectors (or business segments), such as automotive and financial services.

A rule of business is, “It takes money to make money.” Typically, producing goods for sale is the greatest cost of generating revenue. For example, a furniture manufacturing company must buy woods and other raw materials to make furniture; pay wages to workers and managers; and spend money on overhead — power, facilities, and maintenance.

Gross profit

A company deducts these costs (cost of sales, cost of goods sold) from revenue, showing gross profit (or loss).

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In addition to the expenses directly related to producing goods and services, companies incur operating expenses. These include advertising, salaries, rent, research and development, office supplies, and any other administrative amounts spent.

***Operating
income***

A company deducts these operating expenses from gross profit, resulting in operating income (or loss). Operating income represents a company's revenue minus all expenses required to obtain that revenue. From this key number, companies deduct costs relating to debt financing and tax expenses. The remainder is called net earnings.

Net earnings (or net income, net profit) are the "bottom line" (often literally the last line on the statement). After a company deducts all costs and expenses from revenue, the statement of earnings shows the net earnings (or loss). When revenue exceeds costs and expenses, the bottom line shows a profit. When costs and expenses exceed revenue, the bottom line shows a loss. Growth in net earnings usually signals that a company is doing well.

***Net earnings
or net loss –
"bottom line"***

Another key number is the **earnings per share**. There should be no confusion as to the fact that this number shows how much cash each shareholder will receive on every share he owns. This number is merely an indicator of profitability of the company based on the number of shares outstanding.

***Earnings per
share***

Earnings per share (EPS) shows how much money stockholders would theoretically receive for each share if the company distributed all net income to its shareholders. For example, if the net income of the company is \$1 million and there are 500,000 shares are outstanding, the earnings per share are \$2. Although all net income really belong to the shareholders, a company almost never distributes the full amount to them directly.

For example, Microsoft declared and paid dividends in January 2003 for the first time since the company went public in September 1986.

A company needs money to grow, so it takes part of the net income and reinvests that money in the company. The total amount of a company's net income since its inception, minus any payments made to shareholders, is called retained earnings.

On the next page we provide the examples of a typical income statements: one of the Ukrainian company "Galichfarm" (pharmaceutical industry) and the second one belongs to German based corporation "Bayer" (pharmaceutical industry).

INTRODUCTION TO FINANCIAL STATEMENTS

EXAMPLE OF THE INCOME STATEMENT

Joint Stock Company "GALICHFARM" Income statement for 2002 (thousands of UAH)

	<u>2002</u>
Revenues from sale of products (goods, services)	42 812.3
Value added tax	(93)
Excise duty	-
Other deductions from revenues	(52)
Net revenues from sales	42 667.3
Cost of sales	(25 673.7)
Gross profit	16 993.6
Other operating income	3 787.7
Administrative expenses	(5 903.3)
Distribution expenses	(3 294.7)
Other operating expenses	(4 921.8)
Operating income	6 661.5
Share of income of associated companies	-
Other financial income	435.9
Other income	839.5
Financial expenses	(6.4)
Share of losses of associated companies	-
Other expenses	(623.3)
Income from ordinary activities before tax	7 307.2
Taxation	(2 138.5)
Income from ordinary activities after tax	5 168.7
Extraordinary income (losses)	-
Tax on extraordinary income	-
Net income	5 168.7

Ukrainian Accounting Rules



Income statement under Ukrainian accounting standards has the predetermined layout and format. Companies have no choice in customizing the income statement items that would best suit the presentation of specifics of a particular business.

Small value and even zero amounts are still shown on the face of the income statement as line items.

BAYER AG Income statement for 2002 (€ million)

	<u>2002</u>
Net sales	9,513
Cost of goods sold	(6,771)
Gross profit	2,742
Selling expenses	(1,245)
Research and development expenses	(1,288)
General administrative expenses	(464)
Other operating income	465
Other operating expenses	(298)
Operating result	(88)
Income from investments in affiliated companies	1,689
Interest expenses	(178)
Other non-operating expense	(227)
Non-operating result	1,293
Income before income taxes	1,205
Income taxes	(43)
Net income	1,162

International Standards



Income statement prepared under internationally recognized reporting standards is more summarized and condensed. Significant emphasis is made on presenting details of income statement amounts in the notes to the financial statements.

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INTRODUCTION TO FINANCIAL STATEMENTS

Before the mid-1980s, most company managers, investors and stock analysts thought the balance sheet and income statement provided sufficient information for decision-making.

Statement of cash flows

The balance sheet provides a snapshot of financial condition (i.e. cash on hand, short and long term assets, short term and long term liabilities) – it measures only where a company stands at a particular point of time. The income statement summarizes revenues and expenses and net income or loss for the year.

In 1987, the internationally recognized accounting boards introduced the requirement for companies to break out actual cash movements related to operating, investing and financing activities.

This new standard imposed a critical reality check on the profits and operations of the company reported in the income statement. A company with rapid income growth should also have dramatic increase in cash. If cash is in fact declining, there may be a problem with an accounting policy (or occasionally pure fraud) or the company may be in a higher risk “development stage” situation.

In the early 1980, **Oracle** (major software developer) used an aggressive accounting policy to recognize revenue from the sales of products that would not be shipped for months but allowed the company to declare higher earnings in the current quarter. When the products failed to ship (e.g. when customers reduced their orders and products were not shipped), **Oracle** was forced – in a costly blow to shareholders – to restate earnings.

Microsoft has the accounting policy of deferring some current sales to future accounting periods when the completion of contracts are extended over time. This policy not only allows **Microsoft** to better match the costs of supporting a product with the flow of revenues it generates over time, but it also allows the company to “smooth” earnings flow by deferring the recognition of that revenue.

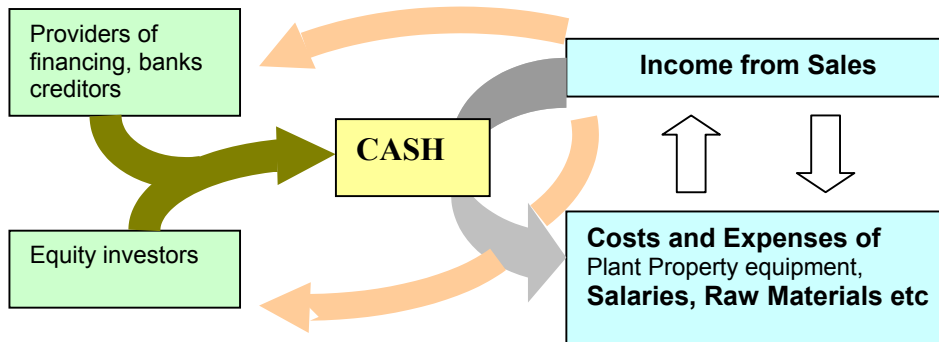
These simple examples illustrate the problems with the income statement which is heavily affected by the accounting policies about sales recognition, inventory valuation methods, depreciation methods, write-downs of goodwill and provisions that impact the results reported in the income statement.

The ultimate objective of profit making should be cash. Cash is a company’s lifeblood. Cash may include cash on hand, accounts and deposits at the bank. Cash equivalents may be a short term, temporary investments – such as certificates of deposits, government treasury bills – that can be quickly and easily converted to cash.

Cash is a company’s lifeblood

FINANCIAL STATEMENTS – KEY TOOL FOR DECISION MAKING

INTRODUCTION TO FINANCIAL STATEMENTS



A company uses cash to pay bills, repay loans, and make investments, allowing it to provide goods and services to customers. If all goes well, a company uses cash to generate even more cash as a result of higher profits.

The important information about company's cash flows is summarized in sections of the cash flow statement labeled "cash from operating activities", "cash from investing activities" and "cash from financing activities".

Cash from operating activities includes cash received and paid in the course of the company's main business activity regardless of when sales revenues or costs to generate revenues were recognized.

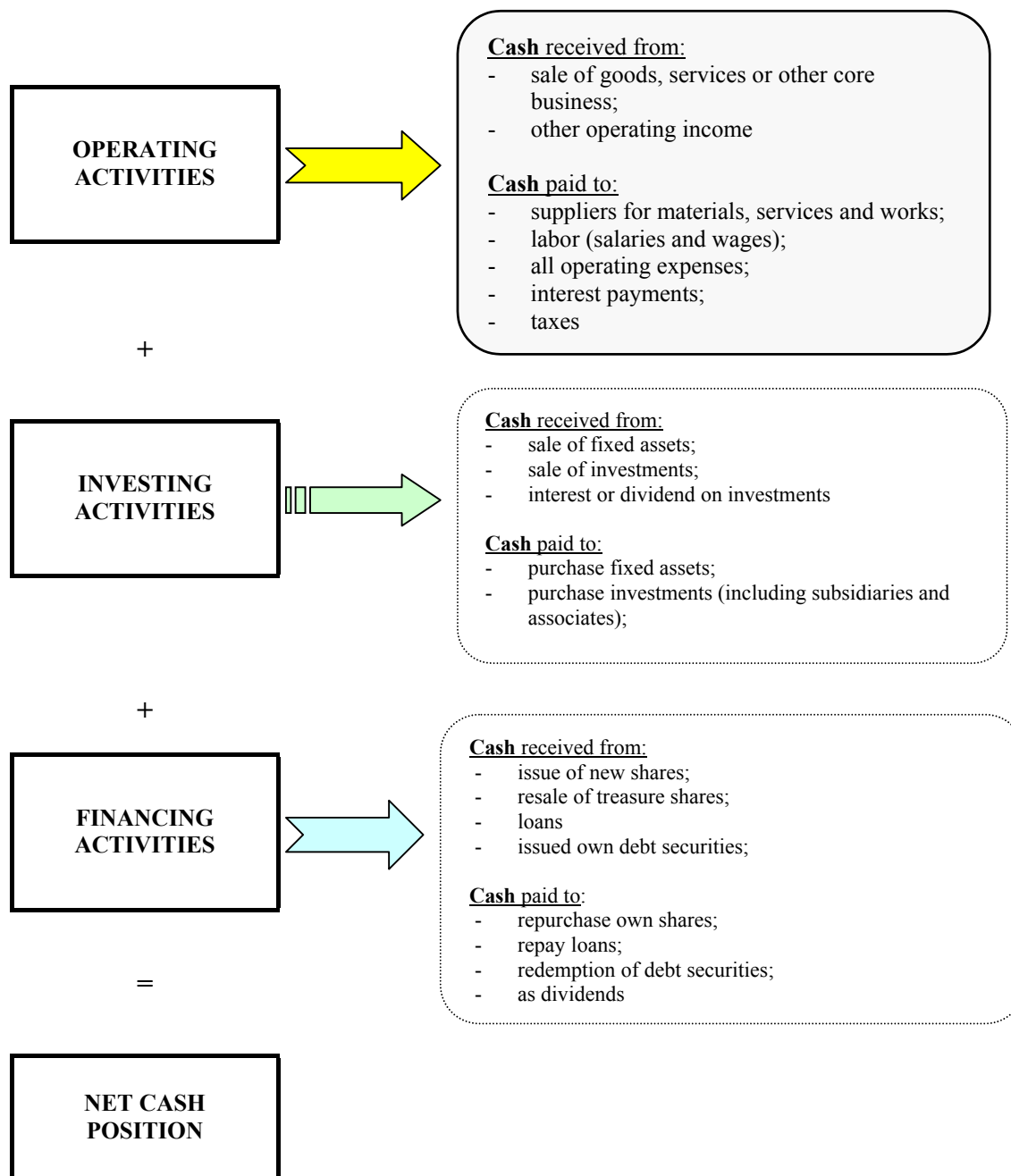
Cash from investing activities focuses on movements of cash to pay for capital expenditures (such as purchase of new plant, property and equipment, purchasing of an investment in another company) or sales of plant, property and equipment, sale of investments.

Cash from financing activities presents cash amounts received as a result of new share issues, taken loans and debt less cash paid as dividends, repurchase of own shares or repayment of loans.

FINANCIAL STATEMENTS – KEY TOOL FOR DECISION MAKING

INTRODUCTION TO FINANCIAL STATEMENTS

ELEMENTS OF THE CASH FLOW STATEMENT

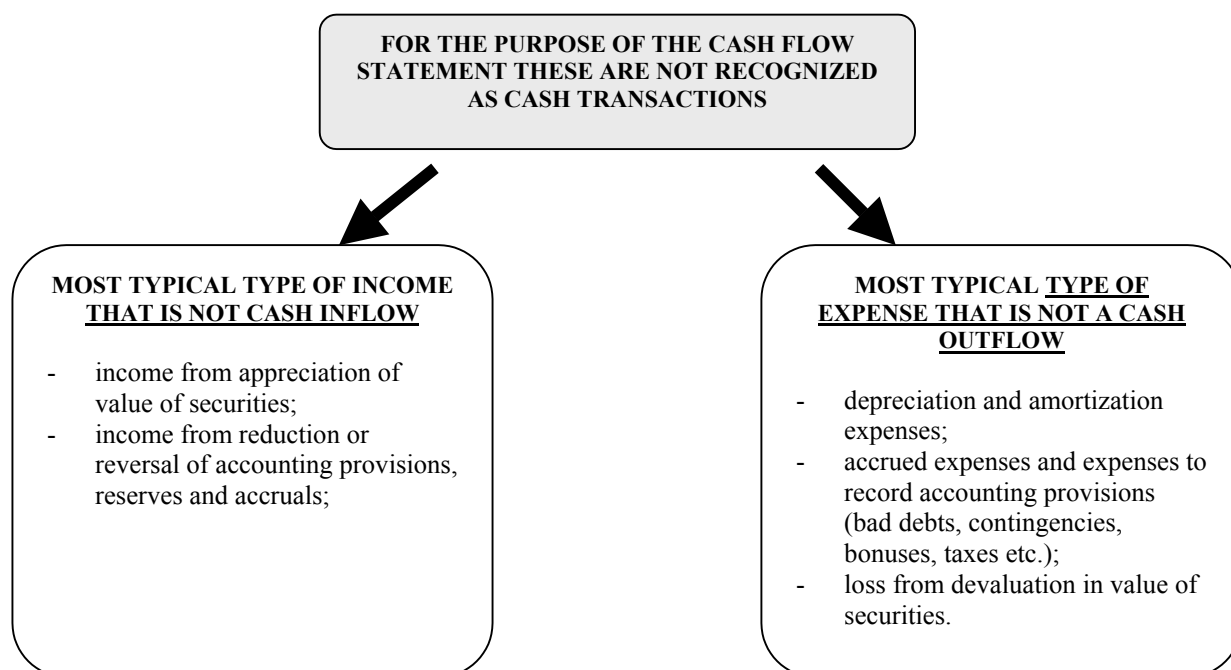


Cash is the final link in the chain of any business decision. For the investor, what will matter in the end is how his profit or capital appreciation converts into cash, how much cash he receives.

That is why the cash flow statement is viewed by some experts as the most important part of the financial statements. It shows how the company's business generates cash (sources of cash inflows) and how it spends the cash resources. Very often this information is a lot more valuable than any other component of the financial statements.

FINANCIAL STATEMENTS – KEY TOOL FOR DECISION MAKING

INTRODUCTION TO FINANCIAL STATEMENTS



Operating cash flows may be prepared from the company's accounting records under the **direct method**, i.e. by classifying and grouping of all actual cash inflows and outflows affecting the company's bank account(s).

Cash flow statement – two methods

Alternatively, the company can calculate the cash flows using **indirect method** by adjusting the net profit or loss for the period for non-cash items and for investing and financing items.

The preferred method is the direct method, because the information provided is more useful and easier to understand. However, the indirect method is more commonly used by companies. The indirect method is preferred by most firms because it shows a reconciliation from reported net income to cash provided by operations.

The indirect method is harder to understand but the following table should provide some guidance as to how the reconciliation takes place. It begins with net income and adjusts net income for changes in account balances that affect available cash.

FINANCIAL STATEMENTS – KEY TOOL FOR DECISION MAKING

INTRODUCTION TO FINANCIAL STATEMENTS

CASH FLOW FROM OPERATIONS – INDIRECT METHOD

Under indirect method the adjustment process would be as follows:

Net income	+	Depreciation expense Amortization expense Increase in deferred tax Decrease in receivables Decrease in inventory Decrease in prepaid expenses Increase in payables Loss on disposal of fixed assets or investments Expenses on provisions	-	Decrease in deferred taxes Increase in receivables Increase in inventories Increase in prepaid expenses Decrease in payables Income from release in provisions Gain on disposal of fixed assets or investments	=	Net cash from operating activities
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Illustration example. The Company was set up in 2003. During its first year of operations, the Company's bank account shows the following:

- 30 received as capital from shareholders
- 100 received from customers for sold products,
- 50 paid to purchase raw materials;
- 25 paid to purchase equipment;
- 20 paid as salaries and wages;
- 15 paid as interest on loan
- 70 received as loan funds

Under **direct method**, the cash flows from operating activity would look as follows:

Operating cash flows:

Cash received from customers	100
Cash paid to suppliers of raw materials	(50)
Cash paid as salaries	(20)

Net cash flows from operating activities **30**

Illustration how **indirect method** is used. Let's assume that the company's balance sheet and income statement is as follows:

	31 Dec 2003	1 Jan 2003	Change in operating assets		2003
Fixed assets	15	0			
Inventory	10	0	(10)	Sales	150
Receivable	50	0	(50)	Cost of sales	(60)
Cash	90	0			
Total assets	165	0		Depreciation	(10)
				Interest on loan	(15)
Loans received	70	0		Net income	65
Share capital	30	0			
Retained earnings	65	0			
Total liabilities and equity	165	0			

FINANCIAL STATEMENTS – KEY TOOL FOR DECISION MAKING

INTRODUCTION TO FINANCIAL STATEMENTS

Under indirect method, the cash flows from operating activity would look as follows:

Operating cash flows:		
Net income for the year	65	Depreciation reduces the amount of income but does not involve any cash movement.
Adjustments to reconcile net income to operating cash flows:		
- depreciation	10	Some companies treat interest on loan as financing activity and include that amount under "Cash flows from financing activities".
- interest on loan	15	
- increase in receivable	(50)	The rationale – the net income figure includes the amount of 150 as revenues, though only 100 was received as cash and 50 is still receivable. Therefore, an increase in receivables is deducted from the net income to adjust the revenue to the actual cash received, i.e. 100.
- increase in inventory	(10)	
Cash flows from operating activities	30	

On the next page we provide the examples of a typical cash flow statement: one of the Ukrainian company "Ukrnafta" (oil industry) and the second one belongs to Dutch based "Royal Dutch Petroleum Company" (oil industry).

FINANCIAL STATEMENTS – KEY TOOL FOR DECISION MAKING

EXAMPLE OF THE CASH FLOW STATEMENT

Joint Stock Company “UKRNAFTA” Cash flow statement for 2002

(thousands of UAH)

	<u>2002</u>
Cash flows from operations	
Profit from ordinary activity before tax	758 823
Adjustments:	
- depreciation of fixed assets	320 927
- increase (decrease) in provisions	-7 922
- gain (loss) from unrealized foreign exchange differences	-
- gain (loss) from non operating activities	100 441
Interest expense	12 685
Profit (loss) from operating activities before changes in net operating assets	1 184 954
Increase (decrease):	
- operating assets	11 265
- prepaid expenses	2 916
Increase (decrease):	
- current liabilities	-45 478
- income of future periods	-480
Cash from operating activities	1 153 177
Paid:	
- interest	-12 685
- income taxes	-367 116
Net cash from operating activities	773 376
Cash from investing activities	
Disposal:	
- financial investments	10
- long term assets	15 300
- business units	-
Received:	
- interest	299
- dividends	47 236
Other receipts	-
Purchases:	
- financial investments	-22 538
- long term assets	-808 917
- business units	-
Other payments	-24 227
Net cash from investing activities	-792 837
Cash from financing activities	
Receipts from own capital	-
Loans received	163 859
Other receipts	-
Loans repaid	112 708
Dividends paid	-113
Other payments	-
Net cash from financing activities	51 038
Net cash changes during the period	31 577
Cash balance at beginning of the year	11 653
Effect of exchange rate on cash balances	-
Cash balance at the end of the year	43 230

Cash flow statement under Ukrainian accounting standards has the predetermined layout and format. Sometimes certain transactions have no matching description on the form and have to be reported as “other” (e.g. issue of own debt securities; repurchased shares).

Small value and even zero amounts are still shown as line items

Royal Dutch Petroleum Company Cash flow statement for 2002 (millions \$)

	<u>2002</u>
Cash flow provided by operating activities	
Net income	9 419
Adjustments to reconcile net income to cash flow provided by operating activities	
Depreciation, depletion and amortization	8 454
Profit on sale of assets	(367)
Movements in :	
- inventories	(1 461)
- accounts receivable	(5 761)
- accounts payable and accrued liabilities	6 885
- taxes payable	(710)
Associated companies: dividends more/(less) than net income	313
Deferred taxation and other provisions	273
Long term liabilities and other	(838)
Income applicable to minority interests	158
Cash flow provided by operating activities	16 365
Cash flow used in investing activities	
Capital expenditures (including capitalized leases)	(12 184)
Acquisitions	(8 925)
Proceeds from sale of assets	1 099
New investments in associated companies	(1 289)
Disposal of investments in associated companies	501
Movement in other investments	83
Cash flow used in investing activities	(20 715)
Cash flow used in financing activities	
Long term debt (including short term part)	
- new borrowings	5 267
- repayments	(5 610)
	(343)
Net increase / (decrease) in short term debt	7 058
Change in minority interests	421
Dividends paid to:	
- Parent companies	(6 961)
- minority interests	(228)
Cash flow used in financing activities	(53)
Parent Companies' shares: net sales and dividends received	(864)
Currency translation differences related to cash and cash equivalents	153
Increase / (decrease) in cash and cash equivalents	(5 114)
Cash and cash equivalents at January 1	6 670
Cash and cash equivalents at December 31	1 556

It would be almost impossible to find two identical forms of the cash flow statements prepared by international companies because every company tailors this statement to its own specifics and needs.

FINANCIAL STATEMENTS – KEY TOOL FOR DECISION MAKING

INTRODUCTION TO FINANCIAL STATEMENTS

There are several variations or types of statements that can be used to summarize the changes of the rights of owners (e.g., statement of retained earnings, statement of surplus, statement of changes in net worth, statement of shareholders' equity, etc.).

Statement of shareholders' equity

This type of financial statement is used to bridge the gap between the amount of equity the owners have in the business at the beginning of the accounting period and the amount of their equity at the end of the period

The income statement summarizes the revenues and expenses during the accounting period. The statement of changes in financial position is used to show the condition of accounts at the end of a particular period. The statement of changes in owners' equity does a bit of each.

The purpose of the statement of shareholders' equity is to disclose the sources of the changes in the various permanent shareholders' equity accounts that occurred during the period.

The purpose of all of these "changes" statements is the same, which is to report:

- the amounts of the owners' rights at the beginning of the period
- the increases or decreases during that period
- the amount of rights at the end of the period

The examples of typical statement of shareholders' equity is provided below:

FINANCIAL STATEMENTS – KEY TOOL FOR DECISION MAKING

EXAMPLE OF THE STATEMENT OF SHAREHOLDERS' EQUITY

DonetskCement

Statement of shareholders' equity for the year 2002 (thousand UAH)

	Share capital	Paid in capital	Additional capital	Other additional capital	Reserve capital	Retained earnings	Un-paid capital	Treasury shares	Total
Balance at beginning of year	259	-	-	29 803.6	65	5 003.4	-	-	35 131
Adjustments									
- change in accounting policy	-	-	-	-	-	-	-	-	-
- correction of errors	-	-	-	-	-	-	-	-	-
- other changes	-	-	-	-	-	-	-	-	-
Adjusted balance at beginning of year	259	-	-	29 803.6	65	5 003.4	-	-	35 131
Revaluation of assets									
- revaluation of fixed assets	-	-	-	5.6	-	-	-	-	5.6
- impairment of fixed assets	-	-	-	-	-	-	-	-	-
- revaluation of construction	-	-	-	-	-	-	-	-	-
- impairment of construction	-	-	-	-	-	-	-	-	-
- revaluation of intangibles	-	-	-	-	-	-	-	-	-
- impairment of intangibles	-	-	-	-	-	-	-	-	-
Net income/(loss) for the reporting period	-	-	-	-	-	(16 410)	-	-	(16 410)
Payout to owners	-	-	-	-	-	-	-	-	-
Transfer of income to share capital	-	-	-	-	-	-	-	-	-
Transfer of income to reserve capital	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	12 970.5	-	-	12 970.5
Contributions of owners									
- new capital contributions	-	-	-	-	-	-	-	-	-
- payment of outstanding debt on capital contributions	-	-	-	-	-	-	-	-	-
Capital withdrawal									
- repurchase of shares	-	-	-	-	-	-	-	-	-
- resale of treasury shares	-	-	-	-	-	-	-	-	-
- termination of treasury shares	-	-	-	-	-	-	-	-	-
- change of nominal value	-	-	-	-	-	-	-	-	-
Other changes in capital									
- writeoff of losses	-	-	-	-	-	-	-	-	-
- assets received free of charge	-	-	-	-	-	-	-	-	-
- payment of dividends in shares	-	-	-	(449.2)	-	449.2	-	-	-
Balance at end of year	259	-	-	29 360	65	2 013.1	-	-	31 697.1

Must always agree with income statement

Must always agree with the balance sheet

LAFARGE GROUP

CONSOLIDATED STATEMENT OF CHANGES IN SHAREHOLDERS' EQUITY

(million EURO)

	Outstanding shares	Treasury shares	Common stock	Additional paid in capital	Retained earnings	Cumulative translation adjustments	Shareholders equity
	in million of shares						
Balance at December 31, 2001	130,145,800	1,864,372	521	4,324	3,389	(352)	7,882
Net income	-	-	-	-	460	(4)	456
Dividends paid	-	-	-	-	(297)	-	(297)
Issuance of common stock (dividend reinvestment plan)	1,400,494	-	5	127	-	-	132
Exercise of stock options	171,583	-	1	7	-	-	8
Employee stock purchase plan	708,718	-	3	42	-	-	45
Issuance of common stock (Cementia Exchange Offer)	453,838	-	2	46	-	-	48
Purchase of treasury stock	-	56,587	-	-	(4)	-	(4)
Change in translation adjustments	-	-	-	-	-	(1,289)	(1,289)
Balance at December 31, 2002	132,880,433	1,920,959	532	4,546	3,548	(1,645)	6,981

FINANCIAL STATEMENTS – KEY TOOL FOR DECISION MAKING

INTRODUCTION TO FINANCIAL STATEMENTS

The notes should always accompany the financial statements and are main tool to understand the financial statements. Companies use notes to explain how they arrived at the numbers in the financial statements and to describe any significant events or changes in procedures that may affect the numbers.

Importance of footnote disclosures

Notes also explain items in the statements and report details of the company's financial performance not shown on the face of the statements. A note might explain, for example, that a company's accounting methods have changed from the previous year or differ significantly from methods other companies in the same industry use. One might examine why the company changed accounting methods, probing, for example, to learn whether the change distorts the company's financial results.

Another note might disclose an acquisition that may have a material effect on the company's financial condition, both short term and long term.

A note might provide additional detail on an item in a financial statement, for example information about Company's debt and borrowings detailing the terms, maturity, assets pledged as security, description conversion to equity options if any and any other relevant data that helps the reader fully understand the picture.

Finally, regardless of the numbers on the face of the balance sheet or the income statement, certain footnote disclosures should be included in the financial statements because they are required by the reporting and accounting standards. The most evident example of this is the disclosure of the related party transactions. This note should disclose details of related party relationship that the company has as well as details of transactions performed with related parties during the year.

Therefore, the **role of notes** to financial statements is to provide additional information to that included in the individual financial statements. They are:

- (a) disclosures required by the regulations; and
- (b) disclosures required by the accounting/reporting standards; and
- (c) any other information necessary to give a true and fair view.

Therefore the notes can serve one or following functions:

- to provide detail of information provided in summary form in the financial statements;
- to explain how information included in the financial statement has been prepared (for example, statement of accounting policies);

FINANCIAL STATEMENTS – KEY TOOL FOR DECISION MAKING

INTRODUCTION TO FINANCIAL STATEMENTS

- to provide information on events or transactions that do not satisfy the recognition criteria for elements of financial reporting (for example, contingent liabilities and some post reporting date events);
- to provide additional disclosure required by individual accounting standards; and
- to provide additional disclosures (to those expressly required company law, the regulations and accounting standards) that are necessary to satisfy the overriding requirement that the financial report gives a true and fair view of the entity's financial position and performance.

Adequate disclosure in the notes to financial statements is necessary for the auditors to issue an unqualified opinion on the financial statements.

Example of note disclosure from the 2002 Annual report of PepsiCola is provided below:

INTRODUCTION TO FINANCIAL STATEMENTS

EXAMPLE OF THE FOOTNOTE DISCLOSURE

Example of footnote disclosure from the 2002 financial statements of PepsiCo

NOTE 9 – DEBT OBLIGATIONS AND COMMITMENTS

	2002	2001
Short-term debt obligations		
Current maturities of long-term debt	\$ 485	\$ 319
Other borrowings (5.7% and 6.4%)	452	410
Amounts reclassified to long-term debt	(375)	(375)
	\$ 562	\$ 354
Long-term debt obligations		
Short-term borrowings, reclassified	\$ 375	\$ 375
Notes due 2003-2026 (4.0% and 4.1%)	1,716	1,986
Zero coupon notes, \$625 million due 2003-2012 (12.6%)	338	356
Other, due 2003-2015 (7.6% and 6.9%)	243	253
	2,672	2,970
Less: current maturities of long-term debt obligations	(485)	(319)
	\$2,187	\$2,651

Short-term borrowings are reclassified to long-term when we have the intent and ability, through the existence of the unused lines of credit, to refinance these borrowings on a long-term basis. The weighted average interest rates in the table shown include the impact of outstanding interest rate swaps at year-end. See Note 10 for additional information on our interest rate swaps.

At year-end 2002, we maintained \$750 million in corporate lines of credit subject to normal banking terms and conditions. These credit facilities support short-term debt issuances and remained unused at year-end 2002. Of the \$750 million, \$375 million expires in June 2003 with the remaining \$375 million expiring in June 2007. Upon consent of PepsiCo and the lenders, these facilities can be extended an additional year. In addition, \$270 million of our debt was outstanding on various lines of credit maintained for our international divisions.

These lines of credit are subject to normal banking terms and conditions and are committed to the extent of our borrowings.

Long-Term Contractual Commitments and Off-Balance Sheet Arrangements

	Total	Payments Due by Year			
		Less than 1 Year	1 - 3 Years	3 - 5 Years	More than 5 Years
Long-term contractual commitments (a)					
Long-term debt obligations (b)	\$2,187	\$ –	\$ 603	\$ 699	\$ 885
Non-cancelable operating leases	526	129	169	91	137
Purchasing commitments	3,307	773	1,006	569	959
Capital equipment commitments	34	34	–	–	–
Marketing commitments	251	75	115	52	9
Other commitments	31	23	8	–	–
	\$6,336	\$1,034	\$1,901	\$1,411	\$1,990

(a) Reflects non-cancelable commitments as of December 28, 2002 based on year-end foreign exchange rates.

(b) Excludes current maturities of long-term debt of \$485 million which are classified within current liabilities.

Long-term contractual commitments, except for our long-term debt obligations, are not recorded in our Consolidated Balance Sheet. Non-cancelable purchasing, capital equipment and marketing commitments are in the normal course of our business for our projected needs. Our non-cancelable capital equipment commitments primarily relate to our new concentrate plant in Ireland. As bottler funding is negotiated on an annual basis, these commitments are not reflected in our long-term contractual commitments. See Note 8 regarding our commitments to noncontrolled bottling affiliates.

Off-Balance Sheet Arrangements

It is not our business practice to enter into off-balance sheet arrangements nor is it our policy to issue guarantees to our bottlers, noncontrolled affiliates or third parties. However, certain guarantees were necessary to facilitate the separation of our bottling and restaurant operations from us. In connection with these transactions, we have guaranteed \$2.3 billion of Bottling Group, LLC's long-term debt through 2012 and \$68 million of YUM! Brands, Inc. (YUM) outstanding obligations, primarily property leases. The terms of our Bottling Group, LLC

debt guarantee are intended to preserve the structure of PBG's separation from us and our payment obligation would be triggered if Bottling Group, LLC failed to perform under these debt obligations or the structure significantly changed. Our guarantees of certain obligations ensured YUM's continued use of these properties. These guarantees would require our cash payment if YUM failed to perform under these lease obligations.

Total agrees to the amount shown on the balance sheet.

As it is seen from this example, the format of the footnote is free-style. The main feature – it fully explains the item shown on the balance sheet, providing various details and background to facilitate understanding.

FINANCIAL STATEMENTS – KEY TOOL FOR DECISION MAKING

INTRODUCTION TO FINANCIAL STATEMENTS

The core of any annual report is the financial statements. The financial statements consist of:

- statement of financial position (balance sheet) – shows what company owns (assets), what company owes (liabilities) and what is the company's net worth (shareholders' equity) at a certain date;
- statement of earnings (statement of income) – summarizes all incomes and expenses for the reporting period;
- statement of cash flows – shows where the cash came from and what the cash was spent for;
- statement of changes in shareholders' equity – explains the changes in capital and equity accounts during the reporting period;
- footnotes – provide additional details and disclosures in order to facilitate understanding of amounts shown on the primary statements and transactions performed by the company.

Summary

ANALYSIS OF WARNING SIGNALS OR “RED FLAGS”

FINANCIAL STATEMENTS – KEY TOOL FOR DECISION MAKING ANALYSIS OF WARNING SIGNALS OR “RED FLAGS”

Many investors and creditors are discouraged from using financial statements and the related footnotes because of their complexity. And, indeed, a thorough knowledge of financial statements of a company of any size can require considerable time and effort. But it is possible to glean important information about the company’s prospects by spending time looking for specific indications of potential problems or **red flags**.

The Supervisory Council performs many important functions using the financial statements prepared by the management as a main source of information. These functions include but not limited to: regular monitoring of financial performance, strategic planning, business planning and approval of budgets, risk management, approval of annual reports and disclosures to the public etc.

Sometimes management can use creative accounting techniques to disguise damaging information, to provide a distorted picture of the financial health of the business, to smooth out erratic earnings, or to boost anemic or no earnings. Accountants can be very clever in hiding these accounting tricks and gimmicks or use a wide range of accounting techniques to “cook the books”. Therefore, Supervisory Council must be alert to the signs of outright financial shenanigans, it should have a healthy skepticism when reading and evaluating financial reports. Supervisory Council must attack financial statements and other supplementary information the way the fictional Sherlock Holmes approached his cases.

Supervisory Council should ensure that the problems in the financial statements are addressed promptly and therefore should identify these problems before they occur or at least soon after its occurrence. There might be a risk though that problems often intended to be well hidden and they may be only discovered by chance or once the company is in financial difficulty, which may result in a takeover or insolvency. It is therefore important to attempt to manage this risk by using early **warning signals or “red flags”**.

Below provided the description of only three “red flag” indicators that the Supervisory Council should look for. The complete system of “red flags” should be developed by the Supervisory Council and tailored to business specifics, company size, main risk areas etc.

FINANCIAL STATEMENTS – KEY TOOL FOR DECISION MAKING ANALYSIS OF WARNING SIGNALS OR “RED FLAGS”

It is important to detect the warnings of future earnings shortfall. The collapse of Enron and other big companies because of questionable accounting practices prompt a simple question: What are earnings? Companies and stock markets are interested in reporting growing earnings to increase the market price of shares.

1. Earnings red flags

Since a growth slowdown will most likely affect the share price, some companies resort to creative measures to mask the falloff. For instance, they may encourage customers to order unneeded products by offering longer payment terms (e.g. one year instead of the usual 60 days), a practice known as “channel stuffing”.



Another way to stimulate demand is to cut prices. Of course reducing prices without corresponding cost saving decreases profit margin and hence earnings. But that result can be masked by manipulating of cost of sales through artificially inflating the inventory values.



Example. The Company sells product for 100. Cost of sales for that product is 80, therefore, the gross margin is 20% (calculated as $[(100-80)/100]$). Now when the Company decides to sell product for 90, the gross margin will fall to 11% $[(90-80)/90]$. The gross margin depends on the cost of sales; cost of sales depends on the value of raw materials and components used to produce the product. The way the accounting works is that the cost of sales is calculated based on the value of inventory that was on hand at the beginning of the year, the value that was purchased during the year and the value of inventory left at the end of the year. Any manipulation with values of ending inventory effects the cost of sales number for the year.

These high jinks leave tracks. “Channel stuffing” increase accounts receivable (money owed by customers) since customers are taking longer to pay. Gross margin manipulations abnormally increases inventory levels. To detect these accounting shenanigans watch for unusual increases in accounts receivable or inventory levels but there is an easier way.



Recent academic research found that such accounting tricks can be detected by simply comparing net income to cash flows from operating activities. The red flag signals would be the instances where net income increases, but cash flow does not. Both these numbers can be found on the cash flow statement.

**Compare net
income to cash
flows**

Focus on the number for net cash provided by operating activities is important because it shows whether the day-to-day operations



FINANCIAL STATEMENTS – KEY TOOL FOR DECISION MAKING ANALYSIS OF WARNING SIGNALS OR “RED FLAGS”

generates cash: because if a company is to survive, the business must generate cash from its core activities.

During some periods in the business cycle, particularly growth spurts, a business may not generate sufficient cash to buy extra material for inventory and to hire more people. In these periods, the business can borrow from banks. But if the business does not ultimately generate cash, it goes bankrupt.

Cash provided, or used, by operating activities (operations) is without a doubt, the most critical number. These activities represent the basic business of the company. If a company consistently fails to make money at its basic business, it will have a hard time surviving. In a healthy mature company, operating activities normally result in positive cash flows.

If earnings grow from quarter to quarter and cash flow declines, the company is either booking fictitious sales or reporting revenues it can not collect. **For example**, Enron’s second quarter 2001 earnings were \$423 million while its negative cash flow was \$527 million for the same quarter.



Please continue on the next page.

FINANCIAL STATEMENTS – KEY TOOL FOR DECISION MAKING ANALYSIS OF WARNING SIGNALS OR “RED FLAGS”

Here is **another example** – Concord Camera Corporation (a global developer, designer, manufacturer and marketer of high quality, low cost, popularly priced digital, instant, Advanced Photo System (APS), and 35mm format cameras and 35mm, APS, and instant format single use cameras).

Net income increased by 254% in 2000 compared to 1999 (more than 2.5 times). However, cash flow from operations fell by 55% for the same period. This should have been a RED FLAG! Indeed, in 2001 and 2002, the Company reported losses, together with the negative operating cash flows.

Year Ended	2002	2001	2000	1999
Cash flows from operating activities:				
Net (loss) income	\$ (5,247,789)	\$ (11,770,350)	\$ 19,598,567	7,708,906
Adjustments to reconcile net (loss) income to net cash (used in) provided by operating activities:				
Depreciation and amortization	6,259,809	5,737,190	4,639,724	4,233,446
Officers' notes forgiven on stock purchases	7,849	13,449	452,965	744,321
Interest income on notes receivable arising from common stock agreements	(780)	(1,754)	(85,190)	(142,400)
Deferred income taxes and stock option exercise tax benefit	(1,402,830)	173,949	(4,232,389)	159,531
Non-cash compensation expense	—	401,363	220,193	182,767
Provision for doubtful accounts	2,282,871	15,800,000	-	-
Provision for inventory	3,261,274	4,714,000	-	-
Restructuring (reversal) reserve	(448,000)	1,400,000	-	-
Changes in operating assets and liabilities:				
Accounts receivable	(13,579)	(7,483,565)	(15,297,718)	1,689,205
Inventories	5,020,203	(3,877,052)	(10,982,591)	838,039
Prepaid expenses and other current assets	163,041	3,245,861	(3,222,708)	833,729
Other assets	(1,651,408)	(2,554,839)	(3,216,104)	(2,256,699)
Accounts payable	(5,489,250)	(7,519,288)	9,286,087	2,010,781
Accrued expenses	(2,872,250)	(765,641)	8,930,879	1,083,666
Other current liabilities	(1,914,119)	(360,915)	383,649	(36,723)
Other liabilities	911,211	(593,106)	3,185,488	470,679
Net cash (used in) provided by operating activities	(1,133,747)	(3,440,698)	9,660,852	17,519,248
Cash flows from investing activities:				
Purchases of property, plant and equipment	(2,141,213)	(7,488,077)	(7,792,029)	(6,166,331)
Purchases of held-to-maturity investments	-	(49,869,567)	-	-
Proceeds from maturities of held-to-maturity investments	49,869,567	-	-	-
Net cash provided by (used in) investing activities	47,728,354	(57,357,644)	(7,792,029)	(6,166,331)
Cash flows from financing activities:				
Net repayments under short-term debt agreements	-	(2,190,264)	(5,898,638)	(2,733,111)
Repayments under long-term debt agreements	-	-	(2,100,000)	(396,460)
Proceeds from issuance of senior notes, net	-	-	-	14,850,000
Net principal repayments under capital lease obligations	(503,547)	(2,036,669)	(2,222,477)	2,416,533
Purchases of treasury stock	—	—	(758,626)	(2,925,593)
Proceeds from notes receivable arising from common stock purchase agreements	9,096	—	1,766,530	-
Net proceeds from issuance of common stock	292,614	98,109,809	1,027,921	1,022,776
Net cash (used in) provided by financing activities	(201,837)	93,882,876	(8,185,290)	12,234,145
Net increase (decrease) in cash and cash equivalents	46,392,770	33,084,534	(6,316,467)	23,587,062
Cash and cash equivalents at beginning of the year	57,474,828	24,390,294	30,706,761	7,119,699
Cash and cash equivalents at end of the year	\$103,867,598	\$ 57,474,828	\$ 24,390,294	\$ 30,706,761

FINANCIAL STATEMENTS – KEY TOOL FOR DECISION MAKING

ANALYSIS OF WARNING SIGNALS OR “RED FLAGS”

Receivables. Compare receivables and cash flow from operations with revenues and earnings. Receivables increasing more quickly than revenues could be a sign that customers are experiencing financial distress. It could also be a sign that a company is engaging in abusive earnings management by recording fictitious sales or otherwise inflating revenues and accounts receivable. **For example**, a June 2000 Wall Street Journal article suggested that Lucent Technologies² might be engaging in creative accounting practices, noting that Lucent Technologies’ receivables were rising by 49% while revenues were rising by only 20%.

**Other earnings
red flags**



Allowance for uncollectible accounts. Analyzing reserves for uncollectible accounts could also provide clues of abusive earnings management. Where this is receivables growth without increase in allowance for doubtful accounts could be a sign that managers are aware that revenues were recorded prematurely. It could also be a sign that managers deliberately understated their reserves for uncollectible accounts or recorded fictitious revenues. Both Lucent Technologies (designs, develops, and manufactures telecommunications systems, software, and products) and Cendant (membership-based, consumer-services company that provides access to travel, shopping, auto, dining, timeshare exchange, financial, and other services) decreased their reserves for uncollectible accounts at times when revenues and receivables were rising.



Consistent earnings. One should carefully examine the accounting practices of a company that consistently and precisely meet analysts’ expectations, particularly growth expectations. Analysts’ expectations are based in part on information obtained from the company management; therefore, companies strive to meet analysts’ expectations to protect their reputations as well as the market value of their shares. Although many companies employ legitimate means to meet or exceed analysts’ expectations, other companies may engage in abusive earnings management practices to cover failures resulting from overly optimistic predictions, economic downturns, or business setbacks. For example, Cendant manipulated its financial reports to ensure that revenues and expenses were consistently reported at approximately the same percentage each quarter.



² Enron’s shares fell from its high of \$90.75 to \$0.68 after the SEC began investigating Enron’s accounting practices. After the collapse in the market value of its shares, Enron was forced to seek bankruptcy protection, resulting in the largest bankruptcy in the U.S. history. A recent Financial Executives International (FEI) report indicates that the stock market lost more than \$34 billion during the three day period during which the three most egregious cases of abusive earnings management in 2000 (Lucent technologies, Cendant, MicroStrategy) surfaced.

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ANALYSIS OF WARNING SIGNALS OR “RED FLAGS”

If a company’s business has a large non-cash expenditures then the financial statements may show a strong operating cash inflows. For example, for capital intensive industries, depreciation is a significant non-cash item; the addback for depreciation converts a net loss each year into positive cash flow from operations. The same applies to non-cash related provisions for restructuring and reorganization charges. This situation should not be perceived as if a cash flow from operations increased each year as the net loss decreased.

Is a positive operating cash flow always good?

Operating cash flows is not the only red flag to be watched for. Operating cash flows may be positive but the company may still make losses, accumulate large debts and subsequently go into the bankruptcy. Other parts of the cash flow can tell how much the company spends on its capital expenditures to buy equipment and other fixed assets (investing activities) and how much the company borrows externally to finance its operations or investing activities.

If a company’s operating cash flows are not sufficient, in the most cases it has to obtain loans from banks or issue the debt securities to finance its capital expenditures. At this is where the problems might arise – if a company can not properly manage its debts it will face the default and may be forced into bankruptcy.

The examples of companies discussed below is a good illustration to this.

Kmart Corp. – extract from consolidated statement of cash flows (millions \$)

	1999	2000	2001
Cash Flows From Operating Activities			
Net income (loss)from continuing operations	\$633	\$(244)	\$(2,587)
Adjustments to reconcile net income (loss)from continuing operations to net cash provided by operating activities:			
Restructuring, impairment and other charges	-	728	1,262
Reorganization items	-	-	(184)
Depreciation and amortization	770	777	824
Equity (income) loss in unconsolidated subsidiaries	(44)	13	-
Dividends received from Meldisco	38	44	51
Decrease (increase)in inventories	(565)	324	596
Increase (decrease)in accounts payable	168	(145)	996
Deferred income taxes and taxes payable	258	(204)	(55)
Changes in other assets	(105)	48	222
Changes in other liabilities	94	(10)	102
Cash used for store closings	(80)	(102)	(128)
Net cash provided by continuing operations	1,167	1,229	1,099
Net cash used for discontinued operations	(83)	(115)	(102)
Net cash provided by operating activities	1,084	1,114	997

Significant non-cash items turn net loss into positive operating cash flows

It had the positive operating cash flows....

FINANCIAL STATEMENTS – KEY TOOL FOR DECISION MAKING ANALYSIS OF WARNING SIGNALS OR “RED FLAGS”

Kmart corporation – U.S. second largest discount retailer and third largest general merchandize retailer. In January 23, 2003, Kmart filed for bankruptcy protection in order to restructure its massive \$8 billion debts.

Polaroid Corp. – extract from consolidated statement of cash flows (millions \$)

	1998	1999	2000
Cash flows from operating activities			
Net earnings/(loss)	\$ (51.0)	\$ 8.7	\$ 37.7
Depreciation of property, plant and equipment	90.7	105.9	113.9
Gain on the sale of real estate	(68.2)	(11.7)	(21.8)
Other non-cash items	62.2	73.8	22.9
Decrease/(increase) in receivables	79.0	(52.7)	41.8
Decrease/(increase) in inventories	(28.4)	88.0	(100.6)
Decrease in prepaids and other assets	39.0	62.4	32.9
Increase/(decrease) in payables and accruals	25.3	(16.5)	9.2
Decrease in compensation and benefits	(21.0)	(72.5)	(105.0)
Decrease in federal, state and foreign income taxes payable	(29.9)	(54.0)	(31.5)
Net cash provided/(used) by operating activities	97.7	131.4	(.5)

Seemingly no apparent sign of concern – positive operating cash flows and positive net earnings.....

Polaroid Company – America’s icon for instant camera and film imaging – filed for bankruptcy in October 2001 to restructure \$948 million debt.

This list could be continued to mention companies as WorldCom (global communication provider), Budget Group (world’s largest car and truck rental company), US Airways, United Airlines etc.

Mostly all of them had to file for bankruptcy to seek protection from creditors **after accumulating enormous debts**. Therefore, companies need to closely monitor their liquidity position, level of gearing to avoid possibilities of going bankrupt.



Many companies fail because they accumulate large debts and their income does not cover the payment of interest and debt.

2. Debt related red flags

A firm that finances its assets with a high percentage of debt is risking bankruptcy if it is unable to make its debt payments. This may happen if the operations of the business do not perform as well as expected. A firm with a lower percentage of debt has a bigger safety cushion should times turn bad.

A related side effect of being highly leveraged is the unwillingness of lenders to provide more debt financing. In this case, a firm that finds itself in a jam may have to issue stock on unfavorable terms. All in all, being highly leveraged is generally viewed as being disadvantageous due to the increased risk of

FINANCIAL STATEMENTS – KEY TOOL FOR DECISION MAKING ANALYSIS OF WARNING SIGNALS OR “RED FLAGS”

bankruptcy, higher borrowing costs, and decreased financial flexibility. However, just because a company has a high debt ratio is not a signal of weakness, if the ratio is in the acceptable range for the industry.

On the other hand, using debt financing has advantages. Shareholders potential return on their investment is greater when a firm borrows more. Borrowing also may have some tax advantages.

One should consider the debt-to-equity ratio in assessing whether the company is being operated in a sensible, creditworthy manner. It shows what load of borrowings is used to finance the business or how much of the business is funded by creditors. Ratio level of 1:1 (or 1) means that for every 1 UAH of own capital (or total shareholders' equity), there is also 1 UAH borrowed.

***Debt to equity
ratio***

Too little equity may suggest the owners are not committed to their own business

Generally speaking, an investor (either equity or debt) will consider an ideal debt-to-equity ratio to be about 1:1. Higher ratio should be a signaling red flag.



Example provided below will try to demonstrate this assertion.

FINANCIAL STATEMENTS – KEY TOOL FOR DECISION MAKING ANALYSIS OF WARNING SIGNALS OR “RED FLAGS”

In May 2002, Farmland Industries Inc. – the largest farm cooperative in the U.S. - filed for bankruptcy. Could this situation have been foreseen by analyzing the Company’s debt load?

thousands \$

	1999	2000
ASSETS		
.....
.....
.....
Total assets	3,257,649	3,282,187
LIABILITIES AND EQUITY		
Current Liabilities		
Checks and drafts outstanding	76,128	135,799
Short-term notes payable (Note 5)	546,180	689,477
Current maturities for long term debt (Note 5)	44,771	32,222
Accounts payable – trade	463,296	345,286
Customer advances on product purchases	13,715	120,731
Other current liabilities	243,540	287,012
Total current liabilities	1,387,630	1,610,527
Long term Liabilities		
Long term borrowings (excluding current maturities Note 5)	808,413	646,160
Other long term liabilities	40,212	40,134
Total long term liabilities	848,625	686,294
Deferred income taxes (Note 6)	63,058	54,676
Minority Owners Equity in Subsidiaries (Note 7)	41,009	49,676
Capital shares and Equities (Note 8):		
Preferred shares	100,000	100,000
Other preferred shares	69	0
Common shares	508,029	522,876
Associate member common shares	26,889	30,321
Earned surplus and other equities	282,340	228,034
Total Capital shares and equities	917,327	881,231
TOTAL LIABILITIES AND EQUITIES	3,257,649	3,282,187

Total Debt = total current liabilities + total long term liabilities + preferred stock

1999: \$ 2,336,324
2000: \$ 2,396,821

Equity

1999: \$ 817,258
2000: \$ 781,258

Farmland’s debt to equity ratio in 1999 equaled – 2.85; in 2000 – 3.06. Therefore, even in 1999 and 2000, the red flag indicated the potential impeding bankruptcy of the company.

Compare to Farmland Ind.’s peer group –

- Growmark FS: Growmark’s debt to equity ratio in 2002 was 1.24; in 2001 – 1.14.
- Cenex Harvest States Cooperatives - debt to equity ratio in 2002 was 1.6 ; in 2001 – 1.35.

FINANCIAL STATEMENTS – KEY TOOL FOR DECISION MAKING ANALYSIS OF WARNING SIGNALS OR “RED FLAGS”

Carry a high debt load is not bad if the company can use the funds it borrows productively – such as earning, for example, 20 percent return on funds that only cost 12 percent to borrow.

***Debt to Income
ratio***

The most common tool to gauge a company's ability to pay its debt is considered EBITDA – earnings before interest, taxes, depreciation and amortization. Most financial analysts believe that a healthy company's total debt should not be more than five times its EBITDA (Earnings before Interest, Tax, Depreciation and Amortization). If this ratio exceeds a predetermined level, typically seven or eight, it can trigger a debt repayment from the lender. A repayment demand may present a significant problem for the company that can cause the company to fail or at a minimum, the company will find it difficult to borrow additional funds.



For illustration below provided an example of the NTL Communications Corp. (UK biggest cable TV operator), which filed for bankruptcy in May 2002.

FINANCIAL STATEMENTS – KEY TOOL FOR DECISION MAKING

ANALYSIS OF WARNING SIGNALS OR “RED FLAGS”

*Extract from the balance sheet of NTL Communication Group
million \$*

	2002	2001
Liabilities and shareholders' deficit		
Liabilities not subject to compromise		
Current liabilities		
Accounts payable	385.8	390.5
Accrued expenses and other	780.5	840.3
Accrued construction costs	70.4	107.8
Interest payable	177.3	252.0
Deferred revenue	359.8	290.2
Due to NTL Europe, Inc.	236.1	-
Current portion of long term debt	5,955.4	14,205.9
Total current liabilities	7,965.3	16,086.7
Long term debt	-	-
Other	-	8.9
Deferred income taxes	94.4	113.8
Commitments and contingent liabilities	-	-
Liabilities subject to compromise	10,157.8	-
Shareholders' deficit		
Common stock – 0.01 par value	-	-
Additional paid in capital	14,045.5	13,917.7
Accumulated other comprehensive loss	(653.6)	(904.5)
Deficit	(18,568.0)	(16,192.2)
	(5,176.1)	(3,179.0)
Total liabilities and shareholders deficit	13,041.4	13,030.4

Debt accumulated by NTL Group to finance its acquisitions in 90-ies.
2002: 16,112
2001: 14,205

Debt / EBITDA ratio

2002: 16,112 / 584 = 27
2001: 14,205 / 299 = 47

*Extract from the Statement of Operations of NTL Communication Group
million \$*

	2002	2001
Revenues		
Consumer telecommunication and television	2,074.1	2,069.2
Business telecommunications	880.1	836.8
Broadcast transmission and other	310.9	283.6
	3,265.1	3,189.6
Costs and expenses		
Operating expenses (excl. of depreciation)	1,502.5	1,564.3
Selling, general and administrative expenses	769.8	973.2
Asset impairment	445.1	8,160.6
Non-cash compensation	-	30.6
Other charges	389.2	297.9
Corporate expenses	18.7	24.3
Depreciation	1,477.9	1,361.4
Amortization	63.7	1,178.9
	4,666.9	13,591.2
Operating (loss)	(1,401.8)	(10,401.6)

EBITDA = operating loss + amortization + depreciation + asset impairment

2002: 584 = -1,401.8+63.7+1,477.9+445.1
2001: 299 = -10,401.6+1,178.9+1,361.4+8,160.6

One of the NTL's biggest competitors, BskyB Group has the ratio of Debt/EBITDA on the level 6.2 in 2002 and 8.5 in 2001.

FINANCIAL STATEMENTS – KEY TOOL FOR DECISION MAKING ANALYSIS OF WARNING SIGNALS OR “RED FLAGS”

Companies with high debt ratios are not bankruptcy candidates if they produce sufficient income to cover their interest payments and other normal expenses. This can be found out by checking the interest coverage ratio – which is the operating income divided by amount of interest payments. Healthy companies' interest coverage ratios typically range upwards of 4.

Interest coverage



EXAMPLE

This was the case with orthopedic, surgical, and medical products maker **Stryker**, which took on a large amount of debt in 1998 to take out one of its major rivals in the joint replacement market. Many shareholders were put off by this capital allocation decision when it was made, and the stock had a rough go of it for awhile. Those who hung onto their stock despite the debt, though, did not regret afterwards.

When Stryker acquired rival Howmedica from drug firm **Pfizer** for \$1.65 billion in late 1998, it decided to borrow the money rather than issue shares. Considering that Stryker's balance sheet had only \$75.2 million in total debt -- and \$725.8 million in shareholders' equity-- at the time of the deal, it was plain to see how adding Howmedica would dramatically change the firm's financial picture.

Upon the deal's closing, Stryker's ratio of debt to total capital increased to 68% from 9%. And for the first full fiscal year with Howmedica on board, Stryker recorded \$122.6 million in debt-related interest expense, which ate up a whopping 67% of fiscal 1999 operating profit. Such numbers would no doubt send signals to many a debt-averse investors.

But as it turns out, the debt load hasn't been a big menace for Stryker. The joint replacement business is a pretty steady cash flow generator, and the Howmedica acquisition cemented Stryker's place as one of the worldwide market leaders. Benefiting from the combination, the firm's cash flow from operations has ballooned to \$332 million in 2000 from \$154.5 million in 1998.

With the boost in cash, Stryker has been able to rapidly pay down its debt. Meanwhile, its ratio of operating profit to interest expense -- a metric commonly referred to as interest coverage -- ticked up to 6.4x in Q1. Total debt today stands at just under \$1.1 billion, and at the recent quarterly pay down rate of \$50 million it could shrink by another \$150 million before the end of the year. All of the remaining debt could conceivably be gone in a few years' time.

Taking on debt may have muddied Stryker's balance sheet in the short term, but in the grand scheme of things, it has turned out to have been well worth the risk. The company took out a major rival and shored up its long-term growth prospects at what has turned out to be a very low cost. On its Q1 conference call, management stated that the average interest rate on the credit facilities that account for the bulk of the debt load is 7%. Furthermore, half of the remaining debt is of the floating rate kind, which can only be a positive in an environment of falling interest rates.

Thanks to the **excellent returns generated from the Howmedica acquisition**, Stryker's stock has shot up 150% since the deal closed. For the company's shareowners, the deal couldn't have turned out better. The company's management made a smart capital allocation move by picking up Howmedica in the first place, then padded their good sense by funding the deal at a low cost with debt.

FINANCIAL STATEMENTS – KEY TOOL FOR DECISION MAKING

ANALYSIS OF WARNING SIGNALS OR “RED FLAGS”

Consolidated Statement of Earnings

Stryker Corporation

million \$

	2002	2001	2000	1999	1998
Net sales	3,011.6	2,602.3	2,289.4	2,103.7	1,103.2
Cost of sales	1,111.2	963.8	815.2	989.7	472.1
Gross profit	1,900.4	1,638.5	1,474.2	1,114.0	631.1
Research, development and engineering expenses	141.4	142.1	122.2	105.2	61.0
Selling, general and administrative expenses	1,165.4	985.4	885.6	808.4	373.6
Purchased research and development	-	-	-	-	83.3
Restructuring and acquisition-related items	17.2	0.6	(1.0)	18.9	19.0
Other expense (income):					
Interest expense	40.3	67.9	96.6	122.6	12.2
Intangibles amortization	28.9	38.4	34.7	33.9	7.6
Other	0.5	(1.6)	1.2	(4.8)	(16.5)
Earnings before income taxes and extraordinary items	506.7	405.7	334.9	29.8	90.9
Income taxes	161.1	133.9	113.9	10.4	30.9
Earnings before extraordinary items	345.6	271.8	221.0	19.4	60.0
Extraordinary loss, net of income taxes	-	-4.8	-	-	-
Net earnings	345.6	267.0	221.0	19.4	60.0

Interest coverage =
Earnings before interest and tax / interest expense

e.g. 1998: $(90.9+12.2)/12.2 = 8.4$

Interest coverage:

1998: 8.4

1999: 1.2

2000: 4.4

2001: 6.9

2002: 13.5

Companies can find lot of space to “cook the books” when they acquire other companies or set up joint ventures. These transactions provide enticing opportunities to move debt off of their balance sheets and onto those of their partners or subsidiaries. They also open up the potential for generating bogus revenue flow by, for example, lending money to their partners who use money to buy product from the parent. One way of telling if a company is making aggressive use of partners transactions to produce more favorable annual results is to look at the footnote disclosure for the “Related party transactions”. If the numbers are significant then this is a red flag. Such sales can be reported as earnings without the company actually receiving any cash.

3. Red flag – Acquisitions and Joint Ventures



The latest accounting wrinkle made famous by Enron is “special purpose entities” (SPE). They are often called “off-balance-sheet partnerships” – those hundreds of Enron entities that were used to hide its debt and book illusionary profits. Many large companies use SPE. Thankfully, they are all not as bad as Enron’s. But SPE’s offer plenty of temptation for companies looking for ways to “cook the books”.

Off balance sheet - and out of control

Like many complex instruments, SPE’s are created to perform a straightforward, necessary task – isolating and containing

FINANCIAL STATEMENTS – KEY TOOL FOR DECISION MAKING ANALYSIS OF WARNING SIGNALS OR “RED FLAGS”

financial risk. Businesses that wanted to perform a specialized task – an airline buying a fleet of airplanes; a company building a big construction project – would set up an SPE and offload the financing to the new entity. For example, a company looking to build a gas pipe line but not wanting to assume all the debt load would set up an SPE – essentially, a joint venture with other investors – to build it. The SPE would own the pipeline and use it as a collateral to issue the bonds to finance it. The sponsoring company would still operate the pipeline, with the revenues being used to pay back the bondholders.

Overtime, SPE became essential components of modern finance. Their uses expanded wildly – and legitimately. For example, virtually every western bank uses SPE to issue debt secured by pools of mortgages. And companies use SPE for factoring – the centuries old practice of generating cash by selling off receivables.

Today many transactions between companies and their SPEs don't isolate risk at all; their primary purpose became to hide pertinent information from investors. In more complicated SPEs, such as some of Enron's, options or derivatives were used to guarantee the bondholders' returns. Enron employed all these tactics and even more. It even sold dubious assets to its SPEs at inflated prices to produce bogus revenue. And it had almost 900 off-balance sheet partnerships located in international tax havens.

Hundreds of respected U.S. companies are ferreting away billions of dollars in debt in off-balance-sheet subsidiaries. Potentially bankrupt contracts are mentioned vaguely in the footnotes to financial statements, at best.

***Who else is
hiding debt***

For example, United Airlines Inc. parent company UAL Corp. published balance sheet for 2000 shows \$5 billion of long term debt (in December 2002, the UAL filed for bankruptcy). But only a footnote describes the bulk of its lease payments, with an estimated present value of \$12.7 billion, due over 26 years on 233 airplanes. AMR Corp., parent of American Airlines Inc., is on the hook for \$7.9 billion in lease payments not on its balance sheet.

With some of the SPEs, it is impossible for investors to know from financial reports who could be responsible for what. For example, Dell Computer Corp. has a joint venture with Tyco International Ltd. called Dell Financial Services (DFS) that in 2001 originated \$2.5 billion in customer financing, according to a footnote to Dell's financial statements. According to the footnote, Dell owns 70% of

FINANCIAL STATEMENTS – KEY TOOL FOR DECISION MAKING ANALYSIS OF WARNING SIGNALS OR “RED FLAGS”

DFS, but does not control it and therefore keeps DFS debts off its own balance sheet. What if DFS has troubles from customers not paying? Dell says that any obligations of DFS are Tyco's responsibility and Tyco agrees. But Tyco's global vendor financing business, Tyco Capital, says that Tyco would look to Dell's customers to pay and not to Dell. As a result of this arrangement, Tyco's balance sheet in fact reflects borrowings to finance Dell's customers.

When analyzing financial statements, one should always read the auditors' report which should be at the front of the audited financial statements to see which type of opinion the auditor is issuing. Absence of the audit report can be considered as a red flag by itself.

If the risk of a material misstatement in the audited financial statement is considered acceptable, the auditor will issue an unqualified opinion, also known as a clean opinion. This is the opinion found in the majority of financial statements. The audit report will contain a paragraph such as "...In our opinion, the financial statements referred to above present true and fair view of the financial position of XYZ Company...". An unqualified audit opinion will not have any further paragraphs that "qualify" the audit.

Other types of audit opinions are a qualified opinion, an adverse opinion, and a disclaimer of opinion.

A qualified opinion states that the auditors have found that one or more items are not presented in conformity with GAAP (generally acceptable accounting principles). This means that the auditors believe that the deficiencies, although significant, were not so material as to invalidate the financial statements as a whole.

One should always look at the qualification to help understand what type of item is not in compliance. Sometimes the item is significant to the creditworthiness of the Company, sometimes it is just something that a reader needs to keep in mind when analyzing the statements.

This section of the auditors' report is where there may be a paragraph that indicates that "the accompanying financial statements have been prepared assuming that the Company will continue as a going concern." Alternatively, the audit report may contain the explicit emphasis of matter that the Company will not be able to continue as a going concern and state the reasons for making this conclusion. If such statements are included in the

5. Red flags in the audit reports



Qualified opinion

FINANCIAL STATEMENTS – KEY TOOL FOR DECISION MAKING ANALYSIS OF WARNING SIGNALS OR “RED FLAGS”

audit opinion, it would be a red flag which might indicate financial problems for the company.

An adverse opinion is very rare to find. An adverse opinion will state that the statements do not fairly reflect the financial position of the company. The reason why this would be rare is that, if a company is going to pay for an audit, they probably will want to make the adjustments recommended by the auditors in order to ensure that the statements are in conformity with generally accepted accounting principles.

***Adverse
opinion***

A disclaimer of opinion may be issued if the auditors are unable to determine the overall truth and fairness of the financial statements. The reasons why this might happen would be:

- the company did not provide sufficient evidence or supporting documentation to the auditor to perform the audit;
- the company's accounting records have been lost or in such a poor state that the auditor is unable to perform his work;
- company's accounting records are not reliable because the computer system that maintains the accounting records is also considered unreliable;
- the company's internal controls do not exist or are totally unacceptable for the auditor to rely on the financial records.

Disclaimer

INTRODUCTION TO BUSINESS VALUATION

FINANCIAL STATEMENTS – KEY TOOL FOR DECISION MAKING

INTRODUCTION TO BUSINESS VALUATION

For the last two years the acquisition and privatization transactions in Ukraine became frequent. Similarly, the frequency of disputes involving the corporate rights and share ownership has significantly increased. As a result, the aspects of business valuation, and in particular, the valuation of shares have gained the paramount importance. This section is, therefore, aimed to provide the basic principles and methods of business valuation so that either a prospective seller or a prospective buyer will have become more knowledgeable party of a transaction.

Determining the price or value of a certain product is important in economic transactions, either in buying or selling the product. Similarly, selling or buying a business interest requires both parties to determine the estimated value of business interests. The business interest under consideration can take many forms such as company shares, debt securities, or a business unit. Thus, simply put, business valuation is the process of estimating value of the business interests.

While it is quite easy to determine the value of commodity products, estimating business value requires more effort since business is complex and different. Although business valuation today is much more scientific, it always contains judgment and well grounded guesswork.

Arriving at the transaction price requires that a value be placed on the company for sale. The process of arriving at this value should include a detailed, comprehensive analysis which takes into account a range of factors.

Some business owners often believe that the valuation is an appraisal of the real estate, the equipment, the furniture and so forth. A company may say that it has an equipment that is only on the books for only \$1 million, but it is really worth \$2 million. That may be true, but **what really matters is the cash the company can generate**. To a buyer valuation means the level of earnings of the business and from this perspective the seller should look at valuation in terms of what somebody would pay for the company.

Business valuation is usually performed for many reasons such as:

- determining value of shares;
- merger or acquisition;
- divestment of equity investment;

***Exactly what
is a
valuation?***

***Purpose of
valuation***

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- private placement from strategic investors;
- partnership dissolution;
- shareholder disputes and legal proceedings
- obtaining external financing; and
- initial public offering.

The purpose of valuation will determine the type of value obtained and methodology used. For example, acquisition valuation for buyer may produce “ceiling price” or a value that contains synergistic value arising from integrating the business acquired and buyer’s existing business operation. On the other hand, the value for seller may not contain such synergistic value.

During the valuation, there are many factors that need to be considered. These include but not limited to:

1. Who is the buyer
2. Documentation of acquired company
3. How acquisition is to be financed
4. Earnings pattern of the acquired company
5. Existence of unique niches

Just as the reasons for a valuation affect the outcome, so can the type of potential buyer. Buyers are always a factor, even if the business is not for sale. Why? Because the business is only worth what someone is willing to pay for it in the current market.

***Factor 1: who
is the buyer***

There are pools of buyers. The big pool is filled with public companies. Though there are similarities in how they determine offers, they each developed different valuation methods that make sense to them. Even analyzing the Price/Earnings ratios or P/E (i.e. correlation of price paid for the each of the company’s share and earnings per share of that company) for many merger/acquisition transactions, one can see a wide disparity. That is because most of the public company acquisitions are based on strategic financial reasons.

For example one public Company X is interested in acquiring Company A, which has earnings of \$1 million a year. The earnings are nice, but what really interests the Company X in the Company A is the widget it has developed in the market it serves. Company X sells widgets as well, but Company A’s widget would help Company X gain entry into the Company A’s market.

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Assuming that Company X has one billion shares outstanding and it knows that after acquisition of Company A its earnings per share would increase by \$1, so anything paid less than \$1 billion would be a good bargain. Even though the Company A is only earning \$1 million a year, Company X might be willing to pay \$500 million for it! In the end, let's say Company X buys the Company A for \$400 million. That's a P/E ratio of 400 to 1.

It is **vital to identify the right kind of buyer** for business.

The Industry Buyer - this is a private company that buys another company, with no strategic reason. The industry buyer usually pays the least.

The Sophisticated/Corporate Acquirer – this purchaser will typically look at a company and based on well grounded analyses will determine what the future profits will likely to be.

The Public Company - this is the public company that is interested in a strategic acquisition for its further business development.

Each of these buyers will pay a different price, but none will pay more than they think a business is worth.

Incomplete fixed asset records or poor state of financial records can make valuations very difficult adversely affecting price.

***Factor 2:
documentation***

The financing or payment arrangements can also impact the perceived value of the business to a buyer. Let's assume that the business should sell for a realistic price of \$10 million. A buyer offers the seller the full \$10 million but asks the seller financing part of the purchase price. The seller may insist that it has to be paid in cash and as a result may lose the sale.

***Factor 3:
financing***

When banks are involved in financing the acquisitions, banks generally want a three-legged stool. First, they want the new owner to put in some equity, a down payment. Second, the bank will lend on the value of the assets, typically the liquidation value. Third, they want the seller to have some interest in the business because the seller is the only one that is going to come back if the new owner does not succeed.

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The shareholders of public companies want, demand, and will punish the lack of steady growth. Therefore, acquisitions will need to show predictable earnings. If a company whose revenues and earnings are up one year and down another, and there is no predictability as to why, the seller will be severely penalized in the valuation process.

***Factor 4:
earnings
pattern***

That is because a buyer is not buying last year's results or even this year's results. He is buying next year's results. Those are the results that benefit him. If results are not consistent, a buyer is going to form an offer on the safe side.

Niches are great for setting apart from the competition but can make accurate valuation extremely difficult.

***Factor 5:
unique niches***

When a company has a particular technical marketing niche, there is probably no independent way of coming up with a value. It is not about equipment but about the skill. When nobody else does what that company does, cash flow and all the other factors no longer mean anything.

In addition to factors described above, various aspects of value must be considered when performing a valuation of the business. Is the business to be valued based upon a going concern concept? Or is a liquidation value the goal of the valuation analyst? Is a controlling interest in the business being valued or a minority interest? To what degree is there a ready market for the business, or interest in the business that is being valued? Different definition of values will normally produce different figures.

***Definition of
"value"***

In business valuation, **the most widely used definition of value is fair market value**. Fair market value is used for transactions with significant impact to external parties such as minority shareholders, tax and government authorities. In estimating fair market value, it is hypothetically assumed that the willing buyer and willing seller deal at arm's length, without being influenced by any special motivation or have no compulsion to buy or sell, both parties having reasonable knowledge of relevant facts .

This definition implies that the value is the **most probable price** in cash or cash equivalent that would be paid if the property was placed on the open market for a reasonable period and, in all likelihood, assumes the existence of a covenant not to compete.

***Price is what
you pay; value
is what you
hope to get***

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The distinction between price and value is crucial. In the real world, businesses are bought and sold for a *price*. The appraiser's purpose, though, is to estimate *value*. Compared to the appraisal environment required by the definition of fair market value, the conditions that exist in the real world often influence price without affecting value.

FAIR MARKET VALUE assumes no particular buyer or seller and is hypothetical. This is "the value of the marketplace". It further assumes no compulsion on the part of the hypothetical buyer and the hypothetical seller. In other words it is an partially empirically based mathematical approach that provides a reasonable range of values for a non-strategic buyer with no compulsion to buy and as a consequence provides a good starting point for all valuations but only a starting point for a strategic acquirer.

INVESTMENT VALUE on the other hand assumes a "value to a particular investor based on individual investment requirements", as distinguished from the concept of Fair Market Value, which is "impersonal and detached". Most strategic acquisitions have some element of investment value as demonstrated by the fact that strategic acquirers pay as a whole about 30% more than non-strategic buyers.

METHODS OF VALUATION

Generally, there are five main methodologies that practitioners use to value businesses. These are:

1. Rule of thumb;
2. Asset based valuation (can be segmented into 4 approaches);
 - book value
 - replacement cost
 - appraised value
 - capitalized earnings (or excess earnings or multiple of earnings)
3. Discounted cash flow;
4. Comparable transaction analysis;
5. Comparable public company method.

To arrive to the most relevant value amount, the seller or purchaser should be using the method that is the most appropriate in each given situation and circumstances.

***Why fair
market value
is not
necessarily
a final goal***

***Business
valuation is
a mix of art
and science***

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Once the total value of business is estimated, the value per share can be further determined based on the total number of shares issued and outstanding.

One of the most common approaches to **small business valuation** is the use of industry rules of thumb. Rules of thumb often provide a useful "back of the envelope" test of value that is based on empirically available data. This empirically available data includes industry benchmarks or historical transaction multiples. Although a rule of thumb can give a quick answer to a difficult question, it does not take into account business-specific information that may significantly impact the value of a business above and beyond industry benchmarks.

1. Rule of thumb method

While most financial analysts cringe at the use of this approach, it does have its place, which is believed to be as adjuncts to other methods. **For example:** one industry rule of thumb says an Internet Service Provider company is worth \$75 to \$125 per subscriber plus equipment at fair market value. Another rule says that small weekly newspapers are worth 100% of one year's gross income.

The problem with these and all rule of thumb formulas is that they are statistically derived from the sale of many businesses of each type. That is, an organization might compile statistics on perhaps 100 small weekly newspapers that were sold over a two year period. They will then average all the selling prices and calculate that the average paper sold for 100% of one year's gross income. The rule of thumb is thus created.

The rule of thumb averages may be accurate for those businesses whose performances are right about the average. The business with expenses and profits that are right on target with industry averages may well sell for a price in line with the rule of thumb formula.

This valuation method is based on the premise that the value of a business can best be determined by adding the value of all the assets of the company and subtracting the liabilities, leaving a net asset valuation.

2. Asset Based Valuation

An asset-based valuation can be further segmented into four approaches:

- a) book value;
- b) replacement cost;
- c) capitalized earnings;
- d) excess earnings (or multiple of earnings).

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In some instances, a business is worth no more than the value of its tangible assets. Selling such a business is often a matter of getting the best possible price for the equipment, inventory, and other assets of the business. For seller, it is generally best to approach other firms in the same business that would have direct use for such assets.

a) Book Value

Also, a company in the same business might be interested in taking over the facility. This would mean that leasehold improvements (modifications to space, etc.) would have value and the equipment would have value as "in place" plant and equipment. In place value is higher than the value on a piece by piece basis such as at a sale by auction.

The book value of a company is obtained from the balance sheet by taking the adjusted historical cost of the company's assets and subtracting the liabilities. Tangible book value is calculated the same way as finding regular book value, except that intangible assets (like goodwill) are excluded in the calculation.

However, in determining the adjusted book value of certain assets, the seller should estimate the approximate market value of such assets. Vary often the asset's historical cost recorded in the balance sheet may significantly differ from the market value. **Example:** the building in the center of Kiev may be easily sold for a million dollars though according to the balance sheet may have only the \$300 thousand as a net historical cost. **Another example:** the airline companies rent or own the rights to operate the boarding gates at the various airports. The balance sheet cost of these rights may be very low compared to the real market value that depends on the location, proximity to other airport infrastructure etc.

Replacement cost reflects the expenditures required to replicate the operations of the company. Figuring replacement cost is essentially a make or buy decision.

b) Replacement Cost

Sometimes companies or individuals will purchase a company just to avoid the difficulties of starting from scratch. The buyer will calculate his or her start up needs in terms of money and time. Next he or she will look at the business and analyze what it has and what it may be missing relative to the buyer's start up plan. The buyer will calculate value based on his or her projected costs to organize personnel, obtain leases, obtain fixed assets, and cost to develop intangibles such as licenses, copyrights, contracts, etc.).

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A reasonable premium of above the sum of projected start up costs may be offered because of the effort and time being saved by the buyer. The more difficult, expensive, and/or time consuming startup is likely to be, the higher the value would be based upon this method.

A common method of valuing a business is called the **Capitalization of Earnings** (or *Capitalized Earnings*) method. Capitalization refers to the return on investment that is expected by an investor. There are many variations in how this method is applied. However, the basic logic is the same.

c) Capitalization of earnings

Example. To demonstrate the capitalization method of valuation, it is proposed to imagine a mythical and highly oversimplified business – the business is simply a post office box to which people send money. The magic post office box has been collecting money at the rate of about \$10,100 per year steadily for ten years with very little variation. It is likely to continue to collect money at this rate indefinitely. The only expense for this business is \$100 per year rent charged by the post office. So the business earns \$10,000 per year (\$10,100-\$100). Because the PO box will continue to collect money indefinitely at the same rate, it retains its full value. The buyer should be able to sell it at any time and get his initial investment back.

A buyer would look at this "minimum risk" business earning \$10,000 and compare it to other ways of investing his or her money to earn \$10,000 per year. Let's assume a near no risk investment like a savings account or government treasury bills currently pays about 8% a year. At the 8% rate, for someone to earn the same \$10,000 per year that the magic PO box earns, an investment of \$125,000 ($125,000 \times 8\% = \$10,000$) would be required. Therefore, the PO box value is in the area of \$125,000. It is an equivalent investment in terms of risk and return to the deposit account or risk free government Treasury bill.

Now the real world of business has no magic PO boxes and lacks "no risk" situations. Business owners take risks and have expenses, and business equipment can and usually does depreciate in value. The higher the perceived risk, the higher the capitalization rate (percentage) that the buyer will use to estimate value. Rates of 20% to 25% are common for business capitalization calculations. That is, buyers will look for a return on their investment of 20% to 25% in buying a business.

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This method is similar to the capitalization method described above. The difference is that it splits off return on assets from other earning (that is why it is called the *excess earnings or multiple of earnings*).

d) Excess earnings

For example, Mr. Owner runs a business that manufactures novelty products. His company has Tangible Assets of \$300,000. Mr. Owner's business has earnings of \$120,000.

The financially rational reason for owning business assets is to produce a financial return. Let's say that a reasonable return on Mr. Owner's Tangible Assets is 15% per year. A reasonable number here should be based on industry averages for return on assets adjusted to current economic conditions. For example, Mr. Owner or his advisors may have looked up industry standards and found that the current average return on assets was 15%.

Let's suppose that Mr. Owner's business is a bit better than average in these factors and assign a multiplier of 3.6³.

Therefore, the value of this business can be determined as follows:

A.	Fair market value of tangible equipment	\$300,000
B.	Total Earnings	\$120,000
C.	Earnings attributed to Tangible Assets (\$300,000 x 15%=\$45,000)	<u>-\$45,000</u>
D.	Excess Earnings (\$120,000 - \$45,000=\$75,000)	\$75,000
E.	Value of excess earnings (\$75,000 x 3.6=\$270,000)	\$270,000
F.	Estimated Total Value (A+E)	<u>\$570,000</u>

The value of the company's intangible asset should be the subject of a separate analysis and assessment.

³ Excess earning number is reciprocal number of capitalization rate. E.g. multiple earnings 3 equals capitalization rate of 33.3% (1/3). Multiple earnings depends on such factors as the level of risk involved in the business, the attractiveness of the business and the industry, competitiveness, and growth potential. The higher the factor used, the higher the estimate of the business will be. A typical number is 3. That is, a business that is judged to be very average in terms of the level of risk involved, the attractiveness of the business, the industry, competitiveness, and growth potential would use three as a multiplier. The actual multiplier used is a mix of opinion, comparison to others in the industry, and industry outlook.

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As a methodology, discounted cash flow is often considered the **preferred tool to value businesses**. What sets this approach apart from the other approaches is that it is based on projected, future operating results rather than on historical operating results. As a result, companies can be valued based on their future cash flows, which may be somewhat different from historical results, especially if a potential buyer expects to operate some aspects of the business differently.

3. Discounted Cash Flow

Discounted cash flow analysis consists of projecting future cash flows, deriving a discount rate and applying this discount rate to the future cash flows and terminal value. This detailed analysis depends on accurate financial projections and discount rate assumptions. The resulting **company valuation is the sum of discounted future cash flows and the discounted terminal value**.

The first step in conducting a discounted cash flow analysis is to **project future operating cash flows** over a projected holding period, generally five years. These projections are generally done before debt (but after taxes) to obtain an accurate indication of future free cash flow. The future free cash flow is the cash left after operating the business and investing in necessary property, plant and equipment, but before servicing debt or paying out any cash to owners.

The second step in the discounted cash flow analysis is to **develop a discount rate**. The discount rate is also referred to as the weighted average cost of capital (WACC) and is best thought of as a percentage which represents the return expected by an owner of the company commensurate with the risk associated with the investment.

For example, a risky Internet start-up with little in the way of a demonstrated track record, would receive a higher discount rate than a company with a long history of growth and profitability and more obvious future prospects.

Discount rates are generally calculated by deriving the company's cost of equity capital and the company's after-tax cost of debt (note that although the cash flows are projected on a debt free basis, it is important to derive a WACC based in part on the company's expected cost of debt, since this reflects the company's level of risk). These financing costs are weighted and result in a WACC percentage, or discount rate. The cost of equity capital is generally determined using the capital asset pricing model (CAPM), which is

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based on three inputs: (1) the risk free rate (the expected return on long term government bonds - currently about 6%), (2) the beta, which is a measure of the relative riskiness of the company (compared to the market), and (3) the equity risk premium (the expected rate of return on common stocks in the long run - currently about 8%). The derived discount rate is applied to the projected future cash flows to determine the present value of the future cash flows.

The next major step involves **calculating a terminal, or residual value**. A terminal value calculation combines assumptions used to derive future projections and the discount rate to obtain a current value for a company's long term future cash flows. The assumption underlying this step is that a company is a going concern and that its value is imbedded in its ability to generate value not just today, but well into the future. A terminal value is calculated by determining the cash flow in the period beyond the last projected period. This predicted future cash flow is then capitalized by a percentage (represented by the company's discount rate less the predicted long term growth rate) and this capitalized figure is then discounted back to the present using the discount rate.

The terminal value can represent a large portion of the valuation. The terminal value of a piece of manufacturing equipment at the end of its useful life is its salvage value, typically less than 10% of the present value. In contrast, the terminal value associated with a business often is more than 50% of the total present value. For this reason, the **terminal value calculation often is critical in performing a valuation**. The terminal value can be calculated either based on the value if liquidated or based on the value of the firm as an ongoing concern.

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Example of discounted cash flow calculation.

For the purpose of valuation, the operating cash flows of a Company A for the next five years are estimated as below. It was also determined that the weighed average cost of capital is 15%. It is expected that the Company's cash flows after fifth year will be 40 million per year and therefore, based on the assumption that the Company will continue as going concern, the terminal value is calculated as follows = 40 million :15% (discount rate) = 266 million. The value of Company A can be determined as follows:

in million	Year 1	Year 2	Year 3	Year 4	Year 5	Terminal value
Revenues	100	120	130	130	130	
Cost of sales	(60)	(70)	(80)	(80)	(80)	
Operating expenses	(10)	(12)	(15)	(15)	(15)	
Other cash flows	5	5	10	10	10	
Taxes	(3)	(5)	(8)	(8)	(8)	
Total net cash flows	32	38	37	37	37	266

Discount rate - 15%

Discounted cash flow value is determined using the Net Present Value formula = **235 million**

$$\sum_{i=1}^n \frac{\text{values}_i}{(1+\text{rate})^i}$$

n – number of cash flows in the list of values

Comparable transactions analysis involves obtaining financial and operating data from other, similar sale/purchase transactions and applying it to the valued company to obtain a predicted value. These historical purchase/sale transactions involve companies that have similar lines of business as the company being valued. In analyzing comparable transactions, valuation professionals will often divide deal price by some industry standard metric, such as EBITDA (Earnings Before Income Tax Depreciation and Amortization). An average or the median of the resulting multiples is then multiplied by the target company's metrics to obtain a company valuation.

4. Comparable Transactions Analysis

Depending upon the relative similarity or difference of the company's characteristics to the group of comparable transactions, analysts may apply a discount or premium to the multiple before it is multiplied by the company's metrics.

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Although comparable transactions analysis can be an important valuation methodology, its usefulness is dependent on the relevance, quality and timeliness of historical transactions data. In addition, due to the fact that the overwhelming majority of acquisitions involve privately-held companies, there is often a dearth of financial data available to track the financial characteristics of these transactions.

Liquid capital markets are generally considered efficient at valuing companies. Each day, stock prices reflect the instantaneous and independent pricing decisions of buyers and sellers around the world. Thus, using existing public companies as a benchmark to value similar private companies is a viable valuation methodology.

5. Comparable Public Company Method

The comparable public company method involves selecting a group of publicly traded companies that, on average, are representative of the company that is to be valued. What is important is that investors would view the comparable companies and the company being valued as similar. Each comparable company's financial or operating data (like revenues, EBITDA or book value) is compared to each company's total market capitalization to obtain a valuation multiple. An average of these multiples is then applied to derive the company's value. If several metric multiples are used, professionals will often weigh each metric based on the relative importance of the metric in the valuation of the company.

Because the comparable public companies will have different characteristics than the company undergoing the valuation, premiums or discounts may be applied to the target company. These valuation premiums or discounts are based on generally accepted research and empirical data and involve such adjustments as discounts for lack of marketability or control premiums. Unlike public companies, privately held firms do not have an actively traded market for their shares. This significant factor, referred to as liquidity or marketability, will result in private companies almost always being valued at a discount to their public company peers.

It should be remembered though that this method can be used only in the developed economies where the capital markets are liquid, efficient and fully transparent.

APPENDIX I

9 STEPS FOR A SIMPLE APPROACH TO DETERMINING AN INVESTMENT VALUE OF BUSINESS

1. CHOOSE AN EARNINGS STREAM

This is the first important judgment call. **The most common income stream chosen in recent years is "Free Cash Flow"**. It is the targets operating pre-tax income, normalized by eliminating deductions for interest expense, excess owners salaries (or occasionally inadequate owners salaries) and bonuses and other unusual, inappropriate, non-recurring, or income tax driven deductions and expenses. Depreciation is generally disregarded and instead reasonable annual capital expenditures are deducted from this earnings stream. It is, in other words, an attempt to determine the cash that will flow to the new owners and be available for distribution, future growth or debt service. Cash flow has become the preferable earnings stream for business valuation in recent years since it approximates the pretax return that an investor would seek in alternative investments and as a consequence makes comparability with other investments and empirical data available about investment returns suitable.

But be forewarned that choosing an earnings stream is itself somewhat more of an art than might be apparent. The problem is after having made all of the above adjustments should you use the most recent year, some kind of an average of several years (5 recent years is not unusual) and do you weight the average? Should recent years be given more weight.? Maybe, Maybe not?

2. CHOOSE A WELL GROUNDED CAPITALIZATION RATE

This step is the second important judgment of any valuation. However it is basically an attempt to determine what rate of return a buyer will demand due to the apparent risks inherent in the particular business. If an investor is willing to accept a 7% return on a 20 year Government Treasury Bill that seems perfectly safe, what rate of return will an investor demand for a widget factory with considerably greater risk? 15%?, 25%? 30%?

3. DIVIDE THE FREE CASH FLOW EARNINGS STREAM BY THE CAPITALIZATION RATE

The result is a tentative fair market value of the business. (An alternative obviously is to multiply the earnings stream by the reciprocal of the Capitalization Rate, i.e., the reciprocal of a 25% capitalization rate is 4, of a 20% rate 5, etc.)

4. REVIEW THE BALANCE SHEET

It is critical that the balance sheet you are paying for be sufficient in terms of working capital and fixed assets to support the business you valued in step 3. Otherwise the Tentative Fair

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9 STEPS FOR A SIMPLE APPROACH TO DETERMINING AN INVESTMENT VALUE OF BUSINESS

Market Value will have to be adjusted upwards or downwards to reflect either a deficient or an unusually rich balance sheet. From these calculations you arrive at:

5. GROSS FAIR MARKET VALUE

6. Deduct: **INTEREST BEARING AND/OR LONG-TERM DEBT**

In as much as the free cash flow earnings stream determined in step 1 above was before interest expense it represents cash flows to both debt and equity stake holders. Accordingly to arrive at a price for equity stake holders the amount of interest bearing and/or long term debt should be deducted from Gross Fair Market Value.

7. Arrive at: **NET FAIR MARKET VALUE**: But keep in mind that net fair market value may be the last step in the calculation for a non strategic buyer but only an intermediate point to arrive at Investment Value for a Strategic Buyer.

8. Add: **ADDITIONAL STRATEGIC VALUE**: Proceed to make whatever additional calculations are appropriate to reflect the specific strategic value that might be inherent in the target to you as a unique buyer.

9. Arrive at: **INVESTMENT VALUE**