



# FINANCIAL STATEMENTS

## – study text



### STUDY TEXT

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## 2 INTRODUCTION TO ACCOUNTING

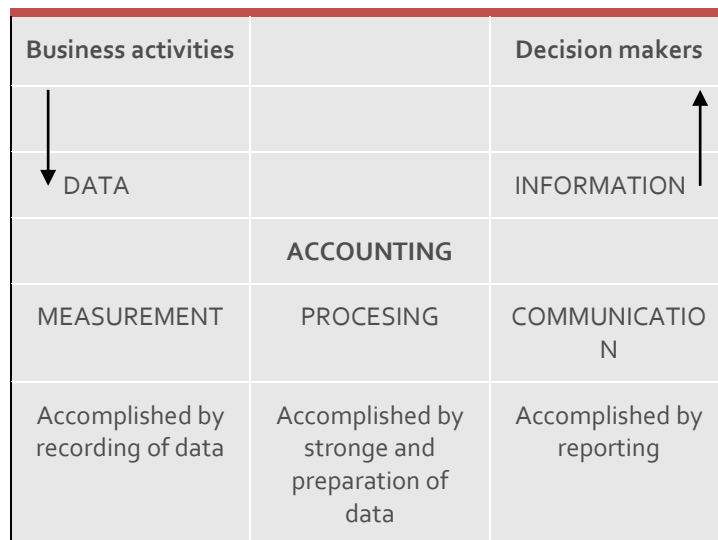
Accounting is an information system that captures the results of complex business activities and reports them. It is a language of business. Reporting should provide information that is useful to the investors, creditors and other users in making decisions about investment, credit, and other similar decisions. The information should be comprehensible.

Accounting is a very old discipline. Forms of it have been essential to commerce for more than five thousand years. Accounting, in a version close to what we know today, came into widespread use in the 1400s, especially in Italy, where it was instrumental to the development of shipping, trade, construction, and other forms of commerce. This system of double-entry bookkeeping was documented by the famous Italian mathematician, scholar, and philosopher Fra Luca Pacioli.

Today's accountant focuses on the ultimate needs of decision makers who use accounting information, whether those decision makers are inside or outside the business. Accounting is an information system that measures processes, and communicates financial information about identifiable economic entity. An economic entity is a unit that exists independently; for example: a business, a hospital, or governmental units.

Accounting provides a vital service by supplying the information that decision makers need to make reasoned choices among alternative uses of scarce resources in the conduct of business and economic activities. As shown in Figure 1, accounting is a link between business activities and decision makers. First, accounting measures business activities by recording data about them for the future use. Second, the data are stored until needed and then processed become useful information. Third, the information is communicated, through reports, to decision makers. We can say, that data about business activities are input to the accounting system and that useful information for decision makers is the output.

*Figure 1 Accounting as an Information System*



Source: Peterson, P.A, 1994

### 2.1 The essence and functions of accounting

Accounting is concerned with collecting, analysing and communicating financial information. This information is useful for people who need to make decisions and plans about businesses and for people who need to monitor



their businesses. The information for decisions should be for example:

- increasing or decreasing the price or quantity of products,
- developing new products,
- borrowing money to help finance the business,
- increasing or decreasing the capacity,
- changing the methods of purchasing, production or distribution, and others.

Accounting has an important role in the economic and social system of the Czech Republic. The accounting system consists of the methods and devices used by a company to keep track of its activities and to summarize these activities in a manner useful to decision makers. The basic elements of accounting are information, recording, evaluation and reporting.

The **users of information from accounting** are:

- managers - information that will assist them in their decision making and control activities,
- shareholders - information on the value of their investment and the income that is derived from their shareholding,
- employees - information on the ability of the firm to meet wage demands and avoid redundancies.
- creditors and providers of loan capital - information on a firm's ability to meet its financial obligations.
- government agencies – collection of accounting information and required information.

Various users can be divided into two categories. These are internal parties within the organization and external parties outside the organization.

It is possible to distinguish between two branches of accounting that reflect the internal and external users. These are financial accounting and management (or managerial) accounting. Management accounting is concerned with people within the organization and financial accounting is concerned with external parties outside the organization. The main areas of difference between financial and management accounting are:

- the nature of the reports produced,
- the level of detail,
- regulations,
- reporting intervals,
- time orientation,
- the range and quality of information.



Figure 2 Difference between financial and management accounting

ITEM	Management accounting	Financial accounting
Nature of the reports produced	Tend to be for a specific purpose	Tend to be general purpose
Level of detail	Often very detailed	Usually broad overview
Regulations	Unregulated	Usually subject to accounting regulation
Reporting interval	As short as required by managers	Usually annual
Time horizon	Often based on projected future info as well as past info	Almost always historical
Range and quality of information	Tend to contain financial and non-financial info, use info that cannot be verified	Focused on financial info, great emphasis on objective verifiable evidence

Source: author

The specific branch concerns evidence of tax on incomes and expenditures. This evidence can be used only by physical persons who are not entered in a trade register and whose turnover does not exceed the amount of 25 mil CZK per year. Tax evidence is regulated by the Law of Income Taxes and it is not considered as a real accounting system.

**Accounting units** are:

- corporations,
- physical persons doing business entered in the trade register,
- physical persons doing business with a turnover exceeding the amount of 25 mil CZK per year,
- physical persons doing business who keep accounts voluntarily,
- physical persons doing business associated in a so-called association without legal subjectivity under the condition that any person associated in the association is an accounting unit.

## 2.2 General principles

A number of basic accounting principles have been developed through common usage. They form the basis upon which modern accounting is based. The best-known of these principles are as follows:

**Accrual principle.** This is the concept that accounting transactions should be recorded in the accounting periods when they actually occur, rather than in the periods when there are cash flows associated with them. This is the foundation of the accrual basis of accounting. It is important for the construction of financial statements that show what actually happened in an accounting period, rather than being artificially delayed or accelerated by the associated cash flows. For example, if you ignored the accrual principle, you would record an

expense only when you paid for it, which might incorporate a lengthy delay caused by the payment terms for the associated supplier invoice.

**Conservatism principle.** This is the concept that you should record expenses and liabilities as soon as possible, but to record revenues and assets only when you are sure that they will occur. This introduces a conservative slant to the financial statements that may yield lower reported profits, since revenue and asset recognition may be delayed for some time. Conversely, this principle tends to encourage the recordation of losses earlier, rather than later. This concept can be taken too far, where a business persistently misstates its results to be worse than is realistically the case.

**Consistency principle.** This is the concept that, once you adopt an accounting principle or method, you should continue to use it until a demonstrably better principle or method comes along. Not following the consistency principle means that a business could continually jump between different accounting treatments of its transactions that makes its long-term financial results extremely difficult to discern.

**Cost principle.** This is the concept that a business should only record its assets, liabilities, and equity investments at their original purchase costs. This principle is becoming less valid, as a host of accounting standards are heading in the direction of adjusting assets and liabilities to their fair values.

**Economic entity principle.** This is the concept that the transactions of a business should be kept separate from those of its owners and other businesses. This prevents intermingling of assets and liabilities among multiple entities, which can cause considerable difficulties when the financial statements of a fledgling business are first audited.

**Full disclosure principle.** This is the concept that you should include in or alongside the financial statements of a business all of the information that may impact a reader's understanding of those financial statements. The accounting standards have greatly amplified upon this concept in specifying an enormous number of informational disclosures.

**Going concern principle.** This is the concept that a business will remain in operation for the foreseeable future. This means that you would be justified in deferring the recognition of some expenses, such as depreciation, until later periods. Otherwise, you would have to recognize all expenses at once and not defer any of them.

**Matching principle.** This is the concept that, when you record revenue, you should record all related expenses at the same time. Thus, you charge inventory to the cost of goods sold at the same time that you record revenue from the sale of those inventory items. This is a cornerstone of the accrual basis of accounting. The cash basis of accounting does not use the matching the principle.

**Materiality principle.** This is the concept that you should record a transaction in the accounting records if not doing so might have altered the decision making process of someone reading the company's financial statements. This is quite a vague concept that is difficult to quantify, which has led some of the more picayune controllers to record even the smallest transactions.

**Monetary unit principle.** This is the concept that a business should only record transactions that can be stated in terms of a unit of currency. Thus, it is easy enough to record the purchase of a fixed asset, since it was bought for a specific price, whereas the value of the quality control system of a business is not recorded. This concept keeps a business from engaging in an excessive level of estimation in deriving the value of its assets and liabilities.

**Reliability principle.** This is the concept that only those transactions that can be proven should be recorded. For example, a supplier invoice is solid evidence that an expense has been recorded. This concept is of prime interest to auditors, who are constantly in search of the evidence supporting transactions.

**Revenue recognition principle.** This is the concept that you should only recognize revenue when the business has substantially completed the earnings process. So many people have skirted around the fringes of this concept to commit reporting fraud that a variety of standard-setting bodies have developed a massive amount of information about what constitutes proper revenue recognition.

**Time period principle.** This is the concept that a business should report the results of its operations over a standard period of time. This may qualify as the most glaringly obvious of all accounting principles, but is intended to create a standard set of comparable periods, which is useful for trend analysis.



These principles are incorporated into a number of accounting frameworks, from which accounting standards govern the treatment and reporting of business transactions.

In accordance with the Act on accounting, there are several **basic valuation possibilities**:

- acquisition cost – it is used for assets and equities acquired by purchase,
- own costs – it is used for assets acquired by one's own activity,
- executant acquisition cost – it is used for assets and equities acquired for free,
- face value – it is the nominal value used for cash, checks, stamps.

## 2.3 Accounting rules

The basic Czech **accounting legislation** is:

- Act No. 563/1991 Coll., on Accounting – constitutes the obligation to keep accounting files for Czech enterprises and defines basic conditions and procedures for the keeping of accounting evidence.
- Edict of Ministry of Finance No. 500/2002 – constitutes the methods and principles of accounting as well as valuation rules.
- Czech Accounting Standards – describe in detail concrete accounting principles for concrete economic transactions.

The company is obliged to keep records of the date of its creation until the day of its death. The reporting period is continuous consecutive periods of twelve months, unless stated otherwise. The accounting period is either the calendar year or economic year. The economic year as an accounting period can begin only on the first day of any month, except in January. The period may be longer than 12 months when the establishment of an entity is in a period of 3 months before the end of the calendar year or when the dissolution of the entity is in a period of 3 months after the end of the calendar year or economic year.

The basic rules and regulations are set out in Act No. 563/1991 Coll., on Accounting. The companies are obliged to follow, in particular, the accounting chart of accounts, the classification and identification of financial statements plus consolidated financial statements, the contents of statements, accounting methods, conditions of readmission accounting records and other conditions. Implementing legislation for each group entity adjusts especially:

- the scope and method of preparing the financial statements and annual reports,
- the arrangement, description and definition of property and other assets, liabilities and other liabilities in the financial statements, including the layout, content labelling and definition of off-balance sheet accounts,
- the arrangement, description and definition of costs, revenues and results of operation in the financial statements,
- the layout and definition of explanatory and supplementary information in the Annex to the financial statements, including information on the management of the state budget and budgets of local governments,
- the layout and definition of cash flow statements and statements of changes in equity,
- the guiding chart,
- the accounting methods, particularly the methods of measurement and their application files including the valuation of assets, processes of creation and use of provisions, depreciation methods, procedures and use of reserves,
- the methods of transition from simple accounting or tax records,
- the organization, tagging, and content of the consolidated financial statements,
- methods of consolidating financial statements,



- processes including entities in consolidated groups,
- the rules for the format, structure, transmission and security of accounting records in technical form of selected entities,
- the requirements for technical and mixed forms of accounting records, including those for relevance, transmission and storage,
- the extent and frequency of transmission of the accounting records of selected entities to the central system of state accounting information,
- the requirements of the organization and how to perform an inventory of selected entities.

The basic principle is that companies are required to keep records so that their financial statements give a true and fair view of the accounting and financial situation of the entity. The presentation of this information is true if the content of the financial statements corresponds to the actual state that is displayed while in accordance with accounting methods, and the uses by an entity imposed under this Act. The presentation of information is honest when the accounting method is used in a way that leads to achieving loyalty. Where an entity can choose between several options and the accounting method chosen would paper over the real situation, then the entity shall select another option that corresponds to the actual state.

Companies are required to keep records in an accurate, complete, conclusive, clear, and transparent way that ensures sustainability of accounting records. Accounting is correct if the company shall keep accounts in a way that is not contrary to the Act on accounting. Accounting is complete if the company has recorded all transactions that it has recognized in the books for an accounting period. The accounts are conclusive, if all of the accounting records are significant and made an inventory of the entity. Accounting is understandable if the context allows an individual to reliably and unambiguously identify:

- at least the contents of accounting transactions using accounting methods,
- the contents of accounting records using the tools.

Accounting is conducted in a manner that ensures the sustainability of accounting records, if the company is able to fulfill obligations associated with their storage and processing.

## 2.4 Accounting documents

The accounting documents are conclusive accounting records, which must include:

- a) Identification of the accounting document,
- b) the content of the financial case and its participants,
- c) a sum of money or information about the price per unit and number of observations,
- d) an instant copy of the accounting document,
- e) time of the transaction,
- f) signature.

The unit charge provides:

- the diary (diaries) in which the accounting entries are arranged in terms of time (in chronological order) and which demonstrates the accounting of all accounting transactions in the accounting period,
- the general ledger in which accounting entries are arranged in terms of material (systematic),
- analytical accounts in the books, which detail the elaborate accounting ledger entries,
- off-balance sheet accounts.

The book includes accounts by a synthetic chart of accounts.

Storage of **accounting records**:

- the financial statements and Annual report for 10 years beginning with the end of the reporting period to which they relate,
- the accounting documents, ledgers, depreciation schedules, inventory lists, chart of accounts, and reports for 5 years beginning with the end of the reporting period to which they relate,
- the accounting records which demonstrate the leadership entity Accounting, for a period of 5 years beginning with the end of the accounting period to which they relate.

## 2.5 The chart (list) of accounts

The chart of accounts consists of these classes and groups:

### Account class 0 - Fixed assets

- 01-Intangible assets
- 02-Tangible assets
- 03-Tangible assets non-depreciated
- 04-Accounts of acquisition
- 05-Unfinished assets – advances
- 06-Long- term financial assets
- 07-Accumulated depreciation on intangible assets
- 08-Acumulated depreciation on tangible assets
- 09-Rectifying items on fixed assets

### Account class 1 - Inventories

- 11-Material
- 12-Inventories of one's own production
- 13-Merchandise
- 15-Advance payments provided on inventories
- 19-Rectifying items on inventories

### Account class 2 – Financial accounts

- 21-Cash
- 22-Bank accounts
- 23 -Short-term bank accounts
- 24-Other short-term financial substitutes
- 25-Short-term financial assets
- 26-Transfers between financial accounts
- 29-Rectifying items on short-term financial assets

### Account class 3 – Receivables and short-term liabilities

- 31-Receivables
- 32-Liabilities (short-term)
- 33-Clearing with employees and institutions
- 34-Clearing of dotations and taxes
- 35-Receivables for partners and members of associations
- 36-Liabilities to partners and members of associations
- 37-Other receivables and liabilities
- 38-Transitive accounts of assets and equities
- 39-Rectifying items on receivables and internal clearing

### Account class 4 – Capital accounts and long term liabilities

- 41-Common stocks and capital funds
- 42-Funds created from net profit and the economic result of previous periods
- 43-Economic result
- 45-Reserves
- 46-Long-term bank credits
- 47-Long-term liabilities
- 48-Postponed tax liability and receivables
- 49-Individual businessman

### Account class 5 – Costs



50-Consumed purchases  
51-Consumed services  
52-Personal costs  
53-Taxes and fees  
54-Other operating costs  
55-Depreciation, creation of reserves, complex costs of other periods and creation of rectifying items in operating activities  
56-Financial costs  
57-Creation of reserves and creation of rectifying items in financial activities  
58-Change in inventory and activation  
59-Income taxes and transitive accounts

#### Account class 6 – Revenues

60-Revenues for one's own products and merchandise  
64-Other operating revenues  
66-Financial revenues  
69-Transitive accounts

#### Account class 7 – Shuttering accounts

70-Balance sheet accounts  
71-Account of profit and loss

#### Account class 8 – Managerial accounting

## 2.6 Inventory of assets and liabilities

The companies discover the real state of the inventory of all assets and liabilities and verify that the observed state corresponds to the actual state of assets and liabilities in the accounts. A continuous inventory entity can only be carried out on stocks which are accounted for by species, by storing sites or materially responsible persons, and in cases of tangible, movable property which has no permanent place to belong. The date of the inventory should be adopted by the entity. Each type of inventory and fixed asset that requires it must be inventoried at least once per accounting period.

The companies discover the real state of the **inventory of assets and liabilities** and these are recorded in the inventory records. In these records are found:

- the physical inventory of assets, in which you can visually determine its existence, or
- the book inventory for liabilities and assets of which you cannot visually determine the existence, including other assets, other liabilities and facts charged in off-book accounts.

## 3 WORLDWIDE REGULATION AND HARMONIZATION

### General points of view

- users of financial statements require reliable, objective and comprehensible information
- the necessary formal form of the statements → information ability - a degree of control or regulation necessary
- global trends of globalization and internationalization (international financial flows) → convergence of generally accepted accounting principles and procedures = harmonization

### Classification of accounting systems

- basic features of differences:
  - on defining the circle of users of financial statements
  - about the level of accounting regulation
  - about the relationship between accounting and taxes
  - on the reporting of income tax
  - the degree of caution when reporting the current year's profit or loss
  - choice of valuation variables (especially historical prices)
  - the degree of inflation
- different types of classification:
  - **deductive approach** (from general to specific, from totals to parts; for developed countries); concepts:
    - macroeconomic - the country's accounting system is primarily based on national economy policy, opinion: the company develops its activity under limiting environmental conditions and corporate goals must ultimately be adapted to the economic policy of the state. Accounting is subject to the general interest.
    - microeconomic - accounting is primarily understood as part of the business sphere, which is considered the basis of the economy. The accounting system is subject to private interests and is geared towards the economic stability of the business.
  - **inductive approach** (process from specific to general)
  - **the cultural and social approach** (accounting as part of the traditional cultural and social values that society recognizes).

### 3.1 Accounting regulation

- in field of financial accounting
- influence: habits, economic and legislative environment, involvement in wider economic and political groupings, etc.
- accounting management:
  1. external - state, professional organizations (unions) → unification of accounting
  2. self-regulation - the company itself, while adhering to the country's generally accepted accounting principles, a small share of government regulation
- the trend of globalization (frontier activities - goods, capital, labor)
- investors → information → decision making (source of information: financial statements, incl. extensive comments)
- insufficient national accounting, or financial reporting → two systems of harmonization: US GAAP X IAS/IFRS
- ? the role of accounting X a true and fair view of the state of the assets, liabilities, financial results and financial position of the accounting units - scandals, bankruptcies

### 3.2 Regulation of financial statements

- based on user requirements
- both legally (this is also indirectly regulated by current accounting)

- base: USA - 1934 entrusted to SEC (Security and Exchange Commission) by setting accounting principles, methods and forms of financial statements for companies on the stock exchange (History dates back to 1929 and the New York Stock Exchange, when it was necessary to create rules for single accounting system)
- then the delegation of the task to the Financial Accounting Standards Board (FASB)

### 3.3 Generally Accepted Accounting Principles (GAAP)

They have 3 hierarchical levels:

- ✓ **fundamental postulates** - ideological assumptions and principles:
  - Basic assumptions:
    - the concept of accounting (economic) unit
    - business continuity assumption
    - valuation by monetary unit
    - assumption of a stable dollar
    - periodicity
    - accrual concept
    - concept of asset preservation
  - Basic principles, principles:
    - the principle of prudence (conservatism)
    - the principle of historical accounting
    - implementation principle
    - the principle of factual connection
    - the principle of consistency between accounting periods
    - the principle of objectivity of accounting information
    - the principle of materiality
    - preference of content before form
    - clarity
    - intercompany comparability
    - relevancy
    - the principle of true and fair view,
- ✓ **comprehensive theoretical basis** - a general approach to the processing of accounting procedures (standards)
- ✓ **Accounting Standards** (Statements of Financial Accounting Standards) - lowest level, most detailed, over 100 standards

Generally Accepted Accounting Principles, also called GAAP or US GAAP, are the generally accepted accounting principles adopted by the U.S. Securities and Exchange Commission (SEC). While the SEC has stated that it intends to move from US GAAP to the International Financial Reporting Standards (IFRS), the latter differ considerably from GAAP and progress has been slow and uncertain

Accounting standards have historically been set by the American Institute of Certified Public Accountants (AICPA) subject to Securities and Exchange Commission regulations. The AICPA first created the Committee on Accounting Procedure in 1939, and replaced that with the Accounting Principles Board in 1959. In 1973, the Accounting Principles Board was replaced by the Financial Accounting Standards Board (FASB) under the supervision of the Financial Accounting Foundation with the Financial Accounting Standards Advisory Council serving to advise and provide input on the accounting standards. Other organizations involved in determining United States accounting standards include the Governmental Accounting Standards Board (GASB), formed in 1984, and the Public Company Accounting Oversight Board (PCAOB).

Circa 2008, the FASB issued the FASB Accounting Standards Codification, which reorganized the thousands of US GAAP pronouncements into roughly 90 accounting topics.

In 2008, the Securities and Exchange Commission issued a preliminary "roadmap" that may lead the United States to abandon Generally Accepted Accounting Principles in the future (to be determined in 2011), and to join more than 100 countries around the world instead in using the London-based International Financial Reporting Standards. As of 2010, the convergence project was underway with the FASB meeting routinely with the IASB. The SEC expressed their aim to fully adopt International Financial Reporting Standards in the U.S. by 2014. With the convergence of the U.S. GAAP and the international IFRS accounting systems, as the highest authority over International Financial Reporting Standards, the International Accounting Standards Board is becoming more important in the United States.

### 3.4 IAS = International Accounting Standards; IFRS = International Financial Reporting Standards

International Financial Reporting Standards (IFRS) are designed as a common global language for business affairs so that company accounts are understandable and comparable across international boundaries. They are a consequence of growing international shareholding and trade and are particularly important for companies that have dealings in several countries. They are progressively replacing the many different national accounting standards. They are the rules to be followed by accountants to maintain books of accounts which is comparable, understandable, reliable and relevant as per the users internal or external.

IFRS began as an attempt to harmonize accounting across the European Union but the value of harmonization quickly made the concept attractive around the world. However, it has been debated whether or not de facto harmonization has occurred. Standards that were issued by IASC (the predecessor of IASB) and are still within use today go by the name International Accounting Standards (IAS), while standards issued by IASB are called IFRS. IAS were issued between 1973 (in London) and 2001 by the Board of the International Accounting Standards Committee (IASC). On 1 April 2001, the new International Accounting Standards Board (IASB) took over from the IASC the responsibility for setting International Accounting Standards. During its first meeting the new Board adopted existing IAS and Standing Interpretations Committee standards (SICs). The IASB has continued to develop standards calling the new standards "International Financial Reporting Standards".

The extent and sophistication of the adaptation is documented by the fact that the full text of the standards is based on 2,200 pages of demanding text which - in order to be fully understood and applied correctly - requires not only good knowledge of practical accounting and financial issues, but above all understanding of the general principles of accounting. The standards are not a manual, a manual, an algorithm, or even a "chart of accounts", which would make it easy to start accounting; are principally formulated so as to be generic enough for application on a global scale and across a wide range of all possible economic sectors. The aim is to align the composition and content of the items of the financial statements to the global level, which also entails the reasons for their creation:

- (a) the emergence of international companies
- (b) trading in securities on the capital market

IAS / IFRSs include:

- about the conceptual framework (function of statements, policies, items, valuation ...)
- accounting standards (statements, inventories, depreciation, CF ...)
- about interpretation (troubleshooting guide)

### 3.5 International Financial Reporting Standard for Small and Medium-Sized Entities (IFRS for SMEs)

There are also separate standards for SMEs. The definition for Small and Medium Enterprise or SMB = Small and Medium Business is:

1. medium-sized enterprises - organizational units whose number of employees is between 50 and 250 persons and their annual turnover does not exceed EUR 50 million (or the total value of the assets does not exceed EUR

43 million).

2. Small enterprises - Organizational units with fewer than 50 employees and at the same time turnover (or total balance) of up to EUR 10 million

3. Micro-enterprises - Organizational units with less than 10 employees and annual turnover (or total balance sheet total) of up to EUR 2 million

### 3.6 Situation in Europe

The treaty establishing the European Economic Community of 1957 - the so-called Roman Treaty - set out in the preamble as its main task the foundations for bringing together the European countries in order to ensure their economic and social progress. Under this Treaty, which constitutes the legal basis for harmonization, the adaptation of the legislation of the EU member states takes place. The instruments of this harmonization are directives binding on Member States in the sense that they must incorporate them into their national legislation. For accounting area → EU accounting legislation = three directives (directives): 4, 7, 8:

#### **Fourth Directive No 78/660 EEC of 25.7.1978 (now cancelled)**

- compromise between Germany, France and the UK (ie continental and Anglo-Saxon accounting) → the right of choice
- focused on reporting to large and medium-sized capital companies (basic provisions, provisions for balance sheet and profit and loss - models, items, breakdowns, valuation rules)

#### **Seventh Directive 83/349 / EEC of 13 June 1983 (now cancelled)**

- Focused on reporting by business clusters - Concerns, Holdings, etc. = Consolidated Units
- there is little room for divergent legal regulation of states

#### **Eighth Directive 84/253 / EEC of 10.4.1984**

- concerns the approval of the persons responsible for the audit (audit) of the financial statements

Since 2000 European Commission → Harmonization Strategy; Significant conceptual change by IAS / IFRS. It is necessary for companies registered in European markets to prepare consolidated financial statements in accordance with IAS / IFRS + recommendations to member countries:

- Incorporating compatible solutions to the issue of IAS / IFRS into national regulations
- to extend IAS / IFRS applications to individual financial statements
- Amend the European Accounting Directives, especially in the field of valuation

Since 2005, all listed EU companies have the obligation to prepare their consolidated financial statements in accordance with IFRS.

Proposal for a DIRECTIVE OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL on the annual accounts, consolidated accounts and related reports of certain types of undertakings, amending **Directive 2006/43 / EC of the European Parliament and of the Council and repealing Council Directives 78/660 / EEC and 83 / 349 / EEC**. The directive was actually merged and replaced by the so-called Fourth and Seventh Accounting Directives of the European Parliament and the Council of the EC, it was published in the Official Journal on 26 June 2013 and entered into force 20 days after its publication. Member States are required to bring into force the laws, regulations and administrative provisions necessary to comply with the Directive by 20 July 2015 at the latest. Member States may provide that the provisions in question shall be applied for the first time to the accounting period commencing on 1 January 2016 or during the calendar year in 2016.

### 3.7 Situation in the Czech Republic

The Czech accounting regulations, as well as a number of other national adjustments, are mainly focused on tax (mainly historical reasons). By the Act No. 563/1991 Coll., on Accounting - Section 19 (9) (as of 1 January 2011) and Section 23a (1) provide accounting entities which are issuers of securities registered in a regulated securities market in the EU Member States to compile individual, respectively. consolidated financial statements in accordance with IFRSs (→ parallel reports).

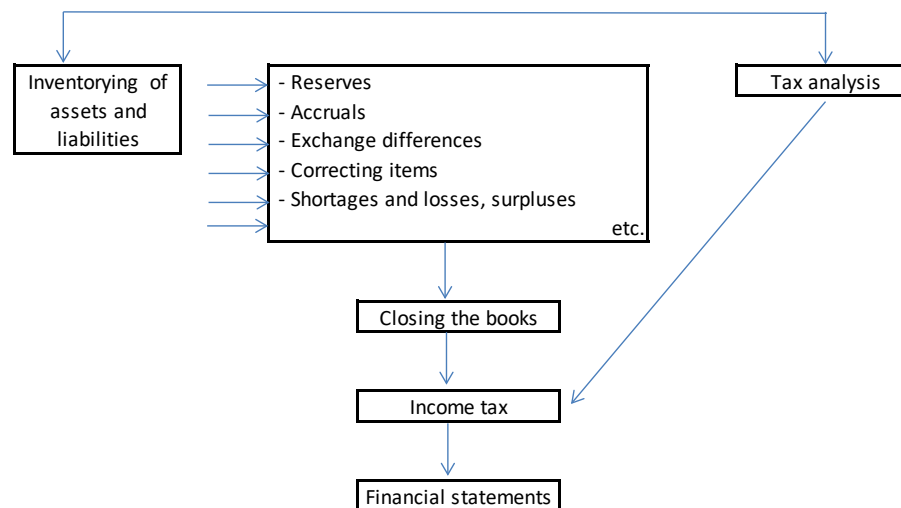


## 4 CLOSING OF ACCOUNTING BOOKS

Accounting work and procedures that take place at the end of the accounting period and at the start of the next period can be called balancing (closing accounting books). This is based on the requirements of:

- law regulation (Act no. 563/1991 Coll., On Accounting; Order no. 500/2002 Coll.; Czech Accounting Standards for Businesses),
- the accounting procedures (internal directives).

Figure 3 Closing of accounting books



Source: author

It is therefore a **sequence of works that guarantee:**

1. Compliance with the assumptions on which accounting is based = accuracy and completeness of accounting books during the reporting period through:
  - accrued costs (expenses) and revenues (accrual accounting principle),
  - billing accruals,
  - billing adjustments,
  - repair of account balances based on inventory,
  - settlement money on the way (transferred cash), etc.

### 2. Calculation and accounting for income taxes:

The system of taxation of the Czech Republic resembles the systems of taxation of other European countries. Generally, taxes can be divided into direct taxes, related to the level of income of the subject, and indirect taxes, related to consumption, or the purchase of goods and services. Each type of tax is defined in a specific piece of legislation. The administration and collection of individual taxes falls under the Ministry of Finance of the Czech Republic and its subordinate administrative bodies, but above all, the local tax authorities.

The most typical and the most common class is the classification according to tax impact. We may distinguish between **direct taxes** and **indirect taxes**. The difference between direct and indirect taxes depends on whose incomes are

influenced by tax, and may be described as follows:

- Direct taxes are assessed on every taxpayer according to his/her incomes and property, and usually respect the personal situation of the taxpayer. Direct taxes influence directly the income of the payer (corporation, employee, employer, consumer, etc.) which pays the tax simultaneously to a financial agency.
- On the other hand, indirect taxes are paid and collected on the prices of goods, services, etc. and do not respect the personal situation of the taxpayer. In practice, it works in the system that, the indirect tax is collected by the seller from the customer in the price of goods, products, etc., and the amount of tax is sent to the financial agency by the seller. The most important indirect taxes are value added tax and excise taxes.

Income tax is undoubtedly one of the most complex forms of tax that exists. The document is based on Act No. 586/1992 Coll., that had been revised by the end of 2013. Income tax represents the main tax duty. It is divided into the income tax on a natural person and the income tax of legal entities, with different tax rates. The income tax on a natural person has a flat 15% rate. The rate is the same for wage earners and self-employed people. The current income tax of legal entities is 19 %. Pension and investment funds pay 5% corporate tax. Since January 2014 an inheritance tax and gift tax is a part of the income tax which were originally separate taxes.

#### a) *Personal Income Tax*

- The payor – the accounting unit (employer).
- The taxpayer – the subject other than the accounting unit (employee).
- These forms of income of natural persons are subject to taxation:
  - Personal Income Tax from dependent activity (employment) and emoluments of office-holders (function benefits), e.g. wages.
  - Income from business and other self-employment.
  - Income from capital assets, e.g.: interests, dividends.
  - Income from leasing.
  - Other forms of income, e.g.: occasional income, income from the sale of property and movable assets, winnings
- Personal income tax – withheld in the form of advances or deductions from employees.
- Personal income tax – is not charged to the costs of the accounting unit.

#### b) *Company Income Tax*

- The taxpayer – entities, i.e. the accounting unit, e.g. companies, civil corporations, political parties, interest corporations, foundations, municipalities, state corporations, banks, insurance companies, organizational components of the State, etc.
- Two types of taxpayers liable to corporate income tax:
  - Tax residents – entities having their seat or head office in the Czech Republic.
  - Tax non-residents – entities not having their seat or head office in the Czech Republic.
- Paying advance payments – amount and frequency depends on the last known tax liability.
- Taxable period – a choice between calendar year (beginning on the first day of the first month, twelve months long) or an economic year (twelve months long, beginning on the first day of any other month than the first month of the year).

The transformation of gross profit for the tax base and after applying the appropriate tax rate – see on next figure. The tax base, rounded down to thousands, is calculated according to a set percentage, which for legal persons is 19% and natural person 15%. Calculated income tax is considered income tax payable.

Figure 4 Tax system and accounting system

Tax system	Accounting system
<p>Gross profit or loss +/- Costs and revenues tax-included = Tax base - Items decreasing tax base = Tax base after adjustments Income tax - Tax credits ----- Tax liability</p>	<p>Revenue of the accounting period (6th class) - Cost of the accounting period (5th class) = Gross profit or loss</p> <p>Income tax payable 591/341 = Available economic result +/- Deferred income tax 592/481 = Profit for distribution (710)</p>

Source: author

The transformation of Gross Profit/loss into the tax base is carried out in particular in costs and revenues tax-included:

- amounts that cannot be recognized under the Income Tax Act as an expense (expenditure) incurred to achieve, secure and maintain taxable income
- amounts that are included in the costs incorrectly
- all amounts unduly reducing revenue
- income already taxed by the payer (tax at source)

For example, in a specific form in the tax base cannot be included:

- creation of non-statutory reserves
- creation of non-statutory adjustments
- contributions to legal entities that do not result by law
- expenditure exceeding the limit set by the relevant legislation
- representation costs
- remuneration to members of statutory bodies
- a technical improvement exceeding a set limit
- mankind and damage over and above compensation for damages,

The next main items decreasing income tax base can be:

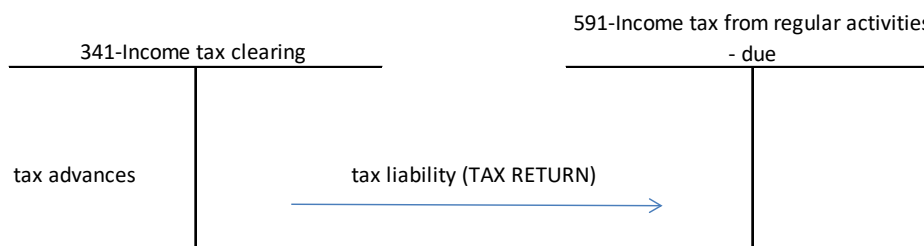
- loss from previous periods
- costs of research and development
- donations, etc.

From the calculated tax can be deducted further (tax credit), eg: fixed amount for each disabled worker depending on the grade his disability.

Tax accounting - for billing income tax in accounting is used class 5 and 3:

- 591- Income tax on regular activities – due,
- 341- Income tax clearing.

Figure 5 Charging about Income Tax

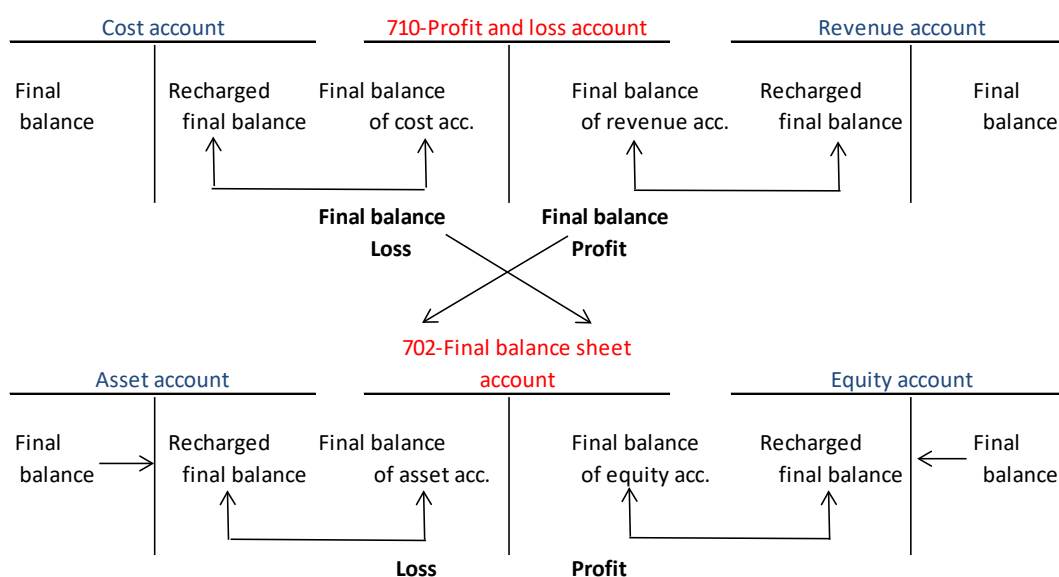


Source: author

### 3. Closing the books:

- After all activities to ensure the veracity of the accounts may become formal stage of accounts - closing the books on the last day of the accounting period, i.e. the balance sheet date:
  - finding turnovers of parties credit and debit individual ledger accounts,
  - final states of active and passive accounts and their transfer to 702 – Final balance sheet account,
  - finding final states of costs and revenues accounts and their transfer to 710 – Profit and loss account, where are also found:
    - Profit/loss operation (the difference between revenues billed in Gr. 60-64 and costs in Gr. 50-55, 58)
    - Profit/loss financial (the difference between revenues billed in Gr. 66-67 and costs in Gr. 56).
- Determination of total profit for the period on account 710 - Profit and loss account in the form of the difference between total revenues and total costs and transfer to a 702 – Final balance sheet account. There is profit/loss listed as a differential value, without account number.

Figure 6 Closing of accounts

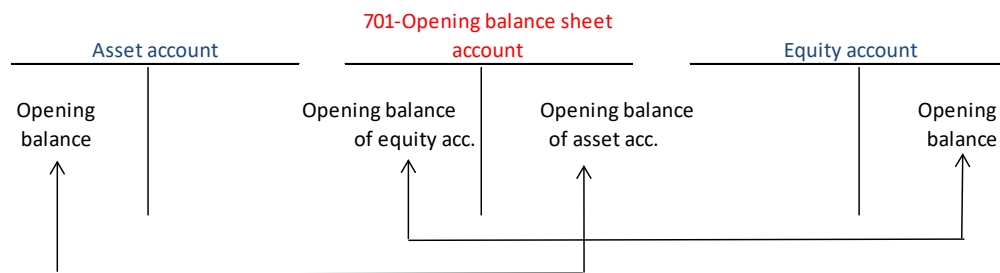


Source: author

4. Ensure balance continuity:

- General ledger accounts are closed on the basis of the closing Account 702 – Final balance sheet account. Acceptance of initial states is performed through double-entry book entry 701 – Opening balance sheet account (which account for the mirror 702).
- Profit/loss in the new period with a corresponding entry account 431 – Economic result for distribution and is ready for distribution by the legal rules of the Commercial Code, the General Meeting, etc.

*Figure 7 Opening of accounts*



Source: author

## 5 PURPOSES AND CHARACTERISTICS OF FINANCIAL STATEMENTS

Financial statements are the primary means of communicating important accounting information users. It is helpful to think of these statements as model of the business enterprise because they show the business in financial terms. As is true of all models, however, financial statements are not perfect pictures of the real thing, but rather the accountant's best effort to represent what is real.

For large corporations, these statements are often complex and may include an extensive set of notes to the financial statements and management discussion and analysis. The notes typically describe each item on the balance sheet, income statement and cash flow statement in further detail. Notes to financial statements are considered an integral part of the financial statements.

### 5.1 Methodology

Methodology, measure and way of preparation of financial statements for entities that are entrepreneurs regulate:

1. Act no. 563/1991 Coll., On Accounting
2. Order no. 500/2002 Coll.
3. Czech Accounting Standards for Businesses

ad 2) provides:

- scope and method of preparation of financial statements, including ordering, labelling and content definition of certain balance sheet items (balance), profit/loss statement, explanatory and supplementary information in the notes to the financial statements, cash flow statement and statement of changes in equity
- organizing, labelling and content of the consolidated financial statements, including the consolidation methods and procedures including entities in the consolidated group.

Reflection of conceptual frame of management in accounting entity must be included in **internal rules** (directives), e.g.:

- list of accountant books, framework attribute and abbreviation
- account classification
- circulation accountant corroboration
- nesting (custody), archiving and shredding of accounting corroboration
- plane of depreciation
- methods of appraisalment
- fundamentals behalf formation calculation, budget, etc.

For among **basic qualitative claims** to information shows in financial statements belongs to:

- authenticity
- comparability
- comprehensibility
- relevance.

**Species of financial statement:**

- ordinary (annual) final statement - making to last day of accounting period
- extraordinary final statement - in another case defined by § 17 and § 19 Act Nr. 563/1991 Coll.
- interlocutory final statement - special case depending on accounting entity during accounting period

### Variants of financial statements:

- full range - obligatorily submit to enterprises that have the obligation to audit the financial statements and to publish the data from the auditor; other businesses on a voluntary basis
- simplified range - items labelled with Latin alphabet and Roman numerals (not Arabic numerals)

The financial statements shall **include** at least the following:

- a business name or other name of the entity and the registered office of the entity
- identification number
- legal form of the entity
- subject of business or other activities
- balance sheet day
- the moment of preparation of the financial statements
- signature of the statutory body of the entity

Preparation of financial statements - **deadlines**:

- at the latest by the end of the immediately following accounting period after the balance sheet date (according to the Act of Accounting)
- no later than 6 months after the end of the accounting period (according to Act of corporates - for commercial companies and cooperatives - see approval by the statutory body)
- to compile an annual report no later than 4 months (joint-stock company - trading with securities)

## 5.2 Composition of financial statement

The full format assembles companies, that are bound checking assessable by auditor (§ 20 Act Nr. 563/1991 Coll.). It composes:

- **Balance sheet**
- **Profit/loss Statement (Income statement)**, with version of expenses:
  - Type structure
    - used by the most companies. We can characterize it as specific type of costs that were spent for specific purpose.
    - for example: consumption of material, goods, energy, payroll, etc.
  - Purpose structure (by function)
    - this classification specifies the relation of costs to their origin
    - they are divided according to the relation to the following processes:
      - technological costs (incur only during technological production of a given product),
      - direct and indirect costs.
- **Notes (supplement, annex) to statements**
- **Statement of cash flow** – mandatory only for the selected entity
- **Statement of change in shareholders' capital** – mandatory only for the selected entity

### Annual report of a company

Companies which must accomplish provide audit must have also annual report. It is visiting-card of company and contains many graphical component units. Purposes of report is round off, balanced and complex give notice about development, capacity and activities of company. The abstract of report is liable to audit.

Annual report contains information about:

- financial situation



- future progression
- activities in research (incl. protection of environment), etc.

Figure 8 Types of financial statements

Type of entity (category)	Range of financial statements: BS, P/L	Obligatory of Statements: CF, Eq.	Obligatory of audit, annual report	Publication Method
<b>Micro:</b>				
• with audit	BS - simple, basic version, P/L - full	NO	NO	BS + Notes §39
• without audit	BS – full P/L - full	NO	NO	Notes §39 + §39a Annual report, with complete FS with audit
<b>Small:</b>				
• with audit	BS – simple, widespread version P/L - full	NO	NO	BS + Notes §39
• without audit	BS – full P/L – full	NO	YES	Notes §39 + §39a Annual report, with complete FS with audit
<b>Middle</b>	BS – full P/L – full	YES	YES	Notes §39 + §39b Annual report, with complete FS with audit
<b>Large:</b>				
• public interest entity	BS – full P/L – full	YES	YES	Notes §39 + §39b + §39c Annual report, with complete FS with audit
• Issuer of a stock exchange	Full (IFRS/IAS)	YES	YES	Notes §39 + §39b + §39c Annual report, with complete FS with audit
• others	BS – full P/L – full	YES	YES	Notes §39 + §39b + §39c Annual report, with complete FS with audit

Source: author

### 5.3 Audit of final statements

Although the legal statutes may differ from country to country, an audit of financial statements are usually, but not exclusively required for investment, financing, and tax purposes. These are usually performed by independent accountants or auditing firms. Results of the audit are summarized in an audit report that either provide an unqualified opinion on the financial statements or qualifications as to its fairness and accuracy. The audit opinion on the financial statements is usually included in the annual report.

Auditing is regulated by Act on Auditors from 2009, as amended (93/2009 Coll.). This act, among others, determines the auditor's obligation to perform the audit in compliance with International standards on auditing. Act on Auditors also regulates the position of the Chamber of Auditors of the Czech Republic, competences of the Council for public supervision over an audit or establishment of an Audit Committee for public interest companies.

Act on Accounting (Article 20) regulates the obligation to have annual financial statements audited by a statutory

auditor. The following entities must have their financial statements audited:

- accounting units, where this obligation is required by other regulation;
- large and medium sized entities;
- small entities, which are joint-stock companies or trustee funds and have exceeded at least one of the following criteria for the current and immediately preceding period:
  - net annual turnover of CZK 80 million;
  - total assets of CZK 40 million;
  - average recalculated number of 50 employees;
- other small entities that have, for the current and immediately preceding period, met or exceeded at least two of the three criteria stated

While the criteria for mandatory audit remain the same, there is a change in their calculation. Total assets category is newly represented by a net instead of a gross amount. In terms of turnover, implicit change was implemented by moving activations items and changes in inventory from own business from revenues to costs. Such calculation used for 2016 will be applied also for the previous period.

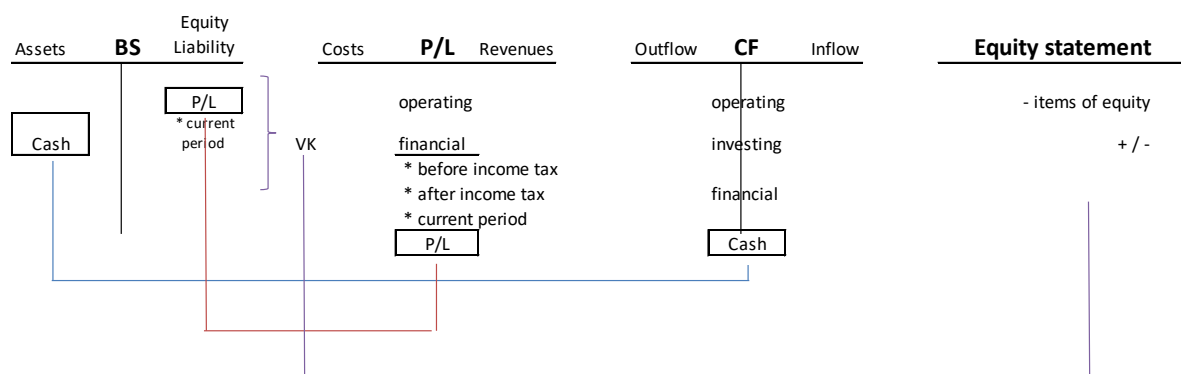
Annual reports containing audited financial statements must also be audited by an auditor. Newly, effective for all audit reports prepared after 3 December 2015, the auditor has to report on the fact, that information included within the annual report that relates to information included in the audited financial statements is stated in all material respects consistently with the financial statements and that the annual report has been prepared in accordance with the accounting regulation and does not contain material misstatements of fact. As Corporations Act does not require the report on relations to be specifically reviewed by the auditor, the auditor reviews the report on relations only as part of their review of the annual report. In addition, the auditor also verifies the consistency of the consolidated annual report with the consolidated financial statements.

The amendment of Act on Accounting from September 2015 also requires the auditor to issue only one report, where they opine on the true and fair presentation of the financial statements and the consistency of the annual report with the audited financial statements.

All entities with a compulsory audit must have an auditor approved by its general body. If the entity does not have a general body or its general body does not determine the auditor, then the auditor is determined by the entity's Supervisory Board. The entity can only conclude a contract on a compulsory audit if an auditor is appointed as described above, and only after an appointment to this role.

## 5.4 Basic links between the statements

Figure 9 Basic links between the statements



Source: author



**Formal rules** for reporting:

- data in CZK, thousands (or millions → Assets netto > CZK 10 billion)
- the basic links between the statements must be payable (see the diagram)
- not to skip the blank lines, not to write zeroes
- it is possible to further subdivide the content according to the annexes to the implementing decree
- Arabic numerals can be merged (if not significant, merge included in attachment)
- can be compensated - see § 58



## 6 FINANCIAL STATEMENTS: BALANCE SHEET – CONTENT AND FORMAL REQUIREMENTS

The balance sheet is the most important financial statement compiled in the system of accounting. It summarizes a company's assets, equity and liabilities at the end of a specified date. A company balance sheet has three parts. It is assets, liabilities, and ownership equity. The main categories of assets are usually listed first, and typically in order of liquidity. Assets are followed by the liabilities. The difference between the assets and the liabilities is known as equity or the net assets or the net worth or capital of the company.

The balance sheet gets its name from the fact that the two sides of the equation – assets on the one side and liabilities plus owner's equity on the other side – must balance out. A company has to pay for all the things it owns (assets) by either borrowing money (taking on liabilities) or taking it from investors (issuing shareholders' equity).

The purpose of a balance sheet is to show the financial position of a business on a certain date, usually the end of the month or year. For this reason, it often is called the statement of financial position, and is dated as of a certain date. The balance sheet presents a view of business as the holder of resources, or assets, that are equal to the sources of those assets. The sources consist of the company's liabilities and the owner's equity in the company.

*Figure 10 Basis structure of Balance sheet*

<b>FIXED ASSETS</b> (LONG-TERM ASSETS, NON-CURRENT ASSETS)	<b>OWNER'S EQUITY</b>
<ul style="list-style-type: none"> <li>• Intangible assets</li> <li>• Tangible assets</li> <li>• Long-term financial assets (investments)</li> </ul>	<ul style="list-style-type: none"> <li>• Common stocks (basic capital, share capital, registered capital)</li> <li>• Funds</li> <li>• Earnings – retained (previous accounting period)</li> <li>• Earning – current accounting period (Economic result, Profit/Loss)</li> </ul>
<b>CURRENT ASSETS</b> <ul style="list-style-type: none"> <li>• Inventories</li> <li>• Receivables               <ul style="list-style-type: none"> <li>▪ short-term</li> <li>▪ long-term</li> </ul> </li> <li>• Short-term financial accounts               <ul style="list-style-type: none"> <li>▪ Cash and bank account</li> <li>▪ Cash equivalents</li> <li>▪ Short-terms investments (securities)</li> </ul> </li> </ul>	<b>LIABILITIES</b> <ul style="list-style-type: none"> <li>• Reserves</li> <li>• Liabilities (debts)               <ul style="list-style-type: none"> <li>▪ short-term</li> <li>▪ long-term</li> </ul> </li> </ul>
<b>TOTAL ASSETS</b>	<b>TOTAL EQUITIES/LIABILITIES</b>

Source: author

## 6.1 The property of a company and its resources.

### THE ACCOUNTING EQUATION AND THE BALANCE SHEET

The whole of financial accounting is based on the accounting equation. The **total assets** of the business **have to equal the capital** of the business.

$$A = E/L$$

$$\text{Assets} = \text{Equity} + \text{liability}$$

where the money went to = where the money came from

Equities may be subdivided into two types – the rights of creditors and the rights of owners.

$$\text{Assets} = \text{liabilities} + \text{owner's equity}$$

$$\text{Assets} - \text{liabilities} = \text{owner's equity}$$

#### 6.1.1 Assets

Assets are divided into fixed assets and current assets. Fixed assets are divided into intangible assets, tangible assets and long-term financial assets. Current assets are divided into inventories, long-term receivables, short-term receivables and short-term financial assets.

**Fixed assets**, also known as tangible assets, is a term used for assets and property that cannot easily be converted into cash. In most cases, only tangible assets are referred to as fixed. Fixed assets are defined as assets whose future economic benefit to the flow into the entity is probable, and the cost of which can be measured reliably. These are the assets which are purchased with the legal right of ownership and use. These assets can also be defined as assets not directly sold to consumers.

The use of fixed assets in a generation is usually more than a year. The Accounting Act says that the valuation of intangible and tangible assets depends on the settings of a company, but the Act No. 582/1992 Coll., on Income Taxes defines the valuation of intangible assets on a level of more than 60 000 CZK and the valuation of tangible assets on a level of more than 40 000 CZK.

**Intangible assets** are in general:

- intangible results of research and development,
- software,
- appraisable rights,
- petty long-term intangible assets,
- goodwill,
- other long-term intangible assets.

**Tangible assets** are in general:

- buildings,
- individual movables and sets of movables without differentiation,
- growers' units of perennials,
- animals,

- petty long-term tangible assets,
- other long-term tangible assets.

The consumption of intangible and tangible assets is usually gradual. But as time passes, many fixed asset lose their capacity to provide useful services. This decrease in usefulness is a business cost called *depreciation*. But there are also the types of assets that are not depreciated. Their value in time does not decrease, but rather increases.

**Tangible assets** which are **non-depreciable** are:

- land,
- artistic works and collections.

There are also **long-term financial assets**, which bring payment (any profit) in future (more 1 year):

- long-term capital shares (stock) – purchased (acquired),
- long-term bonds – purchased (acquired),
- provided long-term loan,
- other long-term financial assets.

**Current assets** are important to businesses because they can be used to fund day-to-day operations and pay ongoing expenses. Components of current assets are used to calculate a number of ratios related to a business's liquidity. Current assets are any assets which can be expected to be sold, consumed, or exhausted through the normal operations of a business within the current year. Typical current assets include cash, cash equivalents, short-term investments, accounts receivables, stock inventory and the portion of prepaid liabilities which will be paid within a year.

**Stock inventory** consists of:

- material,
- inventories of a company's own production (unfinished production, semi-finished products from one's own production, products, animals),
- merchandise.

**Cash and cash equivalents** consist of:

- cash desk (treasury),
- valuables (postage stamps, highway stickers, stamps, phone cards, taking on fuel, food vouchers, etc.),
- bank accounts.

**Short-term investments** (short-term financial assets), which bring payment (any profit) in nearby future (up to 1 year): consist of:

- short-term capital shares (stock) – purchased (acquired),
- short-term bonds – purchased (acquired),
- other short-term viable securities.

**Receivables** are creditor's right to seek specific performance (eg. the money, things) that the debtor. Accounts of receivables (long-term or short-term) consist of:

- trade receivables,
- receivables for employees,
- receivables from social security and health insurance,
- receivables for partners and members of association,
- due from state - tax receivable,
- receivables from securities (financial assets),
- other (from the sale of enterprise, from fixed term operations, from rent, etc.).

## 6.1.2 Equities, liabilities

Equities are divided into owner's equity and liabilities. Owner's equities are divided into common stocks, capital funds, funds created by net profit and economic results. Liabilities are divided into reserves, long-term debts, short-term debts and bank credits.

A liability is a present obligation of the enterprise arising from past events, the settlement of which is expected to result in an outflow from the enterprise of resources embodying economic benefits. Equity is the residual interest in the net assets of an entity that remains after deducting its liabilities.

**Owner's equity** consists especially of:

- Basic capital (Common stock, Registered capital) – monetary expression of monetary and non-monetary contributions of all partners to share capital. It is number of shares issued by an enterprise. The amount of capital depending on the provisions of the relevant law.
- Capital funds created from other resources than a net profit:
  - share premium - arises from the subscription of new shares (the difference between the higher issue price and the nominal value of the shares).
  - differences in valuation resulting from revaluation of assets and liabilities,
  - differences in valuation in transformation of enterprise.
- Funds created from a net profit:
  - reserve fund – it can be used only to cover losses or for measures that have overcome adverse economic progress,
  - statutory and other fund – their creation stems from social contracts, statutes, decisions of the General Meeting or the Board's decision. For example, funds for social fund, entertainment and gifts, etc.
- Economic result – the difference between revenues and costs:
  - undistributed (retained) profit from previous years,
  - accumulated losses from previous years,
  - economic result (profit/loss) for distribution from present (current) accounting period.

**Liabilities** are obligations of the debtor to the creditor for filling. They consist especially of the main types:

- long-term/short-term liabilities:
  - liabilities trade,
  - liabilities to employees,
  - liabilities to social securities and health insurance,
  - due from state - tax liabilities and subsidies,
  - liabilities to companies in the group,
  - liabilities to partners during distribution of profit,
  - liabilities from the sale of enterprise, etc.
- long-term/Short-term liabilities to bank credits (loans),
- long-term/Short-term liabilities to securities (obligations, bonds, etc.),
- other Long-term/Short-term liabilities (to the sale of enterprise, to fixed term operations, from rent, etc.).

There are exist also **Reserves** – special type of liabilities. They represent the liabilities created due to covering potential business risk (losses) in the future:

- reserves under special statutory regulations (for example for bank, insurance company or for the most business firm reserves to repair of fixed assets),
- reserves for pension and similar payables,
- reserves for income tax,
- other reserves.





As the last component of both assets and liabilities are **Accruals**. Applicable accounting regulations require entities to charge costs and revenues significantly in the accounting period to which they relate. Costs and revenues, income and expenses (expenditures) relating to future periods is necessary accruals.

## 6.2 Format of Balance sheet





Minimum compulsory information under  
Regulation 500/2002 Coll.

## BALANCE SHEET

in a full format

as at December 31st, 2017

(in thousand of Czech Crowns)

IC

Commercial name or other  
name of an accounting unit

Registered office or adress  
of an accounting unit

a	ASSETS b	Row c	Current accounting period			Previous period
			Gross 1	Adjustment 2	Net 3	Net 4
	<b>TOTAL ASSETS (r. 02 + 03 + 37 + 74)</b>	001	0	0	0	0
A.	Receivables from subscriptions	002	0	0	0	0
B.	<b>Fixed assets (r. 04 + 14 + 28)</b>	003	0	0	0	0
B. I.	<b>Intangible fixed assets (r. 05 + 06 + 09 to 11)</b>	004	0	0	0	0
B. I. 1	Research and development	005	0	0	0	0
2	Valuable rights (r. 07 + 08)	006	0	0	0	0
2.1	Software	007	0	0	0	0
2.2	Other valuable rights	008	0	0	0	0
3	Goodwill (+/-)	009	0	0	0	0
4	Other intangible fixed assets	010	0	0	0	0
5	Advance payments for intangible fixed assets and intangible fixed assets under construction (r. 12 + 13)	011	0	0	0	0
5.1	Advance payments for intangible fixed assets	012	0	0	0	0
5.2	Intangible fixed assets under construction	013	0	0	0	0
B. II.	<b>Tangible fixed assets (r. 15 + 18 to 20 + 24)</b>	014	0	0	0	0
B. II. 1	Lands and Constructions (r. 16 + 17)	015	0	0	0	0
1.1	Lands	016	0	0	0	0
1.2	Constructions	017	0	0	0	0
2	Equipment	018	0	0	0	0
3	Adjustment to acquired assets	019	0	0	0	0
4	Other tangible fixed assets (r. 21 + 22 + 23)	020	0	0	0	0
4.1	Perennial corps	021	0	0	0	0
4.2	Breeding and draught animals	022	0	0	0	0
4.3	Other tangible fixed assets	023	0	0	0	0
5	Advance payments for tangible fixed assets and tangible fixed assets under construction (r. 25 + 26)	024	0	0	0	0
5.1	Advance payments for tangible fixed assets	025	0	0	0	0
5.2	Tangible fixed assets under construction	026	0	0	0	0
B. III.	<b>Long-term financial assets (r. 28 to 34)</b>	027	0	0	0	0
B. III. 1	Shares - controlled and controlling organizations	028	0	0	0	0
2	Loans - controlled and controlling organizations	029	0	0	0	0
3	Shares - substantial influence	030	0	0	0	0
4	Loans - substantial influence	031	0	0	0	0
5	Other securities and shares	032	0	0	0	0
6	Other loans	033	0	0	0	0
7	Other financial investments (r. 35 + 36)	034	0	0	0	0
7.1	Other financial investments	035	0	0	0	0
7.2	Advance payments for long-term financial assets	036	0	0	0	0

a	ASSETS b	Row c	Current accounting perioe			Previous period
			Gross 1	Adjustment 2	Net 3	Net 4
C.	<b>Current assets (r. 38 + 46 + 68 + 71)</b>	037	0	0	0	0
C. I.	<b>Inventory (r. 39 + 40 + 41 + 44 + 45)</b>	038	0	0	0	0
C. I. 1	Materials	039	0	0	0	0
2	Work in progress and semi-products	040	0	0	0	0
3	Finished products and merchandise (r. 42 + 43)	041	0	0	0	0
3.1	Finished products	042	0	0	0	0
3.2	Merchandise	043	0	0	0	0
4	Animals	044	0	0	0	0
5	Advance payments for inventory	045	0	0	0	0
C. II.	<b>Receivables (r. 47 + 57)</b>	046	0	0	0	0
C. II. 1	Long-term receivables (r. 48 to 52)	047	0	0	0	0
1.1	Trade receivables	048	0	0	0	0
1.2	Receivables - controlled and controlling organizations	049	0	0	0	0
1.3	Receivables - accounting unist with substantial influence	050	0	0	0	0
1.4	Deffered tax receivable	051	0	0	0	0
1.5	Other receivables (r. 53 to 56)	052	0	0	0	0
1.5.1	Receivables from partners	053	0	0	0	0
1.5.2	Long-term deposits given	054	0	0	0	0
1.5.3	Estimated receivable	055	0	0	0	0
1.5.4	Other receivables	056	0	0	0	0
2	Short-term receivables (r. 58 to 61)	057	0	0	0	0
2.1	Trade receivables	058	0	0	0	0
2.2	Receivables - controlled and controlling organizations	059	0	0	0	0
2.3	Receivables - accounting unist with substantial influence	060	0	0	0	0
2.4	Other receivables (r. 62 to 67)	061	0	0	0	0
2.4.1	Receivables from partners	062	0	0	0	0
2.4.2	Receivables from social security and health insurance	063	0	0	0	0
2.4.3	Due from state - tax receivable	064	0	0	0	0
2.4.4	Short-term deposits given	065	0	0	0	0
2.4.5	Estimated receivable	066	0	0	0	0
2.4.6	Other receivable	067	0	0	0	0
C. III.	<b>Short-term financial assets (r. 69 +70)</b>	068	0	0	0	0
C. III. 1	Shares - controlled and controlling organizations	069	0	0	0	0
2	Other short-term financial assets	070	0	0	0	0
C. IV.	<b>Cash and bank accounts (r. 72 +73)</b>	071	0	0	0	0
C. IV. 1	Cash	072	0	0	0	0
2	Bank accounts	073	0	0	0	0
D. I.	<b>Accruals (r. 75 to 77)</b>	074	0	0	0	0
D. I.	Deferred expenses	075	0	0	0	0
D. II.	Complex deferred costs	076	0	0	0	0
D. III.	Deferred income	077	0	0	0	0



a	LIABILITIES b	Row c	Current period 5	Previos period 6
	<b>TOTAL LIABILITIES (r. 79 + 101 + 141)</b>	078	0	0
A.	<b>Equity (r. 80 + 84 + 92 + 95 + 99 - 100)</b>	079	0	0
A. I.	<b>Registered capital (r. 81 to 83)</b>	080	0	0
1	Registered capital	081	0	0
2	Ownership interests (-)	082	0	0
3	Changes of registered capital (+/-)	083	0	0
A. II.	<b>Share premium and capital funds (r. 85 + 86)</b>	084	0	0
A. II. 1	Share premium and capital funds (r. 85 + 86)	085	0	0
2	Capital funds (r. 87 to 91)	086	0	0
2.1	Other capital funds	087	0	0
2.2	Diferences from revaluation of assets and liabilities (+/-)	088	0	0
2.3	Diferences from revaluation in tranformation of companies (+/-)	089	0	0
2.4	Diferences from tranformation of companies (+/-)	090	0	0
2.5	Diferences from valuation in tranformation of companies (+/-)	091	0	0
A. III.	<b>Funds from earnings (r. 93 + 94)</b>	092	0	0
A. III. 1	Other reserve funds	093	0	0
2	Statutory and other funds	094	0	0
A. IV.	<b>Profit/loss - previous years (+/-) (r. 96 to 98)</b>	095	0	0
A. IV. 1	Retained earnings from previous years	096	0	0
2	Accumulated losses from previous years	097	0	0
3	Other profit/loss - previous years (+/-)	098	0	0
A. V.	<b>Profit/loss - current year (+/-)</b> <b>/r. 01 - (+ 80 + 84 + 92 + 95 - 100 + 101 + 141)/</b>	099	0	0
A. VI.	<b>Decided on advance for payment of a profit share (-)</b>	100	0	0
B. + C.	<b>Other sources (r. 102 + 107)</b>	101	0	0
B. I.	<b>Reserves (r. 103 to 106)</b>	102	0	0
B. I. 1	Reserves for pension and similar payables	103	0	0
2	Income tax reserves	104	0	0
3	Reserves under special statutory regulations	105	0	0
4	Other reserves	106	0	0
C.	<b>Payables (r. 108 + 123)</b>	107	0	0
C. I.	<b>Long-term payables (r. 109 + 112 to 119)</b>	108	0	0
C. I. 1	Issues bonds (r. 110 + 111)	109	0	0
1.1	Exchangeable obligations	110	0	0
1.2	Other bonds	111	0	0
2	Liabilities to credit institutions	112	0	0
3	Long-term advances received	113	0	0
4	Trade payables	114	0	0
5	Long-term notes payables	115	0	0
6	Payables - controlled and controlling organizations	116	0	0
7	Payables - accounting units with substantial influence	117	0	0
8	Deffered tax liability	118	0	0
9	Other payables (r. 120 - 122)	119	0	0
9.1	Payable to partners	120	0	0
9.2	Estimated payables	121	0	0
9.3	Other payables	122	0	0



a	LIABILITIES b	Row c	Current period	Previous period
			5	6
C. II.	<b>Short-term payables (r. 124 + 127 to 133)</b>	123	0	0
C. II. 1	Issues bonds (r. 125 + 126)	124	0	0
1.1	Exchangeable obligations	125	0	0
1.2	Other bonds	126	0	0
2	Payables to banks	127	0	0
3	Short-term deposits received	128	0	0
4	Trade payables	129	0	0
5	Short-term notes payables	130	0	0
6	Payables - controlled and controlling organizations	131	0	0
7	Payables - accounting units with substantial influence	132	0	0
8	Other payables (r. 134 to 140)	133	0	0
8.1	Payable to partners	134	0	0
8.2	Short-term accommodations	135	0	0
8.3	Payroll	136	0	0
8.4	Payables to social securities and health insurance	137	0	0
8.5	Due from state - tax liabilities and subsidies	138	0	0
8.6	Estimated payables	139	0	0
8.7	Other payables	140	0	0
D.	<b>Accruals (r. 142 + 143)</b>	141	0	0
D. I.	Accrued expenses	142	0	0
D. II.	Deferred revenues	143	0	0

## 7 FINANCIAL STATEMENTS: PROFIT/LOSS (INCOME) STATEMENT

### 7.1 definitions and classifications

The Profit/loss statement (Income statement) summarizes the revenues earned and costs (expenses) incurred by a business over a period of time. Many people consider it the most important financial report because it shows whether or not a business achieved its profitability goal of earning an acceptable income.

Profit/Loss Statement, is a financial statement for companies that indicates how revenue (money received from the sale of products and services before costs (expenses) are taken out) is transformed into net income (the result after all revenues and costs (expenses) have been accounted for).

The purpose of the income statement is to show managers and investors whether the company made or lost money during the period being reported.

Costs (expenses) and revenues affect profit entity. Costs are to be distinguished from expenditure (the transaction with cash). It can be characterized as a monetary expression of power, as opposed to spending the loss of funds without ties to specific output. Similarly, it is necessary to distinguish revenues from income (the transaction with cash). Revenues are outputs of entity, while revenue increases represent funds.

#### Examples of definition:

(<http://www.businessdictionary.com/definition>)

#### **Cost**

An amount that has to be paid or given up in order to get something. In business, cost is usually a monetary valuation of (1) effort, (2) material, (3) resources, (4) time and utilities consumed, (5) risks incurred, and (6) opportunity forgone in production and delivery of a good or service. All expenses are costs, but not all costs (such as those incurred in acquisition of an income-generating asset) are expenses.

#### **Expense**

Money spent or cost incurred in an organization's efforts to generate revenue, representing the cost of doing business. Expenses may be in the form of actual cash payments (such as wages and salaries), a computed expired portion (depreciation) of an asset, or an amount taken out of earnings (such as bad debts). Expenses are summarized and charged in the income statement as deductions from the income before assessing income tax. Whereas all expenses are costs, not all costs (such as those incurred in acquisition of income generating assets) are expenses.

#### **Expenditure**

Payment of cash or cash-equivalent for goods or services, or a charge against available funds in settlement of an obligation as evidenced by an invoice, receipt, voucher, or other such document. See also revenue expenditure, capital expenditure.

#### **Revenue**

The income generated from sale of goods or services, or any other use of capital or assets, associated with the main operations of an organization before any costs or expenses are deducted. Revenue is shown usually as the top item in an income (profit and loss) statement from which all charges, costs, and expenses are subtracted to arrive at net income. Also called sales, or (in the UK) turnover.

#### **Income**

1. The flow of cash or cash-equivalents received from work (wage or salary), capital (interest or profit), or land (rent).

2. Accounting: (1) An excess of revenue over expenses for an accounting period. Also called earnings or gross profit. (2) An amount by which total assets increase in an accounting period.
3. Economics: Consumption that, at the end of a period, will leave an individual with the same amount of goods (and the expectations of future goods) as at the beginning of that period. Therefore, income means the maximum amount an individual can spend during a period without being any worse off. Income (and not the GDP) is the engine that drives an economy because only it can create demand.
4. Law: Money or other forms of payment (received periodically or regularly) from commerce, employment, endowment, investment, royalties, etc.

### Definition by IFRS/IAS:

**Income is:**

- an increase in economic benefits during the accounting period in the form of inflows or enhancements of assets or decreases in liabilities
- transactions that result in increases in equity, other than those relating to contributions from equity participants.

This definition follows a statement of financial position approach rather than the more traditional profit or loss approach to recognising income.

**Expenses are:**

- decreases in economic benefits during the accounting period in the form of outflows or depletions of assets or incurrences of liabilities
- transactions that result in decreases in equity, other than those relating to distributions to equity participants.

### Usefulness and limitations of income statement

Income statements should help investors and creditors determine the past performance of the enterprise; predict future performance; and assess the risk of achieving future cash flows.

However, information in an income statement has several limitations:

- items that might be relevant but cannot be reliably measured are not reported (e.g. brand recognition and loyalty)
- some numbers depend on accounting methods used (e.g. using FIFO or LIFO accounting to measure inventory level)
- some numbers depend on judgments and estimates (e.g. depreciation expense depends on estimated useful life and salvage value).

In the single-step statement, just two groups exist: revenues and expenses. Expenses are deducted from revenues to get net income (single step). Its main advantage is simplicity, but more and more companies choose multiple-step statements.

Costs and revenues are divided for the purpose of finding profit into 2 groups:

- a) operational,
- b) financial.

(Extraordinary costs and revenues were from 2016 cancelled.)



## 7.2 COSTS (EXPENSE)

### ➤ definition and usage

- an indicator characterizing all inputs to the economic activity of the enterprise (individual)
- provide information on what kinds of assets, purchased services, personnel and other costs for the relevant accounting period incurred
- represent an outflow of resources in terms of money for a specific purpose
- beginning to be observed as:
  - decrease of assets (cash outflow or loss previously purchased property, which is now fully consumed or gradually worn out)
  - increase of liabilities (when the cost in terms of time occurs before there is a cash payment - eg. payroll employees)

Accounting cost is the recorded cost of an activity. An accounting cost is recorded in the ledgers of a business, so the cost appears in an entity's financial statements.

If an accounting cost has not yet been consumed and is equal to or greater than the capitalization limit of a business, the cost is recorded in the balance sheet. If an accounting cost has been consumed, the cost is recorded in the income statement. If cash has been expended in association with an accounting cost, the related cash outflow appears in the statement of cash flows. A dividend has no accounting cost, since it is a distribution of earnings to investors.

An accounting cost is most typically recorded via the accounts payable system. It can also be recorded through a journal entry for individual transactions, or through the payroll system for compensation-related costs.

The scope of an accounting cost can change, depending on the situation. For example, a manager wants to know the accounting cost of a product. If this information is needed for a short-term pricing decision, only the variable costs associated with the product need to be included in the accounting cost. However, if the information is needed to set a long-term price that will cover the company's overhead costs, the scope of the accounting cost will be broadened to include an allocation of fixed costs.

### ➤ classification

Cost classification involves the separation of a group of expenses into different categories. A classification system is used to bring to management's attention certain costs that are considered more crucial than others, or to engage in financial modelling.

Evidence cost is recognized in the accounts. Accounting is suitable for those needs to classify to:

- **Financial Accounting** - focused on the enterprise as a whole
- **Managerial (internal) accounting**, it includes:
  - Cost (operating) accounting, which focuses on:
    - a) monitoring of actual costs in terms of internal departments and performance.
    - b) management of internal departments - must know how costs and revenues, all of which can be quantified the economic result
  - it provides the necessary information for operational management and is basically still accounting. To financial accounting supplies information:
    - 1. the change in inventories produced internally, by activation of the performance, the valuation of inventories and other outputs generated by their activities,
    - 2. costs, revenues of internal departments,
    - 3. incurred costs for the corporate and internal performance,
    - 4. ensures control of formation costs (interim and subsequent),
    - 5. will provide an overview of economic activities for managers in terms of performance and components of enterprise
  - closely connected and calculations and budgeting.

Generally, the cost therefore can be found in the following areas:

#### a) the costs shown in Financial Accounting

- see Classification of accounts: class 5 – Costs, groups:
  - 50 - Consumed purchases
  - 51 - Consumed services
  - 52 - Personal costs
  - 53 - Taxes and fees
  - 54 - Other operating costs
  - 55 - Depreciation, reserves, reserves and prepaid expenses period and adjustments relating to operating activities
  - 56 - Financial costs
  - 57 - Reserves and adjustments relating to financial activity
  - 58 - Change in inventory and activation
  - 59 - Income tax, transfer accounts

#### b) the expenses for Tax purposes

- related to national economic regulation and the intent is to divide the costs into two groups:
  1. expenses not included in the tax base
  2. expenses which is deducted from the tax base

#### c) the costs shown in Managerial (Internal) accounting

- *costs (expenses)* = monetised cost effective use of resources for economic growth of property business purpose related to the implementation of the objects of the company
- characteristics: monetary terms (cost – cash; consumption – natural), efficiency (spending of economic resources is rational and reasonable outcome of)
- cost reduction is a major source of profit growth and business efficiency. Efficiency understand the firm's ability to assess the resources embedded in the business. Its quantitative indication is based on comparing incurred inputs and outputs achieved - see financial analysis tasks.
- here are several types of cost classifications:
  - **Fixed and variable costs.** Expenses are separated into variable and fixed cost classifications, and then variable costs are subtracted from revenues to arrive at a company's contribution margin. This information is used for break-even analysis.
  - **Departmental costs.** Expenses are assigned to the departments responsible for them. This information is used on a trend line to examine the ability of each department manager to control his or her assigned costs.
  - **Distribution channel costs.** Expenses are separated into each of the distribution channels used, such as retail, wholesale, and Internet store. The aggregate amount of each of these classifications is then subtracted from the related channel revenues to determine channel profit.
  - **Customer costs.** Expenses are classified by individual customer, such as the costs of warranties, returns, and customer service. This information is used to determine individual customer profitability.
  - **Discretionary costs.** Those expenses that can be temporarily reduced or eliminated are classified as discretionary. This approach is used to reduce costs on a temporary basis, particularly when a business anticipates having a brief decline in revenues.

The preceding examples of cost classifications should make it clear that costs can be subdivided in many ways. Only a few of these classifications are provided for within the formal accounting system (mostly to classify costs by department). Other types of classifications must be performed manually, usually with an electronic spreadsheet.

## 7.3 REVENUES

### ➤ definition and usage

- in accordance with the Conceptual Framework for IAS/IFRS revenues are characterized as increases in economic benefits
- an indicator of economic activity of the enterprise (individual)
- constitute a payment (whether received or yet unrealized) results from the sale of the undertaking, respectively payment for the consumed components of business assets
- beginning to be observed as:
  - increase of assets (ie. Increase in cash, an increase in receivables, etc.).
  - decrease of liabilities

### ➤ classification

#### a) the revenues for Tax purposes:

- tax deductible
- non-tax deductible

#### b) the revenues shown in Financial Accounting:

- see Classification of accounts: class 6 – Revenues, groups:
  - 60 - Revenues for own products and merchandise
  - 64 - Other operating revenues
  - 66 - Financial revenues
  - 69 - Transfer accounts

### Operating revenue

Operating revenue is the sales associated with the normal daily operations of a business. For example, the meals sold by a restaurant would generate operating revenue, while the sale of its delivery van would instead generate a profit or loss. The concept of operating revenue is important, because it reveals the core sales productivity of a business. Operating revenue information is especially valuable when tracked on a trend line, since it can reveal spikes or declines in sales activity that could indicate a long-term trend.

What constitutes operating revenue can be difficult to resolve, especially when a business is transitioning out of one product line or industry and into another. In this situation, it is possible that the revenues associated with both areas are operating revenue, but that the one related to the new area is more important, since this is the direction in which the company is headed.

### Sales revenue

Sales revenue is the amount realized by a business from the sale of goods or services. This figure is used to define the size of a business. The concept can be broken down into two variations, which are:

**Gross sales revenue.** Includes all receipts and billings from the sale of goods or services; does not include any subtractions for sales returns and allowances.

**Net sales revenue.** Subtracts sales returns and allowances from the gross sales revenue figure.

This variation better represents the amount of cash that a business receives from its customers.

Sales revenue is typically reported for a standard period of time, such as a month, quarter, or year, though other non-standard intervals can be used. The key figure against which sales revenue is compared is net profits, so that the analyst can see the percentage of sales revenue that is being converted into profits. This net profit percentage is usually tracked on a trend line, to see if there are any material changes in performance. Investors also like to track sales revenue on a trend line, and especially the percentage rate of growth, to see if there is any evidence of changes in the growth rate. A declining growth rate may trigger a sell-off among shareholders.

## Financial revenue

Financial revenues form revenues from interest, rent, and other such income earned in owning or renting an asset or property.

**Principles** for accounting of costs and revenues:

- items increasing costs are recognized usually on the side of the credit of cost's accounts,
- items increasing revenues are recognized usually on the side of the debit revenue's accounts,
- costs and revenues are accounted for by species (economically homogeneous costs and revenues)
- costs and revenues are recognized in each of the accounting period to which they relate,
- at the cost and revenue accounts are charged an incremental basis from the beginning of the financial year,
- the final states of cost and expense accounts are translated at the period end on account 710 - Profit and loss account, which permits an entity to determine profit for the entire accounting period.

## 7.4 FINDINGS OF ECONOMIC RESULT – PROFIT/LOSS

Comparing the revenues and costs of the entity to establish the result (profit or loss). In accounting terms, this comparison is made at the end of the reporting period on account 710 - Profit and loss account.

### PROFIT/LOSS

- an important goal of an enterprise (until recently the main; today - maximizing the company's market value) - to make a profit
- it can be defined as the difference between revenues and costs (expenses), and generally it can be called the result (profit/loss)
- profit/loss is an indicator that reflects the performance of the business
- costs and revenues are divided for the purpose of finding profit into 2 groups:

a) operational (Acc. group: 50-55, 58 and 60-64),

b) financial (Acc. group: 56-57 and 66),

- in light of the above breakdown of the profit in the income statement also consists of 2 components:

**1) Operating profit/loss**

**2) Financial profit/loss**

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**= Profit/loss of current accounting period**

(note: Extraordinary profit/loss was from 2016 cancelled.)

A Profit/loss Statement can be prepared according to the purpose or type classification:

#### ➤ **Type structure**

- used by the most companies. We can characterize it as specific type of costs that were spent for specific purpose.
- for example: consumption of material, goods, energy, payroll, etc.

#### ➤ **Purpose structure (by function)**

- this classification specifies the relation of costs to their origin
- they are divided according to the relation to the following processes:
  - technological costs (incur only during technological production of a given product),

- direct and indirect costs.

### 7.4.1 Type of profit/loss (earning, income)

There are several important profit measures in common use. Note that the words earnings, profit and income are used as substitutes in some of these terms.

**Gross profit** equals sales revenue minus cost of goods sold, thus removing only the part of expenses that can be traced directly to the production or purchase of the goods. Gross profit still includes general (overhead) expenses like R&D, S&M, G&A, also interest expense, taxes and extraordinary items.

**Earnings before interest, taxes, depreciation, and amortization (EBITDA)** equals sales revenue minus cost of goods sold and all expenses except for interest, amortization, depreciation and taxes. It measures the cash earnings that can be used to pay interest and repay the principal. Since the interest is paid before income tax is calculated, the debt holder can ignore taxes.

**Earnings before interest and taxes (EBIT)** or operating profit equals sales revenue minus cost of goods sold and all expenses except for interest and taxes. This is the surplus generated by operations. It is also known as Operating Profit Before Interest and Taxes (OPBIT) or simply Profit Before Interest and Taxes (PBIT).

**Earnings before taxes (EBT)** or net profit before tax equals sales revenue minus cost of goods sold and all expenses except for taxes. It is also known as pre-tax book income (PTBI), net operating income before taxes or simply pre-tax income.

**Net income** or earnings after tax or net profit after tax equals sales revenue after deducting all expenses, including taxes (unless some distinction about the treatment of extraordinary expenses is made). In the US, the term net income is commonly used. Income before extraordinary expenses represents the same but before adjusting for extraordinary items.

**Retained earnings** equals earnings after tax minus payable dividends.

To accountants, **economic profit**, or EP, is a single-period metric to determine the value created by a company in one period—usually a year. It is earnings after tax less the equity charge, a risk-weighted cost of capital. This is almost identical to the economists' definition of economic profit.

## 7.5 Format of Profit/loss statement



Minimum compulsory information under  
Regulation 500/2002 Coll.

## PROFIT/LOSS ACCOUNT

as at December 31st, 2017

(in thousands of Czech Crowns)

### TYPE CLASSIFICATION

IC

Commercial name or other name of  
an accounting unit

Registered office or adress of an  
accounting unit

	Profit/Loss Account	Row	Current period 1	Previous period 2
a	b	c		
I.	Revenues from the sale of own products and services	01	0	0
II.	Revenues from sold goods	02	0	0
A.	Production consumption (r. 04 + 05 + 06)	03	0	0
1.	Expenses on sold goods	04	0	0
2.	Consumption of material and energy	05	0	0
3.	Services	06	0	0
B.	Change in inventory of own products (+/-)	07	0	0
C.	Capitalisation (-)	08	0	0
D.	Personal expenses (r. 10 + 11)	09	0	0
1.	Wages and salaries	10	0	0
2.	Social security, health insurance and other expenses (r. 12 + 13)	11	0	0
2. 1	Social security and health insurance expenses	12	0	0
2. 2	Other expenses	13	0	0
E.	Value adjustments in the operational area (r. 15 + 18 + 19)	14	0	0
1.	Value adjustments of intangible and tangible fixed assets (r. 16 + 17 )	15	0	0
1. 1	Value adjustments of intangible and tangible fixed assets - permanent	16	0	0
1. 2	Value adjustments of intangible and tangible fixed assets - temporary	17	0	0
2.	Stock value adjustments	18	0	0
3.	Receivable value adjustments	19	0	0
III.	Other operating revenues (r. 21 + 22 + 23)	20	0	0
III. 1	Revenues from disposals of fixed assets	21	0	0
2	Revenues from disposals of materials	22	0	0
3	Other operating revenues	23	0	0
F.	Other operating expenses (r. 25 to 29)	24	0	0
1.	Net book value of sold fixed assets	25	0	0
2.	Net book value of sold material	26	0	0
3.	Taxes and fees	27	0	0
4.	Reserves and complex deferred costs	28	0	0
5.	Other operating expenses	29	0	0
*	Operating profit/loss (+/-) (r. 01 + 02 - 03 - 07 - 08 - 09 - 14 + 20 - 24)	30	0	0



a	Profit/Loss Account b	Row c	Current period 1	Previous period 2
IV.	<b>Revenues from long-term financial assets - shares (r. 32 + 33)</b>	31	0	0
IV. 1	Revenues from shares - controlled and controlling organizations	32	0	0
2	Other revenues from shares	33	0	0
G.	<b>Costs spent for sold shares</b>	34	0	0
V.	<b>Revenues from other long-term financial assets (r. 36 + 37)</b>	35	0	0
V. 1	Revenues from other long-term financial assets - controlled and controlling organizations	36	0	0
2	Revenues from other long-term financial assets	37	0	0
H.	<b>Costs related to other fixed financial assets</b>	38	0	0
VI.	<b>Interest revenues (r. 40 + 41)</b>	39	0	0
VI. 1	Interest revenues - controlled and controlling organizations	40	0	0
2	Other interest revenues	41	0	0
I.	<b>Value adjustments and reserves in the financial area</b>	42	0	0
J.	<b>Interest expenses (r. 44 + 45)</b>	43	0	0
1.	Interest expenses - controlled and controlling organizations	44	0	0
2.	Other interest expenses	45	0	0
VII.	<b>Other financial revenues</b>	46	0	0
K.	<b>Other financial expenses</b>	47	0	0
*	<b>Profit/Loss from financial operations ( +/- )</b> (r. 31 - 34 + 35 - 38 + 39 - 42 - 43 + 46 - 47)	48	0	0
**	<b>Profit/Loss before tax (+/-) (r. 30 + 48)</b>	49	0	0
L.	<b>Income tax (r. 51 + 52)</b>	50	0	0
1.	Income tax - due tax	51	0	0
2.	Income tax - tax deferred	52	0	0
**	<b>Profit/Loss after tax ( +/- ) (r. 49 - 50)</b>	53	0	0
M.	<b>Transfer profit (loss) to partners (+/-)</b>	54	0	0
***	<b>Profit/Loss of current accounting period (+/-) (r. 53 - 54)</b>	55	0	0
*	<b>Net turnover for the accounting period = I. + II. + III. + IV. + V. + VI. + VII</b>	56	0	0

## 8 FINANCIAL STATEMENTS: NOTES (ANNEX, SUPPLEMENT, APENDIX) OF FINANCIAL STATEMENTS

### 8.1 definitions

Financial statements are intended to be understandable by readers who have a reasonable knowledge of business and economic activities and accounting and who are willing to study the information diligently.

The general purpose of the financial statements is to provide information about the results of operations, financial position, and cash flows of an organization. This information is used by the readers of financial statements to make decisions regarding the allocation of resources.

Notes to financial statements (notes) are additional information added to the end of financial statements that help explain specific items in the statements as well as provide a more comprehensive assessment of a company's financial condition. Notes to financial statements can include information on debt, going concern criteria, accounts, contingent liabilities or contextual information explaining the financial numbers (e.g. to indicate a lawsuit).

The notes clarify individual statement line-items. For example, if a company lists a loss on a fixed asset impairment line in their income statement, notes could corroborate the reason for the impairment by describing how the asset became impaired. Notes are also used to explain the accounting methods used to prepare the statements and they support valuations for how particular accounts have been computed.

As a group, the entire set of financial statements can also be assigned several additional purposes, which are, for example:

- Credit decisions. Lenders use the entire set of information in the financials to determine whether they should extend credit to a business, or restrict the amount of credit already extended.
- Investment decisions. Investors use the information to decide whether to invest, and the price per share at which they want to invest. An acquirer uses the information to develop a price at which to offer to buy a business.
- Taxation decisions. Government entities may tax a business based on its assets or income, and can derive this information from the financials.
- Union bargaining decisions. A union can base its bargaining positions on the perceived ability of a business to pay; this information can be gleaned from the financial statements.

In addition, financial statements can be presented for individual subsidiaries or business segments, to determine their results at a more refined level of detail.

#### NOTES TO THE FINANCIAL STATEMENTS IS:

- a mandatory part of the financial statements
- serves to assess the overall financial and property situation, especially in time comparability (policy stability)
- task - in general:
  - comment on and distribute the information contained in the balance sheet, profit and loss statement
  - to add significant information not included in the balance sheet, profit and loss statement, as:
    - they do not belong to the statement items
    - the accounting period ended
- requirements: relevance, usefulness, reliability, neutrality, clarity, comparability - method stability



## 8.2 content

- see type of entity → § 3a Act of Accounting + §39 Edict of Ministry of Finance No. 500/2002:
- The notes to the financial statements includes in full information:
  - a) according to §39 and §39b and is made by the accounting entity which is
    - 1. Large Entity; that entity shall also provide the additional information specified in §39c or
    - 2. the middle accounting unit,
  - b) according to §39 and §39a and is made by the accounting entity, which is
    - 1. a small entity that is required to have the financial statements audited by an auditor, or
    - 2. a micro entity that is required to have the financial statements audited by the auditor.
- The notes to the financial statements summarizes the information under §39 and can be compiled by a small entity and a micro entity that is not required to have the financial statements certified by the auditor.
- form: is not specified: tables, descriptive, combinations (most common)

### Content - ranked in general (see Section §39 for type of units):

- **general data on the entity, eg:**
  - date of establishment of the entity, date of commencement of operations, data on natural and legal persons with significant or decisive influence, description of the organizational structure, average number of employees (aggregated data), etc.)
- **information on the application of general accounting principles, accounting methods used, valuation methods and depreciation**
  - information on deviations from methods + variants of operations (see components of assets, liabilities)
  - for example:
    - the method of determining allowances and allowances for property
    - the method used to convert data in foreign currencies into the Czech currency
    - the method of determining the fair value of the respective assets and liabilities,
- **supplementary information for the balance sheet and the profit and loss statement; e.g.:**
  - identification of items accumulated, their breakdown
  - to indicate significant items not arising either directly or indirectly, in particular:
    - deductions of income tax due for prior periods
    - a breakdown of a deferred tax liability or receivable
    - a breakdown of reserves
    - a breakdown of long-term bank loans including interest rates and a description of credit protection
    - payables of social security premiums and contributions to the state employment policy, the amount of payable public health insurance liabilities
    - the amount of tax arrears recorded at the local financial and customs authorities
    - the amount of receivables held for trading at fair value



- subsidies received for investment and operating purposes
- individual milk reference quantity, individual production quota, individual limit of premium rights and other similar quotas and limits
- animal species information (long-term assets x stock)
- pledge rights
- taking into account the importance of small intangible and tangible assets
- overdue receivables and payables
- eventually. changes in equity (if not separately), etc.

➤ **other important information, eg.:**

- significant events occurring after the balance sheet date up to the date of preparation of the financial statements (eg. natural disasters, lawsuits, etc.)
- rewards to the statutory auditor or audit firm
- number and nominal value of issued shares during the accounting period, etc.



## 9 FINANCIAL STATEMENTS: STATEMENT OF CASH FLOW

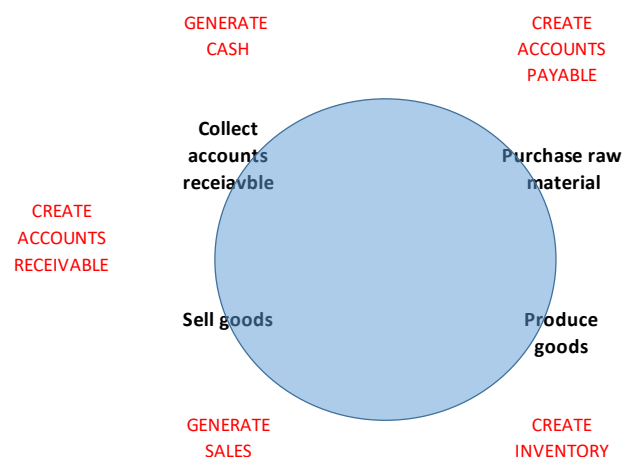
### 9.1 definitions

Information about the cash flows of an entity is useful in providing users of financial statements with a basis to assess the ability of the entity to generate cash and cash equivalents and the needs of the entity to utilise those cash flows. The economic decisions that are taken by users require an evaluation of the ability of an entity to generate cash and cash equivalents and the timing and certainty of their generation.

#### Statement of Cash Flow

= cash flow: "cash" - money and "flow" - flow, sometimes used term net cash income. The basic question of doing business: How much money is needed? (see the operating (business, property) cycle):

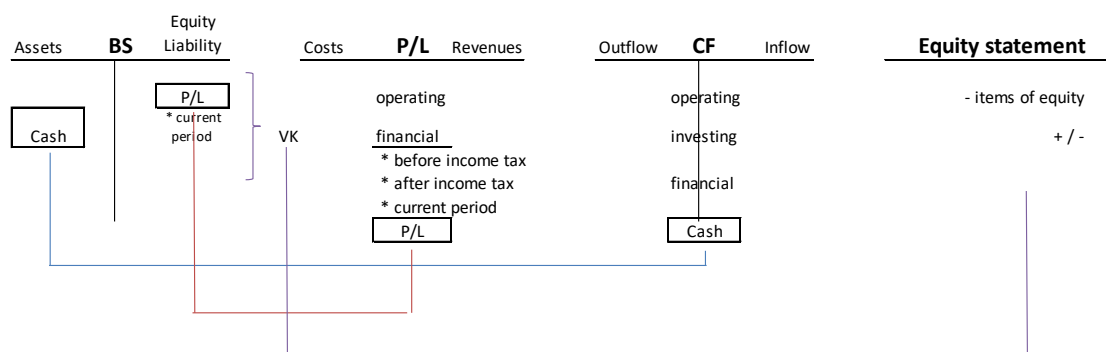
Figure 11 Operating cycle



Source: author

= each  $\uparrow$  assets  $\rightarrow$   $\downarrow$  money

Figure 12 Basic links between the statements



Source: author

Figure 13 Impact of accounting operations on other statements

CASH FLOW		BALANCE SHEET		PROFIT/LOSS STATEMENT	
Inflow	Outflow	Assets	Equity/liability	Expenses	Revenues
←		1		→	
←		2		→	
←		3		→	
←		4		→	
←		5		→	
←		6		→	
←		7		→	
←		8		→	
←		9		→	
←		10		→	

Source: author

Accounting system (double-entry); so-called accrual principle have four basic types of accounting operations with a different impact on cash flow:

1. Effective (influencing PP) and non-profitable.
2. Profitable (affect profit) and do not affect the funds.
3. Profitable and financially effective.
4. Does not affect profit or cash.

→ Transformation of costs (expense) and revenues into outflow (expenditures) and inflow.

Tax records is more easy, because there are only monitoring inflow/outflow → ie cash flow.

## 9.2 Profit and cash

Whilst a business entity might be profitable this does not mean it will be able to survive. To achieve this a business entity needs cash to be able to pay its debts. If a business entity could not pay its debts it would become insolvent and could not continue to operate.

The main reason for this problem is that profit is not the same as cash flow. Profits (from the statement of profit or loss) are calculated using the accruals basis. Most goods and services are sold on credit so that, at the point of sale, revenue is recognised but no cash is received. The same can be said of purchases made on credit. There are also a number of expenses that are recognised that have no cash impact - depreciation is a good example of this. Therefore, it is possible for a business entity to be profitable but have insufficient cash available to pay its suppliers.

For this reason it is important that users of the financial statements can assess the cash position of a business entity at the end of the year but also how cash has been generated and used by the business entity during the accounting period. In the case of limited liability entities, IAS 7 requires that (with very few exceptions) a statement of cash flows is included as part of the annual financial statements that corporate business entities make available to shareholders and other users of that information.

Cash flow concepts: liquidity, liquidity, solvency, insolvency (primary, secondary), flow and status item. Cash flow we

need for internal or external use.

Users of an entity's financial statements are interested in how the entity generates and uses cash and cash equivalents. This is the case regardless of the nature of the entity's activities and irrespective of whether cash can be viewed as the product of the entity, as may be the case with a financial institution. Entities need cash for essentially the same reasons however different their principal revenue-producing activities might be. They need cash to conduct their operations, to pay their obligations, and to provide returns to their investors. Accordingly, this Standard requires all entities to present a statement of cash flow.

A statement of cash flow, when used in conjunction with the rest of the financial statements, provides information that enables users to evaluate the changes in net assets of an entity, its financial structure (including its liquidity and solvency) and its ability to affect the amounts and timing of cash flows in order to adapt to changing circumstances and opportunities. Cash flow information is useful in assessing the ability of the entity to generate cash and cash equivalents and enables users to develop models to assess and compare the present value of the future cash flows of different entities. It also enhances the comparability of the reporting of operating performance by different entities because it eliminates the effects of using different accounting treatments for the same transactions and events.

### Cash flow management

As mentioned above, cash flow is vital to the survival of a business entity both in the long and the short term. To reflect this, one of the key measures of the health of a business is solvency or liquidity. These concepts will be discussed at greater length in the interpretations chapter.

In summary, management have various liquid assets at their disposal that they can use to settle their debts in the short term. These include inventory, receivables and cash (i.e. current assets). They are used to pay off overdrafts, trade payables, loan interest and tax balances (i.e. current liabilities).

Management should maintain sufficient current assets to be able to pay their current liabilities as they fall due. If they do not, they will default on their payments, lose supplier goodwill or suffer fines and sanctions. In the worst case scenario a supplier, lender or tax authority may even have a business entity declared insolvent in an attempt to recover amounts due to them.

To ensure an effective balance, management must consider inventory production and storage cycles and have an effective system of credit control to ensure cash is received as soon as possible. On the flip side it must also manage the level of debt it is exposed to.

### The benefits of a statement of cash flow

A statement of cash flows is needed as a consequence of the differences between profits and cash, as explained earlier. It helps to assess:

- liquidity and solvency – an adequate cash position is essential in the short term both to ensure the survival of the business entity and to enable debts and dividends to be paid.
- financial adaptability – will the business entity be able to take effective action to alter its cash flows in response to any unexpected events?
- future cash flows – an adequate cash position in the longer term is essential to enable asset replacement, repayment of debt and fund further expansion.

The bottom line is: cash flow means survival. A business entity may be profitable but, if it does not have an adequate cash position, it may not be able to pay its debts, purchase goods for resale, pay its employees etc.

The statement of cash flows also highlights how cash is being generated, i.e. either from operating, financing or investing activities. A business entity must be self-sufficient in the long term; in other words, it must generate operating cash inflows or it will be reliant on the sale of assets or further finance to keep it afloat.

Cash flows are also objective; they are matters of fact, whereas the calculation of profit is subjective and easy to manipulate.

## 9.3 Terminology

### Basic terms include:

Cash comprises cash on hand and demand deposits.

Cash equivalents are short-term, highly liquid investments that are readily convertible to known amounts of cash and which are subject to an insignificant risk of changes in value.

Cash flows are inflows and outflows of cash and cash equivalents.

Operating activities are the principal revenue-producing activities of the entity and other activities that are not investing or financing activities.

Investing activities are the acquisition and disposal of long-term assets and other investments not included in cash equivalents.

Financing activities are activities that result in changes in the size and composition of the contributed equity and borrowings of the entity.

Cash equivalents are held for the purpose of meeting short-term cash commitments rather than for investment or other purposes. For an investment to qualify as a cash equivalent it must be readily convertible to a known amount of cash and be subject to an insignificant risk of changes in value. Therefore, an investment normally qualifies as a cash equivalent only when it has a short maturity of, say, three months or less from the date of acquisition. Equity investments are excluded from cash equivalents unless they are, in substance, cash equivalents, for example in the case of preferred shares acquired within a short period of their maturity and with a specified redemption date.

Bank borrowings are generally considered to be financing activities. However, in some countries, bank overdrafts which are repayable on demand form an integral part of an entity's cash management. In these circumstances, bank overdrafts are included as a component of cash and cash equivalents. A characteristic of such banking arrangements is that the bank balance often fluctuates from being positive to overdrawn.

Cash flows exclude movements between items that constitute cash or cash equivalents because these components are part of the cash management of an entity rather than part of its operating, investing and financing activities. Cash management includes the investment of excess cash in cash equivalents.

## 9.4 Presentation of a statement of cash flow

The statement of cash flow shall report cash flows during the period classified by operating, investing and financing activities.

An entity presents its cash flows from operating, investing and financing activities in a manner which is most appropriate to its business. Classification by activity provides information that allows users to assess the impact of those activities on the financial position of the entity and the amount of its cash and cash equivalents. This information may also be used to evaluate the relationships among those activities.

A single transaction may include cash flows that are classified differently. For example, when the cash repayment of a loan includes both interest and capital, the interest element may be classified as an operating activity and the capital element is classified as a financing activity.

### Format of a statement of cash flows

IAS 7 Statement of Cash Flows requires business entities to prepare a statement of cash flows as part of their annual financial statements. The cash flows must be presented using standard headings. Note: There are two methods of reconciling cash from operating activities, which will be discussed later in this chapter.

You should ensure that you understand the items that are included within each of the three sections of the statement of cash flows, together with the reconciliation of the net increase or decrease in cash and equivalents for the year.

## Statement of cash flows for the period ended 31 December XXX

### **Cash flows from operating activities**

Cash generated from operations

Interest paid

Income taxes paid

*Net cash flow from operating activities*

### **Cash flows from investing activities**

Purchase of property, plant and equipment

Proceeds of sale of equipment

Interest received

Dividends received

*Net cash flow from investing activities*

### **Cash flows from financing activities**

Proceeds of issue of shares

Receipt of new loans

Repayment of loans

Dividends paid

*Net cash flow from financing activities*

### ***Net increase (decrease) in cash and cash equivalents***

***Cash and cash equivalents at the beginning of the period***

***Cash and cash equivalents at the end of the period***

### **Key points**

- Operating activities are the principal revenue-producing activities of the business. This section of the statement begins with profit before tax and is adjusted for various items which have been taken into account in arriving at profit before tax but which do not involve the movement of cash to arrive at 'Cash generated from operations'. This, in turn, is further adjusted to deduct interest paid and tax paid in the year to arrive at 'Net cash flow from operations'. Note that 'Net cash flow from operating activities can be calculated using either the direct or indirect method, and both will be explained and illustrated as the chapter progresses.
- Investing activities are cash spent on non-current assets, proceeds of sale of non-current assets and income from investments.
- Financing activities include the proceeds of issue of shares and long-term borrowings made or repaid.
- Net increase or decrease in cash and cash equivalents is the overall increase (or decrease) in cash and cash equivalents during the year. This can be calculated by comparing the level of cash and cash equivalents included in the statement of financial position at the start and at the end of the accounting period.
- Cash is defined as cash in hand and bank current account balances, including overdrafts.
- Cash equivalents are defined as current asset investments (short-term, highly liquid investments, e.g. a 30 day bond).

### 9.4.1 Operating activities

The amount of cash flows arising from operating activities is a key indicator of the extent to which the operations of the entity have generated sufficient cash flows to repay loans, maintain the operating capability of the entity, pay dividends and make new investments without recourse to external sources of financing. Information about the specific components of historical operating cash flows is useful, in conjunction with other information, in forecasting future operating cash flows.

Cash flows from operating activities are primarily derived from the principal revenue-producing activities of the entity. Therefore, they generally result from the transactions and other events that enter into the determination of profit or loss. Examples of cash flows from operating activities are:

- a) cash receipts from the sale of goods and the rendering of services;
- (b) cash receipts from royalties, fees, commissions and other revenue;
- (c) cash payments to suppliers for goods and services;
- (d) cash payments to and on behalf of employees;
- (e) cash receipts and cash payments of an insurance entity for premiums and claims, annuities and other policy benefits;
- (f) cash payments or refunds of income taxes unless they can be specifically identified with financing and investing activities; and
- (g) cash receipts and payments from contracts held for dealing or trading purposes.

Some transactions, such as the sale of an item of plant, may give rise to a gain or loss that is included in recognized profit or loss. The cash flows relating to such transactions are cash flows from investing activities.

An entity may hold securities and loans for dealing or trading purposes, in which case they are similar to inventory acquired specifically for resale. Therefore, cash flows arising from the purchase and sale of dealing or trading securities are classified as operating activities. Similarly, cash advances and loans made by financial institutions are usually classified as operating activities since they relate to the main revenue-producing activity of that entity.

### 9.4.2 Investing activities

The separate disclosure of cash flows arising from investing activities is important because the cash flows represent the extent to which expenditures have been made for resources intended to generate future income and cash flows. Only expenditures that result in a recognised asset in the statement of financial position are eligible for classification as investing activities. Examples of cash flows arising from investing activities are:

- (a) cash payments to acquire property, plant and equipment, intangibles and other long-term assets. These payments include those relating to capitalised development costs and self-constructed property, plant and equipment;
- (b) cash receipts from sales of property, plant and equipment, intangibles and other long-term assets;
- (c) cash payments to acquire equity or debt instruments of other entities and interests in joint ventures (other than payments for those instruments considered to be cash equivalents or those held for dealing or trading purposes);
- (d) cash receipts from sales of equity or debt instruments of other entities and interests in joint ventures (other than receipts for those instruments considered to be cash equivalents and those held for dealing or trading purposes);
- (e) cash advances and loans made to other parties (other than advances and loans made by a financial



institution);

(f) cash receipts from the repayment of advances and loans made to other parties (other than advances and loans of a financial institution);

(g) cash payments for futures contracts, forward contracts, option contracts and swap contracts except when the contracts are held for dealing or trading purposes, or the payments are classified as financing activities; and

(h) cash receipts from futures contracts, forward contracts, option contracts and swap contracts except when the contracts are held for dealing or trading purposes, or the receipts are classified as financing activities.

When a contract is accounted for as a hedge of an identifiable position, the cash flows of the contract are classified in the same manner as the cash flows of the position being hedged.

### 9.4.3 Financing activities

The separate disclosure of cash flows arising from financing activities is important because it is useful in predicting claims on future cash flows by providers of capital to the entity. Examples of cash flows arising from financing activities are:

(a) cash proceeds from issuing shares or other equity instruments;

(b) cash payments to owners to acquire or redeem the entity's shares;

(c) cash proceeds from issuing debentures, loans, notes, bonds, mortgages and other short or long-term borrowings;

(d) cash repayments of amounts borrowed; and

(e) cash payments by a lessee for the reduction of the outstanding liability relating to a finance lease.

## 9.5 Methodology

### Reporting cash flows from operating activities

An entity shall report cash flows from operating activities using either:

(a) the direct method, whereby major classes of gross cash receipts and gross cash payments are disclosed; or

(b) the indirect method, whereby profit or loss is adjusted for the effects of transactions of a non-cash nature, any deferrals or accruals of past or future operating cash receipts or payments, and items of income or expense associated with investing or financing cash flows.

Entities are encouraged to report cash flows from operating activities using the direct method. The direct method provides information which may be useful in estimating future cash flows and which is not available under the indirect method. Under the **direct method**, information about major classes of gross cash receipts and gross cash payments may be obtained either:

(a) from the accounting records of the entity; or

(b) by adjusting sales, cost of sales (interest and similar income and interest expense and similar charges for a financial institution) and other items in the statement of comprehensive income for:

(i) changes during the period in inventories and operating receivables and payables;

(ii) other non-cash items; and

(iii) other items for which the cash effects are investing or financing cash flows.

Under the **indirect method**, the net cash flow from operating activities is determined by adjusting profit or loss for the effects of:

- (a) changes during the period in inventories and operating receivables and payables;
- (b) non-cash items such as depreciation, provisions, deferred taxes, unrealised foreign currency gains and losses, undistributed profits of associates, and non-controlling interests; and
- (c) all other items for which the cash effects are investing or financing cash flows.

Alternatively, the net cash flow from operating activities may be presented under the indirect method by showing the revenues and expenses disclosed in the statement of comprehensive income and the changes during the period in inventories and operating receivables and payables.

The indirect method of presenting cash flows from operating activities relies upon information that is disclosed in the financial statements, or can be calculated from information disclosed in the financial statements. The starting point is normally profit before tax, which is then adjusted to remove any non-cash items or accruals-based figures included in the statement of profit or loss. The following are examples of adjustments that are normally required when preparing cash flows from operating activities using the indirect method:

- Depreciation – added back to profit before tax because it is a non-cash expense
- Loss on disposal of non-current assets - the loss a non-cash expense and is added back to profit before tax: the cash proceeds on disposal will be classified as an investing activity cash inflow. Note that a gain on disposal is deducted from profit before tax
- Interest payable expense – added back to profit before tax because it is not part of cash generated from operations (the cash payment is deducted elsewhere in the statement of cash flows – refer to the proforma statement)
- Increase/decrease in inventory – inventory represents purchases made in one accounting period, but which will be charged against profit in another accounting period. An increase in inventory is deducted from profit before tax as it represents a cash outflow to pay for the additional inventory. A decrease in inventory is added to profit before tax as it represents a cash inflow from disposing of inventory
- Increase/decrease in trade receivables – trade receivables represent revenue recognised in profit or loss in one accounting period, whilst the cash will be received in the following accounting period. An decrease in receivables is added to profit before tax as it represents a cash inflow as more cash has been collected from receivables. An increase in trade receivables is therefore deducted from profit before tax
- Increase/decrease in trade payables – trade payables represent purchases made in one accounting period which will be paid for in the following accounting period. An increase in trade payables means that the business entity has had the use or benefit of goods and services provided, but not yet paid for them. As such, it preserves cash resources within the business and is added back to profit before tax. A decrease in trade payables indicates that more payables have been paid off, and will therefore be deducted from profit before tax as a cash outflow.

Figure 14 Impact of accounting items on cash flow

Items		Impact on CF
Assets	+	—
Assets	—	+
	Equity/liability	+
	Equity/liability	—
Revenue	YES	—
Expense	YES	+
Inflow	YES	+
Outflow	YES	—

Source: author

### Reporting cash flows from investing and financing activities

An entity shall report separately major classes of gross cash receipts and gross cash payments arising from investing and financing activities, except to the extent that cash flows described in paragraphs 22 and 24 are reported on a net basis.

**Investing activities** cash inflows may include:

- interest received
- dividends received
- proceeds of sale of non-current assets.

Cash outflows may include:

- purchase of property, plant and equipment.

**Cash inflows from financing activities** may include:

- proceeds of the issue of shares
- proceeds of receipt of loans/debentures.

Cash outflows may include:

- repayment of loans/debentures
- dividends paid
- interest paid.

### Reporting cash flows on a net basis

Cash flows arising from the following operating, investing or financing activities may be reported on a net basis:

- (a) cash receipts and payments on behalf of customers when the cash flows reflect the activities of the customer rather than those of the entity; and
- (b) cash receipts and payments for items in which the turnover is quick, the amounts are large, and the maturities are short.

Examples of cash receipts and payments are:

- (a) the acceptance and repayment of demand deposits of a bank;
- (b) funds held for customers by an investment entity; and
- (c) rents collected on behalf of, and paid over to, the owners of properties.

Examples of cash receipts and payments referred are advances made for, and the repayment of:

- (a) principal amounts relating to credit card customers;
- (b) the purchase and sale of investments; and
- (c) other short-term borrowings, for example, those which have a maturity period of three months or less.

Cash flows arising from each of the following activities of a financial institution may be reported on a net basis:

- (a) cash receipts and payments for the acceptance and repayment of deposits with a fixed maturity date;
- (b) the placement of deposits with and withdrawal of deposits from other financial institutions; and
- (c) cash advances and loans made to customers and the repayment of those advances and loans.

#### Resources for cash flow calculation:

→ accounting:

- balance sheet accounts
- profit accounts
- synthetic accounts
- analytical accounts
- statements from bank accounts
- cash book
- book of books (accounts, records) of cash equivalents

#### Is better cash flow than profit/loss?

Yes → CF:

- is not affected by the depreciation method
- Not distorted by time difference
- the implementation principle is not applied here (transfer of ownership increases receivables, not PP)
- does not affect the precautionary principle (creation of OP, reserves)

## 9.6 Format of Statement of Cash Flow



Minimum compulsory information under  
Regulation 500/2002 Coll.

## CASH FLOW STATEMENT

Commercial name or other name  
of an accounting unit

**as at December 31st, 2017**  
(in thousands of Czech Crowns)

Registered office or adress of  
an accounting unit

<b>P. Balance of cash on hand and financial equivalents as at the beginning of reporting period</b>	<b>0</b>
<b>Cash flows from running activities</b>	
Z. Accounting profit/loss from running activities before taxation	0
A. 1 Adjustments by non-cash operations	0
A. 1 1 Depreciation of fixed assets and amortization of adjustments to acquired assets	0
A. 1 2 Change in balance of adjustments, reserves	0
A. 1 3 Profit from sales of fixed assets	0
A. 1 4 Revenue from shares in profit	0
A. 1 5 Accounted for interest expense, exclusive of interest capitalization and accounted for credit interest	0
A. 1 6 Possible adjustments by other non-cash operations	0
A. * <b>Net cash flow from running activities before taxation, changes in working capital</b>	<b>0</b>
A. 2 Change in non-cash items of working capital	0
A. 2 1 Change in balance of receivables from running activities, temporary assets accounts	0
A. 2 2 Change in balance of short-term payables from running activities, temporary liability accounts	0
A. 2 3 Change in balance of inventory	0
A. 2 4 Change in balance of current liquid assets not included in cash or equivalents	0
A. ** <b>Net cash flow from running activities before taxation</b>	<b>0</b>
A. 3 Paid interest with the exception of interest included in fixed assets pricing	0
A. 4 Interests received	0
A. 5 Income tax for running activities and additional tax assessments for previous periods	0
A. 6 Income and expense on unusual and/or extraordinary items, including income tax	0
A. *** <b>Net cash flow from running activities</b>	<b>0</b>
<b>Cash flows from investing activities</b>	
B. 1 Expense on fixed assets acquisition	0
B. 2 Income from fixed assets sales	0
B. 3 Loans to related parties	0
B. *** <b>Net cash flow from investing activities</b>	<b>0</b>
<b>Cash flows from financing activities</b>	
C. 1 Change in balance of long-term or short-term payables	0
C. 2 Impact of changes in equity on cash on hand and financial equivalents	0
C. 2 1 Increase in cash on hand as a result of increased registered capital, share premium etc.	0
C. 2 2 Payment of share in equity to partners	0
C. 2 3 Other contributions of cash by partners and shareholders	0
C. 2 4 Loss coverage by partners	0
C. 2 5 Direct debit fund payments	0
C. 2 6 Paid shares in profit, including taxes paid	0
C. *** <b>Net cash flow from financing activities</b>	<b>0</b>
<b>F. Net increase/decrease in cash on hand</b>	<b>0</b>
<b>R. Balance of cash on hand and financial equivalents as at the end of reporting period</b>	<b>0</b>



## 10 FINANCIAL STATEMENTS: STATEMENT OF CHANGES IN EQUITY

### 10.1 definitions

Equity represents the owners' interests in the company. An alternative way of defining it is that it represents what is left in the business when it ceases to trade, all the assets are sold off and all the liabilities are paid. This can then be distributed to the equity holders (ordinary shareholders).

Equity comprises share capital, share premium, and reserves. The main reserves are the revaluation surplus and retained earnings.

#### Revaluation surplus

This is created to recognise the surplus arising when tangible non-current assets (normally land and buildings) are revalued. The gain is not realised so cannot be included in the retained earnings of the entity. However, the gain would still form part of the value repaid to the equity holders if the business were sold off at that point in time.

#### Retained earnings

This represents the sum total of all the profits and losses made by the business since its incorporation and that have not yet been paid to shareholders as a dividend.

As these elements are particularly relevant to shareholders (it helps them value their wealth or 'share of the pie') it is important to ensure the shareholders understand any movements in these balances. For this reason a statement of changes in equity is required. It summarises the opening and closing positions on all these accounts and identifies the reason for the movements in between the two periods.

An entity shall present a statement of changes in equity showing on the face of the statement:

- (a) profit or loss for the period;
- (b) each item of income and expense for the period that, as required by other Standards or by Interpretations, is recognised directly in equity, and the total of these items;
- (c) total income and expense for the period (calculated as the sum of (a) and (b)), showing separately the total amounts attributable to equity holders of the parent and to minority interest; and
- (d) for each component of equity, the effects of changes in accounting policies and corrections of errors recognised in accordance with IAS 8.

A statement of changes in equity that comprises only these items shall be titled a statement of recognised income and expense.

An entity shall also present, either on the face of the statement of changes in equity or in the notes:

- (a) the amounts of transactions with equity holders acting in their capacity as equity holders, showing separately distributions to equity holders;
- (b) the balance of retained earnings (ie accumulated profit or loss) at the beginning of the period and at the balance sheet date, and the changes during the period; and
- (c) a reconciliation between the carrying amount of each class of contributed equity and each reserve at the beginning and the end of the period, separately disclosing each change.

Changes in an entity's equity between two balance sheet dates reflect the increase or decrease in its net assets during the period. Except for changes resulting from transactions with equity holders acting in their capacity as equity holders

(such as equity contributions, reacquisitions of the entity's own equity instruments and dividends) and transaction costs directly related to such transactions, the overall change in equity during a period represents the total amount of income and expenses, including gains and losses, generated by the entity's activities during that period (whether those items of income and expenses are recognised in profit or loss or directly as changes in equity).

## 10.2 Format of Statement of Changes in Equity

Minimum compulsory information under Regulation 500/2002 Coll.		<b>STATEMENT OF CHANGES IN EQUITY</b> <b>as at December 31st, 2017</b> (in thousands of Czech Crowns)				Comercial name or other name of an accounting unit  Registered office or adress of an accounting unit   
		Opening balance	Increase	Decrease	Closing balance	
A.	Authorized capital registered in the Commercial	0	0	0	0	
B.	Authorized capital unregistered in the Commercial Register	0	0	0	0	
C.	Total A +/- B	0	XX	XX	XX	
D.	Own shares and ownership interests	0	0	0	0	
*	Total A +/- B +/- D	XX	XX	XX	0	
E.	Share premuim	0	0	0	0	
F.	Reserve funs	0	0	0	0	
G.	Other funds from earnings	0	0	0	0	
H.	Capital reserve	0	0	0	0	
I.	Differences from revaluation not included in trading loss/prof	0	0	0	0	
J.	Profit of previous reporting periods	0	0	0	0	
K.	Loss of previous reporting periods	0	0	0	0	
L.	Profit/Loss for the reporting period after taxation	XX	0	XX	0	
*	Total	0	0	0	0	

## 11 ANALYSIS OF FINANCIAL STATEMENTS: FINANCIAL ANALYSIS – BASIS METHODS

### 11.1 Definitions

- Financial analysis is the selection, evaluation, and interpretation of financial data and other pertinent information to assist in evaluating the operating performance and financial condition of company.
- Financial analysis is used to evaluate economic trends, set financial policy, build long-term plans for business activity, and identify projects or companies for investment. This is done through the synthesis of financial numbers and data.
- Financial analysis is the process of evaluating businesses, projects, budgets and other finance-related entities to determine their performance and suitability. Typically, financial analysis is used to analyze whether an entity is stable, solvent, liquid or profitable enough to warrant a monetary investment.

Financial analysis uses financial or other information to make recommendations and decisions. One of the most common ways to analyze financial data is to calculate ratios from the data to compare against those of other companies or against the company's own historical performance.

Financial analysis can be conducted in both corporate finance and investment finance settings. In corporate finance, the analysis is conducted internally, using such ratios as net present value and internal rate of return to find projects worth executing. A key area of corporate financial analysis involves extrapolating a company's past performance, such as gross revenue or profit margin, into an estimate of the company's future performance. This allows the business to forecast budgets and make decisions based on past trends, such as inventory levels.

Corporate finance is the area of finance dealing with the sources of funding and the capital structure of corporations, the actions that managers take to increase the value of the firm to the shareholders, and the tools and analysis used to allocate financial resources. The primary goal of corporate finance is to maximize or increase shareholder value. Although it is in principle different from managerial finance which studies the financial management of all firms, rather than corporations alone, the main concepts in the study of corporate finance are applicable to the financial problems of all kinds of firms.

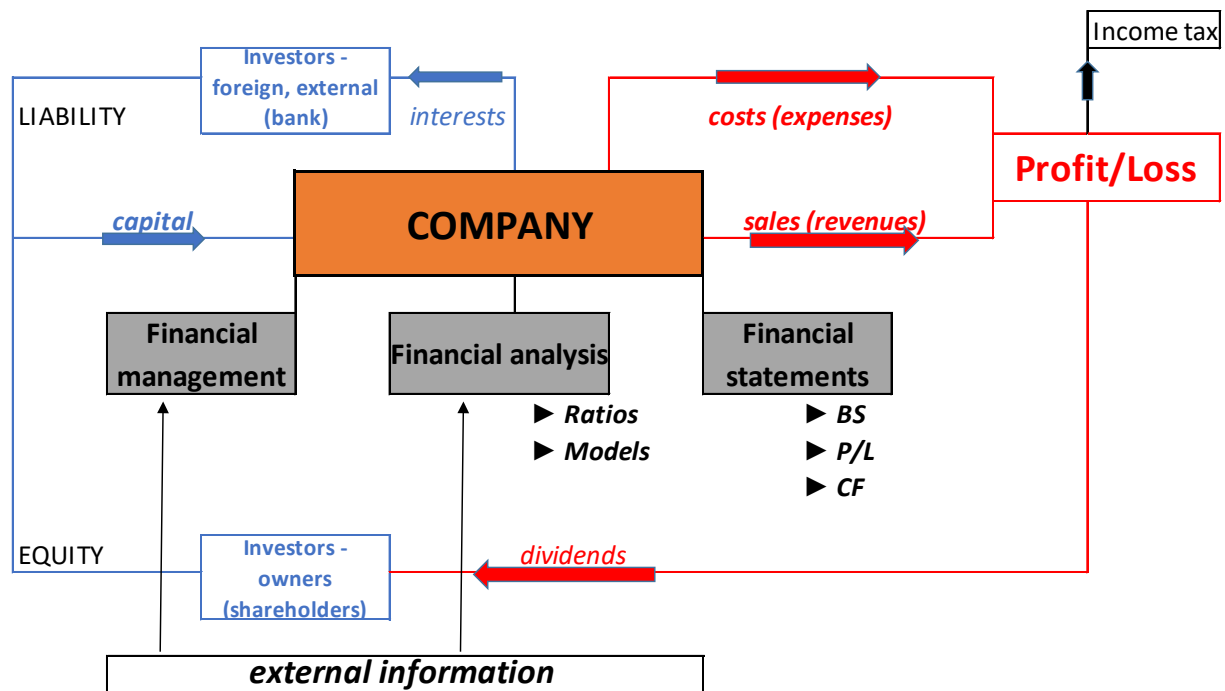
Financial management overlaps with the financial function of the accounting profession. However, financial accounting is the reporting of historical financial information, while financial management is concerned with the allocation of capital resources to increase a firm's value to the shareholders.

The operating performance of a company is a measure of how well a company has used its resources – its assets, both tangible and intangible – to produce a return on its investment. The financial condition of a company is a measure of its ability to satisfy its obligations, such as the payment of interest on its debt in a timely manner.

The analyst must select the pertinent information, analyze it, and interpret the analysis, enabling judgments on the current and future financial condition and operating performance of the company.



Figure 15 Financial flows in the company



Source: lite

The objective of the financial analysis is as a usually:

- assessment of the impact of internal and external business environment
- analysis of previous development
- comparison of analysis results in space
- analysis of relations between indicators (e.g. pyramidal decompositions)
- providing information for decision-making in the future
- analysis of variants of future development and selection of the most suitable variant
- interpretation of the outcome, including a proposal in the financial planning and management

## 11.2 Users of financial analysis

When interpreting financial statements, it is important to ascertain who are the users of accounts and what information they need:

- shareholders and potential investors – primarily concerned with receiving an adequate return on their investment, but it must at least provide security and liquidity
- suppliers and lenders – concerned with the security of their debt or loan
- management – concerned with the trend and level of profits, since this is the main measure of their success.

The people who use accounting information to make decision fall into two categories:

1. Internal users: are owners, managers, employees and other parties who are directly connected with a company.
  - Owners and managers require financial statements to make important business decisions that affect its continued operations. Financial analysis are then performed on these statements to provide management with a more detailed understanding of the figures. These statements are also used as

part of management's report to its stockholders, as it form part of its Annual Report.

- Employees also need these reports in making collective bargaining agreements with the management, in the case of labour unions or for individuals in discussing their compensation, promotion and rankings.
2. External users: are potential investors, banks, government agencies and other parties who are outside the business but need financial information about the business for a diverse number of reasons.
- Those who invest or may invest in a business, and acquire a part ownership are interested in its past success and its potential earnings. A thorough study of a company's financial statements helps potential investors judge the prospects for a profitable investment: After investing in a company, investors must continually review their commitment, again by examining the company's financial statements. Prospective investors make use of financial statements to assess the viability of investing in a business. Financial analyses are often used by investors and is prepared by professionals (financial analysts), thus providing them with the basis in making investment decisions.
  - Financial institutions (banks and other lending companies) use them to decide whether to grant a company with fresh working capital or extend debt securities (such as a long-term bank loan or debentures) to finance expansion and other significant expenditures. Most companies borrow money for both long- and short-term operating needs. Creditors, those who lend money or deliver goods and services before being paid, are interested mainly in whether a company will have the cash to pay interest charges and repay debt at the appropriate time. They study a company's liquidity and cash flow as well as its profitability. Banks, finance companies, mortgage companies, securities firms, insurance firms, suppliers, and other lenders must analyze a company's financial position before they make a loan.
  - Government entities (tax authorities) need financial statements to ascertain the propriety and accuracy of taxes and other duties declared and paid by a company. Government at every level is financed through the collection of taxes. Under federal, state, and local laws, companies and individuals pay many kinds of taxes, including federal, state, and city income taxes, social security and other payroll taxes, excise taxes, and sales taxes. Each tax requires special tax returns and often a complex set of records as well. Proper reporting is generally a matter of law and can be very complicated. The Internal Revenue Code, for instance, contains thousands of rules governing the preparation of the accounting information used in computing federal income taxes.
  - Media and the general public are also interested in financial statements for a variety of reasons.
  - Regulatory Agencies - most companies must report to one or more regulatory agencies at the federal, state, and local levels. Companies that are listed on a stock exchange also must meet the special reporting requirements of their exchange.

### 11.3 Data of financial analysis – accounting, financial statements

Accounting is a very old discipline. Forms of it have been essential to commerce for more than five thousand years. Accounting, in a version close to what we know today, came into widespread use in the 14th century, especially in Italy, where it was instrumental to the development of shipping, trade, construction, and other forms of commerce. This system of double-entry bookkeeping was documented by the famous Italian mathematician, scholar, and philosopher Fra Luca Pacioli (1445-1517).

Today's accountant focuses on the ultimate needs of decision makers who use accounting information, whether those decision makers are inside or outside the business. Accounting is an information system that measures processes, and

communicates financial information about identifiable economic entity. An economic entity is a unit that exists independently; for example: a business, a hospital, or a governmental unit.

Accounting provides a vital service by supplying the information that decision makers need to make reasoned choices among alternative uses of scarce resources in the conduct of business and economic activities. As shown in Figure 1, accounting is a link between business activities and decision makers. First, accounting measures business activities by recording data about them for the future use. Second, the data are stored until needed and then processed become useful information. Third, the information is communicated, through reports, to decision makers. We can say, that data about business activities are input to the accounting system and that useful information for decision makers is the output.

**Financial statements** are the primary means of communicating important accounting information to users. It is helpful to think of these statements as a model of the business enterprise because they show the business in financial terms. As is true of all models, however, financial statements are not perfect pictures of the reality, but rather the accountant's best effort to represent what is real.

For large corporations, these statements are often complex and may include an extensive set of notes to the financial statements and management discussion and analysis. The notes typically describe each item on the balance sheet, income statement and cash flow statement in further detail. Notes to financial statements are considered an integral part of the financial statements.

A complete set of financial statements comprises:

- BALANCE SHEET (IFRS: Statement of financial position)
- PROFIT/LOSS STATEMENT – INCOME STATEMENT (IFRS:
  - Statement of profit or loss and other comprehensive income, or
  - Statement of profit or loss plus a statement showing other comprehensive income)
- NOTES (APPENDIX) TO FINANCIAL STATEMENTS (IFRS: Accounting policies and explanatory notes)
- STATEMENT OF CASH FLOWS
- STATEMENT OF CHANGES IN EQUITY

## 11.4 Classification of financial analysis

There are two types of financial analysis: technical analysis and fundamental analysis.

- Technical analysis may appear complicated on the surface, but it boils down to an analysis of supply and demand in the market to determine where the price trend is headed. In other words, technical analysis attempts to understand the market sentiment behind price trends rather than analyzing a security's fundamental attributes. If you understand the benefits and limitations of technical analysis, it can give you a new set of tools or skills that will enable you to be a better trader or investor over the long-term.
- Fundamental analysis involves analyzing a company's financial statements to determine the fair value of the business, while technical analysis assumes that a security's price already reflects all publicly-available information and instead focuses on the statistical analysis of price movements. Fundamental analysis more – see on figure.

Figure 16 Classification of financial analysis

Analysis of absolute indicators	Ratios analysis		Analysis of systems of indicators / (Financial models / Bankruptcy models)
• Horizontal analysis	• Profitability ratios	= Performance	• DuPont model • Altman Z-score (Z-score formula)
• Vertical analysis	• Activity ratios	= Stability, Position	• Taffler model
	• Liquidity ratios		• IN model (Neumaier) <b>CZ</b>
	• Debt ratios (financial leverage, gearing)		• Clobulos and Grammatikos <b>GR</b>
	• Market ratios		• Theodossiou and Papoulis <b>GR</b>

Source: author

## 11.5 Horizontal Analysis

A horizontal analysis, or trend analysis, is a procedure in fundamental analysis in which an analyst compares ratios or line items in a company's financial statements over a certain period of time. The analyst uses his discretion when choosing a particular timeline; however, the decision is often based on the investing time horizon under consideration.

Horizontal analysis allows investors and analysts to determine how a company has grown over time. Additionally, analysts and investors could use horizontal analysis to compare a company's growth rates in relation to its competitors and industry.

Horizontal analysis looks at the trend of financial statements over multiple periods, using a specified base period or year-over-year change in each line item. With horizontal analysis, we look across the statements.

Example:

Figure 17 Horizontal analysis: Balance sheet – assets

Item	05/04	06/05	07/06	08/07	09/08	10/09	Ø growth
ASSETS - TOTAL	1.09	0.98	1.12	1.02	0.95	1.05	1.0330
Fixed assets	1.09	0.98	1.10	1.04	0.97	1.07	1.0443
- intangible assets	9.88	0.84	1.30	0.97	1.05	0.85	1.4540
- tangible assets	1.09	0.99	1.11	1.05	0.98	1.07	1.0456

- financial assets	0.95	0.94	1.03	0.98	0.89	1.25	<b>1.0010</b>
<b>Current assets</b>	<b>1.10</b>	<b>0.96</b>	<b>1.16</b>	<b>0.98</b>	<b>0.92</b>	<b>1.01</b>	<b>1.0164</b>
- inventory	1.04	0.95	1.10	1.03	0.95	0.96	<b>1.0064</b>
- long-term receivables	0.88	1.13	1.20	0.45	0.91	0.73	<b>0.8419</b>
- short-term receivables	1.02	0.95	1.21	1.00	0.76	1.07	<b>0.9909</b>
- financial assets	1.68	0.99	1.26	0.81	1.10	1.11	<b>1.1278</b>
<b>Accruals</b>	<b>0.84</b>	<b>1.52</b>	<b>0.80</b>	<b>1.00</b>	<b>0.87</b>	<b>0.87</b>	<b>0.9585</b>

Source: Authors' research of the sample of farms

The fact of increasing the growth rate of the value of assets since 2004 is definitely positive. It increased from 107 million CZK to 130 million in the last year of our research (by up to 3.3%). Development of the assets is undoubtedly given by encouraging investment from the Ministry of Agriculture and the European Union through the Operational Programme of Agriculture. To a large extent, however, it is the modernization of existing assets, and therefore there is no significant increase of the asset value. The proof is the highest growth rate of fixed assets of all items of assets (4.4%).

## 11.6 Vertical analysis

With this method of analysis of financial statements, we will look up and down the statement (hence, "vertical" analysis) to see how every line item compares for example to assets, revenues, etc. as a percentage.

The balance sheet and income statement, usually in a simplified format, can be presented in for example in € amounts and then standardized as percentages. In common-size analysis, all balance sheet items are stated as a percentage of total assets and all income statement items as a percentage of sales or total revenues. Abbreviated financial statements for several years and across firms in the industry can provide a useful overview of the operating performance and financial health of the firm. Common-size analysis can be used as a useful starting point for a firm's operations and financial position.

Example:

Figure 18 Vertical analysis: Balance sheet - assets

Item	2004	2005	2006	2007	2008	2009	2010
<b>ASSETS - TOTAL</b>	<b>100.00%</b>	<b>100.00%</b>	<b>100.00%</b>	<b>100.00%</b>	<b>100.00%</b>	<b>100.00%</b>	<b>100.00%</b>
<b>Fixed assets</b>	<b>59.93%</b>	<b>60.02%</b>	<b>60.42%</b>	<b>59.53%</b>	<b>61.01%</b>	<b>62.52%</b>	<b>63.94%</b>
- intangible assets	0.04%	0.38%	0.33%	0.38%	0.36%	0.40%	0.33%
- tangible assets	56.78%	56.94%	57.49%	56.75%	58.34%	59.96%	61.04%
- financial assets	3.11%	2.71%	2.61%	2.40%	2.30%	2.16%	2.57%
<b>Current assets</b>	<b>39.03%</b>	<b>39.18%</b>	<b>38.35%</b>	<b>39.59%</b>	<b>38.14%</b>	<b>36.69%</b>	<b>35.41%</b>
- inventory	23.44%	22.39%	21.77%	21.47%	21.82%	21.82%	20.04%
- long-term receivables	0.44%	0.35%	0.41%	0.44%	0.19%	0.18%	0.13%
- short-term receivables	11.43%	10.67%	10.36%	11.15%	10.96%	8.71%	8.90%

- financial assets	3.74%	5.76%	5.81%	6.53%	5.17%	5.98%	6.34%
<b>Accruals</b>	<b>1.02%</b>	<b>0.78%</b>	<b>1.22%</b>	<b>0.87%</b>	<b>0.85%</b>	<b>0.78%</b>	<b>0.65%</b>

Source: Authors' research of the sample of farms

Assets of the average farm are made up of roughly 61% of the fixed assets with 7% of land in average, implying that the most of farm land is leased. At about 65% of long-term assets consist of buildings and 20% separate movable items. A specific range of property of farms is livestock – animals. Adult animals are only at about 7%. The most important problem to deal with is their evidence as sometimes they are reported as inventory and sometimes as depreciated fixed assets. By the Regulation No. 500/2002 Coll., Implementing certain provisions of Act No. 563/1991 Coll., On accounting, the following animals are included in inventory: young breeding animals, animals for fattening, fur-bearing animals, fish, bees, - flocks of chickens, ducks, turkeys, guinea fowl and geese for fattening. Adult animals (basic herd and draughts), breeding livestock in categories of cattle, horses, pigs, sheep, goats and geese, are recorded as tangible assets. Basic herd animals of other economically utilized breeds are also included by the unit's decision.

## 11.7 Ratio analysis

Financial ratios = a tool of financial analysis. Financial ratio is simply an expression of the relation between two financial statements accounts and financial ratio analysis is the investigation of a company's condition and performance using one or more of these ratios. We use these ratios to get a measure of the relative value of one account to another.

A number of ratios can be calculated to help interpret the financial statements. A ratio has a numerator and a denominator, which converts the financial data to a percentage. This provides one approach to standardizing financial information for useful comparisons.

Analysts will, in practice, be limited in the analysis that can be performed by the amount of information available. They are unlikely to have access to all the facts which are available to a company's management.

The major ratio categories and the questions they attempt to answer are:

- Liquidity-Does the company have enough cash and current assets to pay obligations as they come due?
- Activity-How efficient are the operations of the company?
- Leverage-What is the mix of equity to debt?
- Performance-How profitable is the company?

In a report, you are often asked to analyse specific sections. The broad categories are:

- Performance – This looks largely at the statement of profit or loss and associated ratios, such as profit margins, returns on capital employed and net asset turnover. This section looks at the results that the business has generated in the year.
- Position – This looks at the statement of financial position, and the associated ratios. This could be broken down further into short-term liquidity, looking at working capital, and long-term solvency, looking at levels of debt.
- Investor – This looks at items that would specifically matter to investors. This will cover items such as the share price, dividends and earnings.

Each ratio provides a somewhat different analysis. A company may have substantial current assets but little cash. A

company with high leverage may or may not suggest a red flag. High leverage increases business and default risk, but it improves return on equity. High leverage could result from too many long-term bonds or high accounts payable. These would be interpreted differently.

Three significant points relate to ratio analysis:

1. the ratios overlap, so a red flag in one area will likely relate to red flags in other areas;
2. a thorough ratio analysis must be done, although most ratios end up in a normal range that needs little further analysis;
3. the importance of specific ratios differs based on the objectives of the financial analysis (e.g., credit versus investment decision), industry involved (e.g., banks behave differently from high tech or automobile companies), and other factors (e.g., relative interest rates at the time of analysis).

Financial ratios for the most recent year (and most recent quarter when relevant) are the most important, since this represents the latest financial data available. As with other techniques, comparisons over time and with other companies and industries are useful, since ratios are evaluated in some context.

The value of a given ratio, however, is rarely informative. Financial ratios provide information when compared to other financial ratios and standards.

Once we calculate a financial ratio, we need to put it in perspective with the other aspects of the company's financial condition and performance, both over the time and comparison with other, leading companies in the same industry.

### 11.7.1 Profitability ratios

Profitability ratios (also referred to as profit margin ratios) compare components of income with sales. They give us an idea of what makes up a company's income and are usually expressed as a portion of each dollar of sales. The profit margin ratios we discuss here differ only by the numerator. It is in the numerator that we reflect and thus evaluate performance for different aspects of the business.

Profit (profit/loss, earning, income) is the most important criterion for evaluating commercial firms for investment decisions. The most significant predictor of firm market valuation is profitability and the likelihood of continuous profit growth. Thus, the future existence and success of corporations depends on this analysis. Consequently, there are several profitability ratios that consider different aspects of earnings performance.

Profit, in accounting, is an income distributed to the owner in a profitable market production process (business). Profit is a measure of profitability which is the owner's major interest in income formation process of market production. There are several profit measures in common use.

Income formation in market production is always a balance between income generation and income distribution. The income generated is always distributed to the stakeholders of production as economic value within the review period. The profit is the share of income formation the owner is able to keep to himself/herself in the income distribution process. Profit is one of the major sources of economic well-being because it means incomes and opportunities to develop production. The words income, profit and earnings are substitutes in this context.

#### Type of profit/loss (earning, income)

There are several important profit measures in common use. Note that the words earnings, profit and income are used as substitutes in some of these terms.

- Gross profit equals sales revenue minus cost of goods sold, thus removing only the part of expenses that can be traced directly to the production or purchase of the goods. Gross profit still includes general (overhead)

expenses like R&D, S&M, G&A, also interest expense, taxes and extraordinary items.

- Earnings before interest, taxes, depreciation, and amortization (EBITDA) equals sales revenue minus cost of goods sold and all expenses except for interest, amortization, depreciation and taxes. It measures the cash earnings that can be used to pay interest and repay the principal. Since the interest is paid before income tax is calculated, the debt holder can ignore taxes.
- Earnings before interest and taxes (EBIT) or operating profit equals sales revenue minus cost of goods sold and all expenses except for interest and taxes. This is the surplus generated by operations. It is also known as Operating Profit Before Interest and Taxes (OPBIT) or simply Profit Before Interest and Taxes (PBIT).
- Earnings before taxes (EBT) or net profit before tax equals sales revenue minus cost of goods sold and all expenses except for taxes. It is also known as pre-tax book income (PTBI), net operating income before taxes or simply pre-tax income.
- Net income or earnings after tax or net profit after tax equals sales revenue after deducting all expenses, including taxes (unless some distinction about the treatment of extraordinary expenses is made). In the US, the term net income is commonly used. Income before extraordinary expenses represents the same but before adjusting for extraordinary items.
- Retained earnings equals earnings after tax minus payable dividends.
- To accountants, economic profit, or EP, is a single-period metric to determine the value created by a company in one period—usually a year. It is earnings after tax less the equity charge, a risk-weighted cost of capital. This is almost identical to the economists' definition of economic profit.

### Gross profit margin

$$\frac{\text{Gross profit}}{\text{Sales revenue}} * 100\%$$

Revenue is key in relation to performance and should always be commented on. Comments on revenue should not be limited to basic analysis such as 'Revenue has increased, which is good'. Comments should look to explain why revenue has increased in the year, examining items such as new products, new markets, promotional activity or anything relevant to the scenario.

This is the margin that the company makes on its sales, and would be expected to remain reasonably constant.

Since the ratio is affected by only a small number of variables, a change may be traced to a change in:

- selling prices – normally deliberate though sometimes unavoidable, e.g. because of increased competition or entry into a new market
- sales mix – often deliberate (company discontinuing some products)



- purchase cost – including carriage inwards or discounts
- production cost – materials, labour or production overheads

A good way to analyse gross profit margin is to ask yourself:

- Are there any reasons why the selling price has changed?
- Are there any significant changes to the costs in the year?
- Has there been any indication of a change in sales mix?

#### Comparing gross profit margin over time

If gross profit has not increased in line with sales revenue, you need to establish why not. Is the discrepancy due to:

- increased 'purchase' costs: if so, are the costs under the company's control (i.e. does the company manufacture the goods sold)?
- inventory write-offs (likely where the company operates in a volatile marketplace, such as fashion retail)? or
- other costs being allocated to cost of sales – for example, research and development (R&D) expenditure?

#### Inter-company comparison of gross profit margin

Intercompany comparison of margins can be very useful but it is especially important to look at businesses within the same sector. For example, food retailing is able to support low margins because of the high volume of sales. A manufacturing industry would usually need higher margins to offset lower sales volumes.

Low margins usually suggest poor performance but may be due to expansion costs (launching a new product) or trying to increase market share. Lower margins than usual suggest scope for improvement.

Above-average margins are usually a sign of good management although unusually high margins may make the competition keen to join in and enjoy the 'rich pickings'.

### Operating profit margin

$$\frac{\textit{Profit from operations}}{\textit{Sales revenue}} * 100\%$$

An alternative to operating profit margin is to calculate net profit margin, using either profit for the year or profit before tax as the numerator.

Any changes in operating profit margin should be considered further:

- Are they in line with changes in gross profit margin?
- Are they in line with changes in sales revenue?
- As many costs are fixed they need not necessarily increase/decrease with a change in revenue.
- Look at individual categories (admin expenses, distribution)

If there are significant changes within operating expenses, it is important to consider:

Are these one-off items, such as redundancies or legal cases? If so, these should be stripped out of the ratio to provide a meaningful comparison.

Are there likely to be ongoing future consequences? For example, a company opening a website to sell directly to the public is likely to have much higher distribution costs into the future.

This is affected by more factors than the gross profit margin but it is equally useful and if the company does not disclose a cost of sales it may be used on its own in lieu of the gross profit percentage.

One of the many factors affecting the trading profit margin is depreciation, which is open to considerable subjective judgement. Intercompany comparisons should be made after suitable adjustments to align accounting policies.

By the time you have reached operating profit, there are many more factors to consider. If you are provided with a breakdown of expenses, you can use this for further line-by-line comparisons. Bear in mind that:

- some costs are fixed or semifixed (e.g. property costs) and therefore not expected to change in line with revenue
- other costs are variable (e.g. packing and distribution, and commission).

### Return On Capital Employed – ROCE

$$\frac{\textit{Profit}}{\textit{Capital employed}} * 100\%$$

This shows the ability of the entity to turn its long-term financing into profit.

Profit is measured as:

- operating (trading) profit, or
- the PBIT, i.e. the profit before taking account of any returns paid to the providers of long-term finance.

Capital employed is measured as:

- equity, plus interest-bearing finance, i.e. the long-term finance supporting the business. This usually includes all finance lease liabilities, whether they are shown as current or noncurrent, or
- total assets less current liabilities

ROCE for the current year should be compared to:

- the prior year ROCE
- the cost of borrowing
- other companies' ROCE in the same industry.

Movements in ROCE should be analysed by looking for the reasons why profit has moved, and reasons for any changes in the long-term funding, such as loans or share issues.

It is important to note that ROCE can be significantly affected by an entity's accounting policies. A company that revalues their assets will have a revaluation surplus in equity. This will make their ROCE lower than a company that does not revalue their assets, making comparison meaningless.

Similar to ROCE is **return on equity (ROE)**

$$\frac{\text{Profit after tax}}{\text{Equity}} * 100\%$$

This can be used to show the return made for the year on the total equity in the business. Pretax

ROE can also be calculated using profit before tax rather than profit after tax.

Once calculated, ROCE should be compared with:

- previous years' figures – provided there have been no changes in accounting policies, or suitable adjustments have been made to facilitate comparison (note, however that the effect of not replacing non-current assets is that their value will decrease and ROCE will increase)
- the company's target ROCE – where the company's management has determined a target return as part of its budget procedure, consistent failure by a part of the business to meet the target may
- make it a target for disposal
- the cost of borrowings – if the cost of borrowing is say 10% and ROCE 7%, then further borrowings will reduce EPS unless the extra money can be used in areas where the ROCE is higher than the cost of borrowings
- other companies in same industry – care is required in interpretation, because of the possibility, noted above, of different accounting policies, ages of plant, etc.

The ratio also shows how efficiently a business is using its resources. If the return is very low, the business may be better off realising its assets and investing the proceeds in a high interest bank account! (This may sound extreme, but should be considered particularly for a small, unprofitable business with valuable assets such as property.) Furthermore, a low return can easily become a loss if the business suffers a downturn.

#### *Further points*

- Treatment of associates and investments: where the profit excludes investment income, the statement of financial position carrying amounts for associates and investments should be excluded from the capital employed.
- This gives an accurate measure of trading performance. If associates and investments are not excluded, the overall profit figure should include income from investments and associates.
- Large cash balances are not contributing to profits and some analysts therefore deduct them from capital employed (to compare operating profits with operating assets). However, it is usually acceptable not to make this adjustment as ROCE is a performance measure and management have decided to operate with that large balance.

#### **Return on assets (ROA)**

Return on assets is an indicator of how profitable a company is relative to its total assets. ROA gives a manager, investor, or analyst an idea as to how efficient a company's management is at using its assets to generate earnings. Return on assets is displayed as a percentage and its calculated as:

$$\frac{\text{Profit}}{\text{Total assets}} * 100\%$$

In basic terms, ROA tells you what earnings were generated from invested capital (assets). ROA for public companies can vary substantially and will be highly dependent on the industry. This is why when using ROA as a comparative measure, it is best to compare it against a company's previous ROA numbers or against a similar company's ROA.

Remember that a company's total assets is the sum of its total liabilities and shareholder's equity. Both of these types of financing are used to fund the operations of the company. Since a company's assets are either funded by debt or equity, some analysts and investors disregard the cost of acquiring the asset by adding back interest expense in the formula for ROA. In other words, the impact of taking more debt is negated by adding back the cost of borrowing to the net income, and using the average assets in a given period as the denominator. Interest expense is added because the net income amount on the income statement excludes interest expense. An analyst that chooses to ignore the cost of debt will use this formula:

$$\text{ROA} = (\text{Net Income} + \text{Interest Expense}) / \text{Average Total Assets}$$

The ROA figure gives investors an idea of how effective the company is in converting the money it invests into net income. The higher the ROA number, the better, because the company is earning more money on less investment.

### 11.7.2 Activity ratios

**Activity** or **turnover ratios** are measures of efficiency and, generally, the higher the better. Typically, the numerator is an operating measure such as sales (revenues) or cost of goods sold and the denominator is a balance sheet measure such as inventory or receivables. Thus, operating flows are measured against asset and ether levels. Time series trends and comparisons to ether companies are useful to spot red flags or potential opportunities.

The operating measures occur over the fiscal period. Therefore, the most appropriate comparison is the average balance sheet measure for the denominator. This is measured as 1h (beginning balance+ ending balance), equivalent to half of this year's balance plus half of last year's balance. Note that inventory turnover uses cost of goods sold as the numera-tor; all ether activity ratios use sales (or total revenue) as the numerator.

Activity ratios are measures of how well assets are used. Activity ratios can be used to evaluate the benefits produced by specific assets, such as inventory or accounts receivable. Or they can be use to evaluate the benefits produced by all a company's assets collectively. The most com-

mon turnover ratios are the inventory turnover, the total asset turnover, and the accounts receivable turnover.

#### Total assets turnover

This ratio indicates the extent that the investment in total assets results in sales. The resultant number is a multiplier of the sales that are generated for the investment in total assets. For example, if assets are E 100 million and sales are E 125 million, the total asset turnover is 1.25, meaning that E 1.25 of s a les are generated per E 1 of asset investment.

As with any other ratio, the total asset turnover cannot be judged in isolation, but rather must be considered in

conjunction with other dimensions of the company's condition and performance, the trend of the ratio over time, and industry norms.

A turnover ratio may be constructed to evaluate the use of any set of assets by comparing the gross benefit to the assets employed. For example, if you wish to focus on a company's fixed assets, you can construct a fixed asset turnover as the ratio of sales to net plant and equipment.

$$\frac{\text{Sales}}{\text{Total assets}} = \text{times pa}$$

### Net asset turnover

$$\frac{\text{Sales revenue}}{\text{Capital employed}} = \text{times pa}$$

Note: Capital employed can be used as equity plus interest-bearing debt. As an alternative, net assets (total assets less total liabilities) could also be used.

It measures management's efficiency in generating revenue from the net assets at its disposal:

- the higher, the more efficient.

Note that this can be further subdivided into:

- noncurrent asset turnover (by making noncurrent assets the denominator) and
- working capital turnover (by making net current assets the denominator).

### Inventory turnover

$$\frac{\text{Inventory}}{\text{Cost of sales}} * 365 \text{ days}$$

An alternative is to express the inventory turnover period as a number of times:

$$\frac{\text{Cost of sales}}{\text{Inventory}} = \text{times pa}$$

An increasing number of days (or a diminishing multiple) implies that inventory is turning over less quickly which is

regarded as a bad sign as it may indicate:

- lack of demand for the goods
- poor inventory control
- an increase in costs (storage, obsolescence, insurance, damage).

However, it may not necessarily be bad where management are:

- buying inventory in larger quantities to take advantage of trade discounts, or
- increasing inventory levels to avoid stock-outs.

### Inventory days

Year-end inventory is normally used in the calculation of inventory turnover. An average (based on the average of year-start and year-end inventories) may be used to have a smoothing effect, although this may dampen the effect of a major change in the period.

Inventory turnover ratios vary enormously with the nature of the business. For example, a fishmonger selling fresh fish would have an inventory turnover period of 1-2 days, whereas a building contractor may have an inventory turnover period of 200 days. Manufacturing companies may have an inventory turnover ratio of 60-100 days; this period is likely to increase as the goods made become larger and more complex.

For large and complex items (e.g. rolling stock or aircraft) there may be sharp fluctuations in inventory turnover according to whether delivery took place just before or just after the year end.

A manufacturer should take into consideration:

- reliability of suppliers: if the supplier is unreliable it is prudent to hold more raw materials
- demand: if demand is erratic it is prudent to hold more finished goods.

### Receivables collection period

$$\frac{\text{Trade receivables}}{\text{Credit sales}} * 365 \text{ days}$$

If credit sales are not available, revenue should be used.

The collection period should be compared with:

- the stated credit policy
- previous period figures.

Increasing accounts receivables collection period is usually a bad sign suggesting lack of proper credit control which may lead to irrecoverable debts.

It may, however, be due to:

- a deliberate policy to attract more trade, or
- a major new customer being allowed different terms.

Falling receivables days is usually a good sign, though it could indicate that the company is suffering a cash shortage.

### Receivables days

The trade receivables used may be a year-end figure or the average for the year. Where an average is used to calculate the number of days, the ratio is the average number of days' credit taken by customers.

For many businesses total sales revenue can safely be used, because cash sales will be insignificant. But cash-based businesses like supermarkets make the substantial majority of their sales for cash, so the receivables period should be calculated by reference to credit sales

only.

The result should be compared with the stated credit policy. A period of 30 days or 'at the end of the month following delivery' are common credit terms.

The receivables days ratio can be distorted by:

- using yearend figures which do not represent average receivables
- factoring of accounts receivables which results in very low trade receivables
- sales on unusually long credit terms to some customers.

### Payables payment period

$$\frac{\text{Trade payables}}{\text{Credit purchases}} * 365 \text{ days}$$

This represents the credit period taken by the company from its suppliers.

The ratio is always compared to previous years:

- A long credit period may be good as it represents a source of free finance.
- A long credit period may indicate that the company is unable to pay more quickly because of liquidity problems.

If the credit period is long:

- the company may develop a poor reputation as a slow payer and may not be able to find new suppliers
- existing suppliers may decide to discontinue supplies
- the company may be losing out on worthwhile cash discounts.

In most sets of financial statements (in practice and in examinations) the figure for purchases will not be available therefore cost of sales is normally used as an approximation in the calculation of the accounts payable payment period.

Note: In an exam, you may be asked to calculate the working capital cycle, or asked to work the

receivables/inventory/payables period from the working capital cycle.

### **Relationship between *ratios profitability and activity***

ROCE can be subdivided into profit margin and asset turnover.

$$\text{Profit margin} * \text{Asset turnover} = \text{ROCE}$$

$$\frac{\text{PBIT}}{\text{Sales revenue}} * \frac{\text{Sales revenue}}{\text{Capital employed}} = \frac{\text{PBIT}}{\text{Capital employed}}$$

Profit margin is often seen as an indication of the quality of products or services supplied (top-of-range products usually have higher margins).

Asset turnover is often seen as a measure of how intensively the assets are worked.

A trade-off may exist between margin and asset turnover.

- Low-margin businesses (e.g. food retailers) usually have a high asset turnover.
- Capital-intensive manufacturing industries usually have relatively low asset turnover but higher margins (e.g. electrical equipment manufacturers).

Two completely different strategies can achieve the same ROCE.

- Sell goods at a high profit margin with sales volume remaining low (e.g. designer dress shop).
- Sell goods at a low profit margin with very high sales volume (e.g. discount clothes store).

### 11.7.3 Liquidity ratios

Liquidity in the context of financial analysis refers to a company's ability to satisfy its short-term obligations using assets that are most readily converted into cash. Assets that may be converted into cash in a short period of time are referred to as liquid assets. These assets are listed in financial statements as current assets. Current assets are often referred to as working capital, since they represent the resources needed for the day-to-day operations of the company's long-term, capital investments. Current assets are used to satisfy short-term obligations, or current liabilities. The amount by which current assets exceed current liabilities is referred to as the net working capital.

Does the company have the cash and other current assets to pay liabilities as they come due? Most current assets are converted to cash and most current liabilities are paid in cash when due. Current marketable securities generally are



investments of excess cash into liquid debt securities to earn a return until the cash is needed for operations. Marketable securities are treated as cash (or near cash) for analysis. In most cases, relatively large cash balances are considered good news.

Accounts receivable are credit terms given to customers on sales. Some percentage of receivables will become delinquent and end up as bad debts. The credit terms that companies give is an important component related to revenue analysis. A company can increase sales by expanding credit sales to higher-risk customers. This will increase revenue in the short term, but receivables will increase and bad debts can be expected to rise in the near future.

**Inventory** represents goods available for sale, either purchased (merchandizing firms) or manufactured, plus raw materials and work in progress for manufacturing firms. There are different inventory accounting techniques (last-in first-out versus first-in first-out or average, perpetual, or periodic) plus all firms must use lower of cost or market. Large inventory may signal relatively inefficient operations. Also, excess inventory or rising inventory levels may be a red flag related to potentially obsolete inventory or operating problems.

**Current liabilities** are obligations to be paid or liquidated with current resources, usually within one year. The largest category usually is accounts payable, the amount owed to suppliers. Many companies have a policy to delay payment as long as possible to conserve cash.

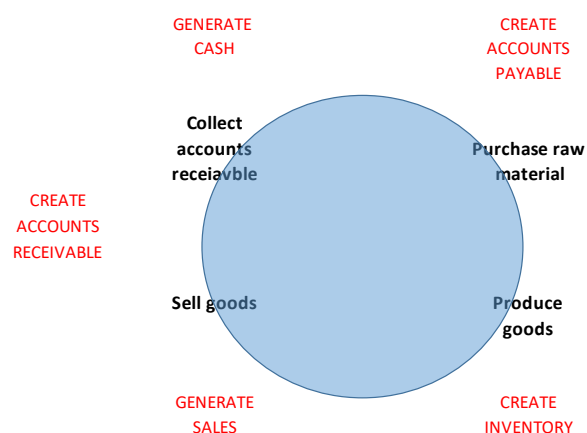
### Operating cycle

How much liquidity a company needs depends on its operating cycle. The operating cycle is the duration between the time cash is invested in goods and services to the time that investment produces cash. For example, a company that produces and sells goods has an operating cycle comprising four phases, as we diagram in Exhibit 4.4.

The operating cycle is the length of time it takes to convert an investment of cash in inventory back into cash through the collections on sales. Considering that not all purchases a company makes are paid immediately with cash, we can use another cycle metric, the net operating cycle, to capture the length of time it takes to convert an investment of cash in inventory and back into cash considering that some purchases are made on credit.

- The number of days a company ties up funds in inventory is determined by:
- The total amount of money represented in inventory The average day's cost of goods sold

Figure 19 Operating cycle



Source: author

**Working capital** is net current assets:

$$= \text{total current assets} - \text{total current liabilities}$$

This is one measure of liquidity. Since cash and other current assets are needed to pay current obligations, negative working capital is a potential red flag. Working capital and other measures of liquidity are particularly important when evaluating credit decisions. Common liquidity ratios are shown

When analysing position, this can be split down into short-term liquidity (looking at working capital) and long-term solvency (focusing on debt levels).

### **Working capital cycle (cash cycle)**

$$\begin{aligned} \text{Working capital cycle} &= \text{Inventory turnover period (days)} \\ &+ \text{receivables collection period} - \text{payables payment period} \end{aligned}$$

The working capital cycle shows the length of time between incurring production costs and receiving cash returns from these.

There are two ratios used to measure overall working capital:

- the current ratio
- the quick or acid test ratio.

**Current ratio** (or working capital ratio)

$$\frac{\text{Current assets}}{\text{Current liabilities}}$$

The current ratio measures the adequacy of current assets to meet the liabilities as they fall due.

A high or increasing figure may appear safe but should be regarded with suspicion as it may be due to:

- high levels of inventory and receivables (check working capital management ratios)
- high cash levels which could be put to better use (e.g. by investing in noncurrent assets).

The current ratio measures the adequacy of current assets to meet the company's short-term liabilities. It reflects whether the company is in a position to meet its liabilities as they fall due.

Traditionally, a current ratio of 2:1 or higher was regarded as appropriate for most businesses to maintain creditworthiness. However, more recently a figure of 1.5:1 is regarded as the norm.

The current ratio should be looked at in the light of what is normal for the business. For example, supermarkets tend to

have low current ratios because:

- there are few trade receivables
- there is a high level of trade payables
- there is usually very tight cash control, to fund investment in developing new sites and improving sites.

It is also worth considering:

- availability of further finance, e.g. is the overdraft at the limit? – very often this information is highly relevant but is not disclosed in the accounts
- seasonal nature of the business – one way of doing this is to compare the interest charges in the statement of profit or loss with the overdraft and other loans in the statement of financial position; if the interest rate appears abnormally high, this is probably because the company has had higher levels of borrowings during the year
- long-term liabilities, when they fall due and how will they be financed • nature of the inventory – where inventories are slow moving, the quick ratio probably provides a better indicator of short-term liquidity.

**Quick ratio** (also known as the liquidity and acid test)

## *Current assets - Inventory* *Current liabilities*

The quick ratio is also known as the acid test ratio because by eliminating inventory from current assets it provides the acid test of whether the company has sufficient liquid resources (receivables and cash) to settle its liabilities. Normal levels for the quick ratio range from 1:1 to 0.7:1.

As well as analysing how 'safe' a business is by looking at the current and quick ratio, it is important to look at why they have moved by talking in more depth about working capital.

### **Cash**

As well as talking about the working capital ratios below, it is also useful to comment on any movement in cash in the year.

- Look at where any major cash inflows have come from in the year.
- Identify where the cash has gone in the year.

As much as possible, this should be done with reference to the scenario. A simple discussion of 'cash has gone up, which is good' is unlikely to be worth many marks. A discussion should be based around whether cash has gone up from the company's performance or from other sources, such as taking on more debt.

Like the current ratio it is relevant to consider the nature of the business (again supermarkets have very low quick ratios). Sometimes the quick ratio is calculated on the basis of a six-week timeframe (i.e. the quick assets are those which will turn into cash in six weeks; quick liabilities are those which fall due for payment within six weeks). This basis would usually include the following in quick assets:

- bank, cash and short-term investments
- trade receivables.

thus excluding prepayments and inventory.

Quick liabilities would usually include:

- bank, cash and short-term investments
- trade receivables.
- bank overdraft which is repayable on demand
- trade payables, tax and social security
- dividends.

*Income tax liabilities may be excluded.*

When interpreting the quick ratio, care should be taken over the status of the bank overdraft. A company with a low quick ratio may actually have no problem in paying its amounts due if sufficient overall overdraft facilities are available.

### 11.7.4 Debt ratios

**Leverage** (also called solvency) considers the capital structure of the firm and the evaluation of the relative risk and return associated with liabilities (especially long-term debt) and equity (or ownership). Equity is associated with common stock, although preferred stock is part of the equity structure in some firms. Essentially, equity is a residual value, also called net assets (which are equal to total assets - total liabilities). Another way to consider the balance sheet is assets are on the left and the sources of the assets on the right. Both stockholders and creditors are stakeholders in the firm.

A company can finance its assets either with equity or debt. Financing through debt involves risk because debt legally obligates the company to pay interest and to repay the principal as promised. On the other hand, equity financing does not obligate the company to pay anything; dividends are paid at the discretion of the board of directors. There is always some risk, which we refer to as business risk, inherent in any operating segment of a business. But how a company chooses to finance its operations -the particular mix of debt and equity, its capital structure -may add financial risk on top of business risk. Financial risk is the extent that debt financing is used relative to equity. The greater the company's use of debt in its capital structure, the greater its risk.

A number of technical accounting issues influence the evaluation of debt. However, it is worth noting that real and potential liabilities exist whether or not reported on the balance sheet. Contingencies, operating leases, defined benefit pension commitments, and other postemployment benefits are associated with liabilities that require additional analysis.

Debt is defined as total liabilities. This may be an oversimplification, but it is easy to determine and compare across firms. Other definitions of debt can be useful for additional analysis. Total equity at market value is defined as closing stock price at some specific date multiplied by the number of shares outstanding at the end of the fiscal period under study.

Leverage ratios are relatively easy to interpret for credit decisions: the lower the better. As debt increases, the potential for credit default decreases. The interpretation for equity investment decisions is more difficult, since increasing debt would increase return on equity. From an equity perspective, the relative debt is evaluated. Too high increases credit risk, too low means reduced return on equity.

The main points to consider when assessing the longer-term financial position are: gearing and overtrading.

**Gearing ratios** indicate:

- the degree of risk attached to the company and
- the sensitivity of earnings and dividends to changes in profitability and activity level.

Preference share capital is usually counted as part of debt rather than equity since it carries the right to a fixed rate of dividend which is payable before the ordinary shareholders have any right to a dividend. Gearing will include all interest-bearing debt, and show it as a proportion of equity, or as a proportion of the total long-term financing (being equity plus interest-bearing debt).

#### High and low gearing

✓ In highly geared businesses:

- a large proportion of fixed-return capital is used
- there is a greater risk of insolvency
- returns to shareholders will grow proportionately more if profits are growing.

✓ Low-geared businesses:

- provide scope to increase borrowings when potentially profitable projects are available
- can usually borrow more easily.

#### Relatively stable profits

Loan stock interest must be paid whether or not profits are earned. A company with erratic profits may have insufficient funds in a bad year with which to pay the interest. This would result in the appointment of a receiver and possibly the liquidation of the company.

#### Suitable assets for security

Most issues of loan capital are secured on some or all of the company's assets which must be suitable for the purpose. A company with most of its capital invested in fast depreciating assets or inventory subject to rapid changes in demand and price would not be suitable for high gearing.

The classic examples of companies that are suited to high gearing are those in property investment and the hotel/leisure services industry. These companies generally enjoy relatively stable profits and have assets which are highly suitable for charging. Nonetheless, these are industries that could be described as cyclical.

Companies not suited to high gearing would include those in the extractive, and high-tech, industries where constant changes occur. These companies could experience erratic profits and would generally have inadequate assets to pledge as security.

We use financial leverage ratios to assess how much financial risk the company has taken on. There are two types of financial leverage ratios: component percentages and coverage ratios. Component percentage compare a company debt with either its total capital (debt plus equity) or its equity capital. Coverage ratios reflect a company's ability to satisfy fixed obligations, such as interest, principal repayment, or lease payments.

The component-percentage financial leverage ratios convey how reliant a company is on debt financing by comparing

the amount of debt to either the total capital of the company or to the equity capital. The total debt-to-assets ratio is a measure of the proportion of assets that are financed with debt (both short-term and long-term debt):

### Total debt-to-assets ratio

$$\frac{\text{Total debt}}{\text{Total assets}}$$

### Debt/equity ratio:

The debt-to-equity ratio, also known as the debt ratio, indicates the relative uses of debt and equity as sources of capital to finance the company's assets, evaluated using book values of the capital sources:

$$\frac{\text{Total debt}}{\text{Total shareholder's equity}}$$

$$\frac{\text{Loans} + \text{Preference share capital}}{\text{Ordinary share capital} + \text{Reserves} + \text{Non - controlling interest}}$$

**Percentage of capital employed** represented by borrowings:

$$\frac{\text{Loans} + \text{Preference share capital}}{\text{Ordinary share capital} + \text{Reserves} + \text{Non - controlling interest} + \text{Loans} + \text{Preference share capital}}$$

One problem with looking at risk through a financial ratio that uses the book value of equity is that most often there is little relation between the book value and its market value. The book value of equity consists of:

- The proceeds to the company of all the stock issued since it was first incorporated, less any treasury stock (stock repurchased by the company).
- The accumulation of all the earnings of the company, less any dividends, since it was first incorporated.

The book value generally does not give a true picture of the investment of shareholders in the company because:

- Earnings are recorded according to accounting principles, which may not reflect the true economics of transactions.
- Due to inflation, the dollars from earnings and proceeds from stock issued in the past do not reflect today's values.

In contrast, the market value is the value of equity as perceived by investors. It is what investors are willing to pay, its worth. So why bother with the book value of equity? There are two reasons. First, it is easier to obtain the book value than the market value of a company's securities; second, many financial services report ratios using the book value, rather than the market value.

We may use the market value of equity in the denominator, replacing the book value of equity. To do this, we need to know the current number of shares outstanding and the current market price per share of stock and multiply to get the market value of equity.

In addition to the leverage ratios that use information about how debt is related to either assets or equity, there are a number of financial leverage ratios that capture the ability of the company to satisfy its debt obligations. There are many ratios that accomplish this, but the two most common ratios are the times interest coverage ratio and the fixed charge coverage ratio.

### Interest cover

$$\frac{\text{Profit before interest and tax}}{\text{Interest payable}}$$

Interest cover indicates the ability of a company to pay interest out of profits generated:

- low interest cover indicates to shareholders that their dividends are at risk (because most profits are eaten up by interest payments) and
- the company may have difficulty financing its debts if its profits fall
- interest cover of less than two is usually considered unsatisfactory.

A business must have a sufficient level of long-term capital to finance its long-term investment in noncurrent assets. Part of the investment in current assets would usually be financed by relatively permanent capital with the balance being provided by credit from suppliers and other short-term borrowings. Any expansion in activity will normally require a broadening of the long-term capital base, without which 'overtrading' may develop.

Suitability of finance is also a key factor. A permanent expansion of a company's activities should not be financed by temporary, short-term borrowings. On the other hand, a short-term increase in activity such as the 'January sales' in a retail trading company could ideally be financed by overdraft.

A major addition to noncurrent assets such as the construction of a new factory would not normally be financed on a long-term basis by overdraft. It might be found, however, that the expenditure was temporarily financed by short-term loans until construction was completed, when the overdraft would be 'funded' by a long-term borrowing secured on the completed building.

## 11.8 Limitations ratio analysis

Ratios are a tool to assist analysis.

- They help to focus attention systematically on important areas and summarise information in an understandable form.
- They assist in identifying trends and relationships.

However ratios are not predictive if they are based on historical information.

- They ignore future action by management.
- They can be manipulated by window dressing or creative accounting.
- They may be distorted by differences in accounting policies.

A basic assumption of financial ratios and other financial analysis tools is that the numbers used are correct. Basic income statement and balance sheet numbers can be misstated or manipulated in a variety of ways. Managers have earnings management incentives, which suggests that basic financial statement numbers may be fallible. A primary purpose of the detailed accounting analysis is to determine to what degree the financial statement numbers can be relied upon. If not reliable, the ratio analysis is less useful for decision purposes.

Asset values shown in the statement of financial position at historical cost may bear no resemblance to their current value or what it may cost to replace them. This may result in a low depreciation charge and overstatement of profit in real terms. As a result of historical costs the financial statements do not show the real cost of using the noncurrent assets.

### Limitations of ratio analysis

- Although there are general guidelines (for example, the quick ratio should not normally be less than 1:1), there is no such thing as an 'ideal' ratio. A quick ratio of less than 1:1 would be acceptable in some businesses, but dangerously low for many others.
- Unless ratios are calculated on a uniform basis, from uniform data, comparisons can be very misleading.
- The statement of financial position shown in the financial statements may not be representative of the financial position at other times in the year. Many businesses set the end of their accounting period to a date on which there is a relatively low amount of trading activity. Retail organisations often have an end of February accounting date (after the peak preChristmas trading and the January sales). As a result, the items on a statement of financial position are not representative of the items throughout the accounting period.

Consider inventory levels in a retail organisation. They may vary throughout the year with lows at the end of a season and highs at the start of the season.

Adding opening and closing inventory and dividing by two will not produce a fair average.

- Ratios based on historical cost accounts do not give a true picture of trends from year to year. An apparent increase in profit may not be a 'true' increase, because of the effects of inflation.
- Financial statements only reflect those activities which can be expressed in money terms. They do not give a complete picture of the activities of a business.
- The application of accounting policies in the preparation of financial statements must be understood when attempting to interpret financial ratios.
- The earning power of a business may well be affected by factors which are not reflected in the financial statements. Thus, these do not necessarily represent a complete picture of a business, but only a collection of those parts which can be translated into money terms. For example, the size of the order book is normally ignored in financial statements.
- Ratios must not be used as the sole test of efficiency. Concentration on ratios by managers may inhibit the incentive to grow and expand, to the detriment of the long-term interests of the company.
- A few simple ratios do not provide an automatic means of running a company. Business problems usually involve complex patterns which cannot be solved solely by the use of ratios.

### Additional information





In practice and in examinations it is likely that the information available in the financial statements may not be enough to make a thorough analysis.

You may require additional financial information such as:

- budgeted figures
- other management information
- industry averages
- figures for a similar business
- figures for the business over a period of time.

You may also require other nonfinancial information such as:

- market share
- key employee information
- sales mix information
- product range information
- the size of the order book
- the long-term plans of management





## 12 RESOURCES





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