WORKSHOP

Business finance

Training for social companies' managers (INNO WISE Project)

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1. INTRODUCTION

The term finance applies for all economic activities connected with the management of money.

Money role in market economy = the role of the blood flow in the body.

Money management on all levels of production and consumption of real goods and services: individual – company – other organisations and institutions.

Three areas of finance:

I. PERSONAL FINANCE
II. BUSINESS FINANCE
III. PUBLIC FINANCE

WHAT IS FINANCE?

- System: cash flow – approving and taking loans – investment – bank system services,
- Methods: how to acquire financial assets,
- Methods: how to manage the acquired financial assets.

Finance as "science art"

FINANCIAL SYSTEM

- Saving/investing and macroeconomic stability (S=I),
- Saving/investing and economic growth,
- Financial system development level,
- Natural exchange (ex-ante S=I),
- Cash as means of payment (transactions in a period),
- Cash as means of saving (transactions between periods),
- Internal financing/external financing,
- Direct financing/indirect financing
- What is the financial system composed of?
- Economic role – real transactions
- transfer of financial savings,
- sharing work between savers and investors,
- reallocation of real production producers to investors,
- Financial role – financial transactions
- Changing the structure of investments by liquidity, risk and distribution,
- Financial transactions are mostly not directly connected to investments, but are very important from the economic aspect.

1.1 Subject of business finance

Primary financial function: financing of operations.

Main problems:

- to acquire a sufficient scope of all financial assets,
- at the lowest price possible and
- in appropriate time-related structure,

this leads to the limitation of business finance on the money market and capital market, financial institutions and financing "principles" (as a multitude of rules).

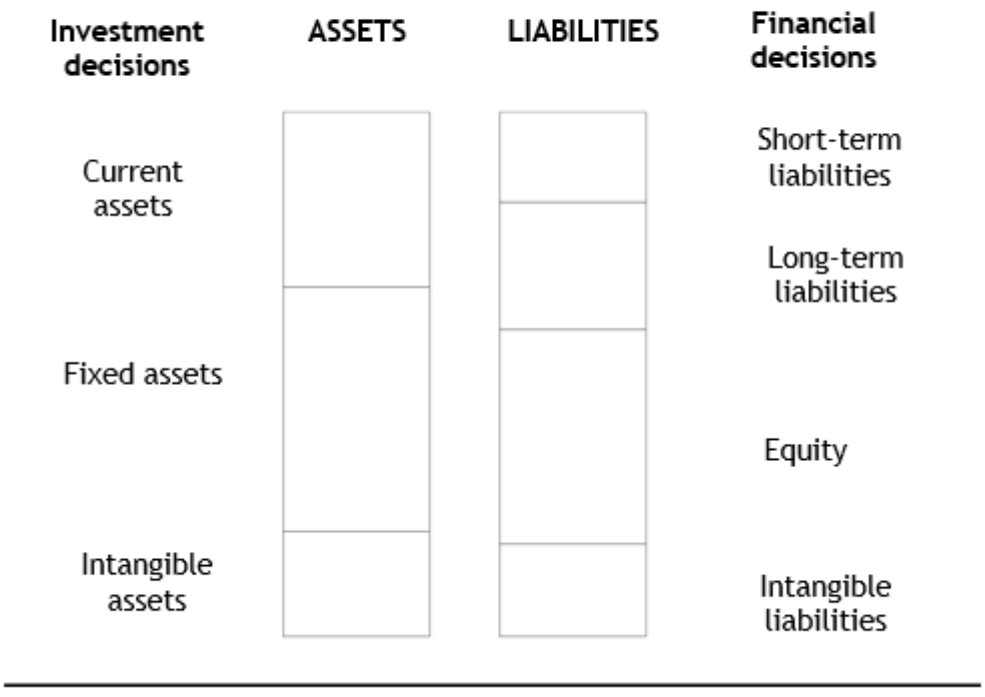
This is followed by a process of very fast development of theory in some branches of finance (determining high-risk investment prices).

The development of a wide analytical scope of instruments – this leads to expanding the financial function in other business areas: short- and long-term business investments.

Subject of business finance

- financial decisions,
- investment decisions,

FINANCIAL FUNCTION AND LOGIC OF BS



CFO's tasks:

- to determine short- and long-term costs and benefits connected to the use of company's funds,
- to find the sources of funds and determine their costs,
- to choose those sources of funds and use of funds that follows the goal of company's operations,
- to assess the risk and return of each business activity.

1.2 Financial environment

Money, financial markets, financial institutions and financial instruments represent or create a financial environment.

1.2.1 Money

a) What is money?

Money is everything that is generally accepted for payment of goods and services or for the repayment of debts.

Money comes in the following forms:

- Coins,
- Banknotes,
- On demand deposits in banks and other financial institutions,

Cheque – deposit on current bank account.
Payment order – business account.

Scriptular money – money registered in accounts of a financial institution.

b) Money functions

- Money is the exchange intermediary,
- Money is the keeper of value,
- Money is value measurement,
- Money is a mean of payment.

c) Value of money

The value of money is connected to its purchasing power.

Inflation, meaning the increase of prices of goods and services, lower the value of money (money devaluation).

The value of money = the price of what is purchased.

Interest rate = the price of a loan.

Interest rate = a price someone needs to pay to use someone else's money.

A loan enables the borrower to defer the payment until the date of loan repayment, the role of interest

rate is to distribute the loan.

d) How to define money in practice?

Role of money in financial institutions (banks) – do all the defined deposits have the four functions of money determined above?

- The first problem: liquidity issue for those deposits.

There are technical and contractual restrictions when withdrawing the deposits.

- The second problem: question whether money is generally accepted as payment.
- Role of money in the economy – monitoring the quantity of money in flow (quantitative money theory: M x V = Q x P).

Volume and movement of currency in circulation – important elements in the models for economic activity forecasting.

Several definitions of money in flow – the most common is:

M1: currency in circulation + deposits on demand at the Bank of Slovenia + deposits on demand at commercial banks (current and giro accounts in financial institutions).

M2: M1 + fixed deposits of the state at the Bank of Slovenia + fixed and savings deposits in commercial banks.

M3: M2 + foreign currency deposits in commercial banks.

e) Monetary base and currency in circulation

- Primary money is issued by the central bank (Bank of Slovenia).
- Deposit money is issued by commercial banks under the central bank.

The Bank of Slovenia issues monetary base:

- By purchasing excess foreign currency (BS has major foreign currency reserves, commercial banks have more excess reserves),

- With loans (BS gives a loan to the state or commercial bank – directly or by purchasing their securities) – result: additional receivables of BS and increased (excess) reserves of commercial banks.

Money multiplication process:

1. When commercial banks get extra money they do not need (excess reserves), they approve their clients (companies and population) loans.
2. Clients get money to conduct purchases or settle their liabilities.
3. In such transactions, money comes directly or indirectly in the hands of companies or people who have accounts at commercial banks – the majority of money is thus returned back to commercial banks.
4. This results in the increase of clients' deposits in commercial banks.
5. Commercial banks have to increase reserves – to pay the deposits on clients' demands.
6. Part of the money does not have to be retained in reserves (excess reserves) – therefore, commercial

banks lend it to clients.

7. The money comes back to commercial banks – a part of this money is directed by commercial banks in their reserves, the remaining part is lent etc.

8. Final result: commercial banks' clients have a lot more (scriptular) money on their bank accounts as was primarily flown into commercial banks due to extra (monetary base) money of the BS; the issued BS money is in two forms:

- Necessary reserves of commercial banks
- Cash in circulation

Currency in circulation comprises cash in circulation (issued by BS) and scriptular money (issued by commercial banks).

f) Monetary policy and fiscal policy

Monetary policy means the regulation of the quantity of currency in circulation with the purpose of achieving the economy's economic goals.

Monetarist' opinion: changes in the quantity of currency in circulation directly impact economic activity: appropriate increase of the currency in circulation leads to greater consumption, higher employment rates and economic growth.

If the quantity of currency in circulation increases too fast, the prices are increased (inflation).

Monetary policy impacts a series of economic factors:

- Interest rates (restrictive monetary policy that would reduced the inflation rate, increase the interest rate, expansive policy would reduce the interest rate),
- Exchange rate (restrictive monetary policy reduces the price of foreign currency, expansive policy increases it),
- Inflation level (changes in the quantity of currency in circulation affect the inflation level in the same direction with a determined time delay),
- Economic cycles (oscillation of the level of growth of the quantity of currency in circulation causes less stable economic development – economic cycles).

Monetary policy is led and managed by the Bank of Slovenia.

The Bank of Slovenia was founded in 1991 with the purpose to:

- achieve economic goals of stable prices, full employment and economic growth.

It simultaneously achieves its direct goals:

- preserving currency stability,
- preserving general liquidity of domestic payments and foreign payments.

BS is owned by Slovenia and is an independent institution (also financially).

The Governing Board of the Bank of Slovenia is the highest body of the central bank (governor, deputy governor, 3 vice governors, 6 external independent experts).

The Bank of Slovenia legally has the following instruments at its disposal to run the monetary policy:

1. purchase and sale of foreign means of payment,
2. purchase and sale of state securities,
3. purchase and sale of domestic and foreign transferable short-term securities,
4. issue and purchase of bills,
5. short-term bank crediting on the basis of transferable short-term securities,
6. short-term bank crediting with the pledge of securities.

With these instruments, the BS has a direct impact on the quantity of currency in circulation (with these instruments, the BS issues monetary base).

1. The BS determines mandatory (necessary) reserves.

Fiscal policy means state management of taxes, national expenditure and state debt.

Similarly as monetary policy, fiscal policy impacts a number of economic factors.

The fiscal policy is more or less determined by the National Assembly of the Republic of Slovenia.

Contradicting goals followed by the monetary policy (increasing state expenditure for stimulating economic activity can cause budget deficit that is temporarily covered with loans with the BS – this can led to inflation, change in exchange rates etc.) can occur.

Monetary policy and budget deficit impact the costs of company financing.

Taxes and state expenditure have an extensive direct effect on company performance:

- Changing tax rates, tax relief, tax exemption.
- Directing state expenditure to companies (school system, defence, highway construction etc.) and to individuals (social security).

1.2.2 Financial markets

Financial markets are markets that in general:

Provide money to those who need it to realise their plans and

Provide profitable financial assets to those who are prepared to buy with money

Financial markets + financial institutions = mechanism that enables the transfer of savings from sufficit cells (savers) to deficit cells (productive investors).

Sufficit economic cells = cells with financial savings.

Deficit economic cells = cells that invest more than they save.
Adapting the composition of property of economic subjects.

Property of economic subjects = group of financial and real assets.

Financial assets = property in the form of money, receivables, securities, deposits at financial institutions etc.

Real assets = property in the form of land, buildings, machinery, merchandise etc.

Functions of financial markets:

- Economic function:
  Enabling such transfer of savings from savers to investors to use the savings economically efficiently.
- Financial function:
- Ensuring liquidity.
- Option of investment distribution.
  Differentiating financial markets by types of possible financial investments (mortgage market, state bonds market etc.) and by geographical distribution (local, regional, national, international).

Normal distribution of financial markets (arbitrary):

I. Primary and secondary financial markets

Primary financial market: trading with new issues of financial means.

Secondary financial market: trading with existing financial means (the possibility to change a financial receivable into money before maturity).

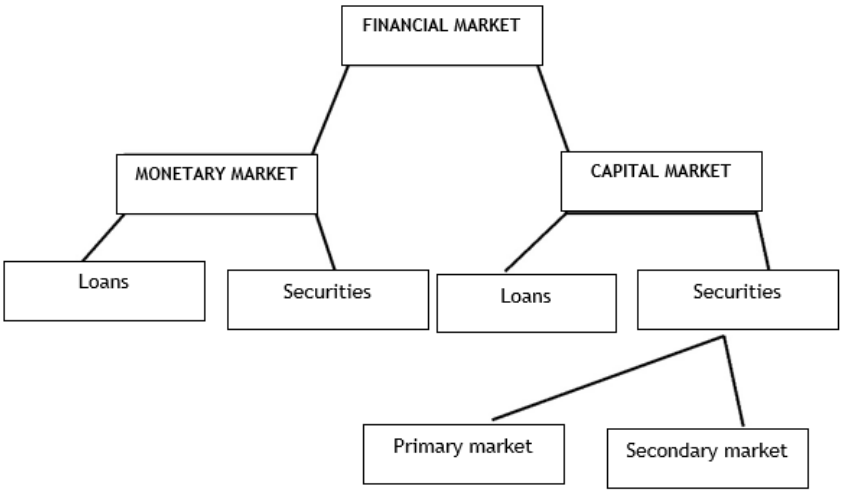
II. Financial markets for credits and securities
Credit market:
Credit = contractually agreed between the lender and the borrower (credits usually have no developed secondary financial market).

Securities market:
Impersonal or open market – trading via brokers or agents.
Personal or closed market – the seller and buyer directly agree on the purchase of securities.
Stock exchange: market for trading with securities.
OTC trading: trading on the non-organised market.

III. Monetary markets and capital markets
Monetary market: financial market used to trade short-term financial instruments (maturity less than a year).
Meaning and role of monetary markets:

- They are the main source of cash (to preserve liquidity).
- They enable the central bank to manage its monetary policy (interventions in the monetary market to regulate the quantity of currency in circulation).

DIVISION OF FINANCIAL MARKETS



Capital market: financial market for trading with long-term securities (maturity in a period over one year and without maturity – shares).

The main task of the capital market is to increase the volume of saving and direct savings in productive investments, i.e.:

- Savers buy newly issued long-term securities of companies – they use the cash to finance investment projects.
- Financial institutions use individuals' and companies' savings to purchase long-term securities.

The connection between the monetary market and the capital market are commercial banks: they perform the function of transforming the maturity of funds.

The state on financial markets as:

- The borrower (takes loans and issues securities for covering budget deficit).
- The guarantor (issues guarantees for loans of some economic subjects).
- The legislator and regulator (regulates financial markets with loans).
- The final source of liquidity (BS gives liquidity loans to banks and the state and buys short-term securities to improve liquidity).

The Republic of Slovenia has all types of financial markets, but they are relatively disconnected and non-transparent.

Rapidly developing financial market in the Republic of Slovenia comprises the operations of the secondary securities market at the Ljubljana Stock Exchange.

The goals of each stock exchange (great impact on other financial markets):

- Transparency
- Efficiency
- Liquidity
- Safety
- Integrity

Ljubljana Stock Exchange:

- Initially founded in 1924 and operated until 1941.
- Re-founded in 1989.
- First meeting: 29 March 1990.
- Trading with securities and gold
- Stock brokers (dealers and brokers)
- Dealers implement transactions in their own name and for their own account
- Brokers implement transactions in their own name and for foreign account
- Stock exchange meeting

- Brokerage houses
- Pricing at the stock exchange meeting by proclamation
- Designing average prices
- Trading with long-term securities:
  - categorised listing I
  - categorised listing II
  - free market.

1.2.3 Financial institutions

Financial institutions are the intermediaries between savers and real investors in the transfer of savings. They offer savers the option to save in a short time period (ensure greater quality of invested savings and greater liquidity).
They offer real investors to use their savings in a longer time period.

Change in maturity of financial savings = ability of financial institutions to exceed the difference between the offered and desired maturity of savings.
The advantage of "mass production" of services, brought by a large scope of savings transfer means:

Payments for collected savings (interest paid to investors) + requested payments for transferred savings (interest paid by investors)?? (lower) than the costs of direct transfer.

Types of financial institutions:
- Commercial banks
- Savings banks
- Mutual savings banks
- Credit unions

Non-deposit financial institutions
- Investment funds
- Mutual funds
- Investment companies
- Contract financial institutions
- Pension funds
- Insurance companies

Other institutions in the financial market
- Investment banks
- Credit rating agencies
- Stock brokers etc.

1.2.4 Financial instruments

Financial instruments comprise:
- Cash and cash equivalents (cash, scriptular money)
- Loans
- Deposits, savings deposits
- Bonds
- Shares
- Bills
- Commercial papers
- Treasury bills

2. PRICE OF SECURITIES

2.1 Investments

A company acquires financial means with its activity, and it spends them partially for current costs, the remaining part, the so called savings can be invested.
Savings can be invested as real or financial investments.
Investments are distributed to:

- Financial investments
- Investment in the company
- Investment in the state
- Investment in financial institutions
- Derivative investments

- Investment in knowledge
- Real investment
- Real estate
- Equipment
- Permanent consumables

Division of financial investments

I. FINANCIAL INVESTMENTS IN COMPANIES

A. Equity investments
- Shares
- Ordinary shares
- Preferred shares
- Convertible preferred hares
- Shares of partners
- Sole proprietor investment

Ordinary shares – Holders of ordinary shares are in case of bankruptcy the last in line in the repayment of their receivables; they have full voting right, return on shares depends on the company's business performance.
Preferred shares – If the company goes bankrupt, these shares are paid before ordinary shares, have limited voting right and often fixed dividends. The supervisory board decides on their payment with regard to the company's business results.
Convertible preferred shares – Enable holders the exchange of preferred shares with ordinary shares in a certain ratio according to holder's wishes.

B. Creditor investment
- Bonds
  - Ordinary bonds
    - Uninsured bonds
    - Insured bonds
  - Mortgage bonds
  - Collateral trust bonds
  - Equipment trust certificate
  - Unordinary bonds
    - Company business results interest
  - Profit bonds
  - Participating bonds
    - Factor-related bonds
  - Indexed bonds
  - Floating rate bonds
    - Interest rate is lower than market rate

- Foreign currency bonds
- Convertible bonds

Bond is a security that bring contractually determined interest to the holder.
It is typical for plain bonds that the interest they bring is fixed in a face value.
Plain bonds are separated with regard to the insurance of the bond's holder claim.
Unordinary bonds are differed by the method of calculation and payment of interest.
Income bond is also well known, since interest is paid only if the company's profit is sufficiently high.
The holder of a participating bond, which is quite rare, is also participating in the company's profit and gets contractually determined interest.
Convertible bonds usually have a longer maturity period, the holder can convert them under determined conditions, for instance to preference shares or ordinary shares.

- Futures loans

- Bank futures loan (revolving, evergreen)

- Insurance company futures loan

Futures loans are a type of financial investment that is suitable for banks and insurance companies but not for individuals and companies.

Futures loan is partially insured when it is approved to purchase specific equipment with the repayment period equal to the amortisation period of such equipment (bank rule applies, i.e. that fixed and current assets may not be financed with such loans to more than one third of the value).

Special types of futures loans are the revolving loan and the evergreen loan.

Revolving loan is actually some kind of a credit line to three years (the company can renew it at maturity) – after three years, the bank changes it into a futures loan.

Evergreen loan is a credit line without maturity which can be changed by the bank in any year into a futures loan (which is usually very expensive for the company, since it is uninsured, non-transferable claim without maturity).

- Lease

Lease as a type of financial investment legally is not a financial investment – from the legal aspect, the lease is an advance real investment, when the first economic entity buys real estate (e.g. business premises) or equipment, ant the other economic entity leases it from the first one (uses it for payment).

Such type of a real investment is in many cases, by economic content, another form of insured financial investment with mortgage or equipment trust certificate.

- Short-term bank loans

- Uninsured

  - For temporary increase of stock
  - Credit line
  - Surmountable crediting

- Insured

  - With the pledge of trade receivables

- With inventories

- Trade receivables
- Commercial loan per open account
- Commercial loan per written promise
- Commercial bill of exchange
- Irrevocable letter of credit

Considering business customs, receivables are actually a mandatory investment, because when a company sells goods to another company, there is a normal payment deadline for such goods (for instance 60 days) and until the date of payment, the seller actually credits the buyer, i.e.g makes a short-term financial investment in the buyer.

II. FINANCIAL INVESTMENTS IN THE STATE

- Long-term investments
- Republic bonds
- Municipal and city bonds
- Republic institutions and companies bonds

Republic bonds are issued by the Republic of Slovenia and it guarantees for the payment of liabilities (they are uninsured!).

The money from the issue of republic bonds is intended to cover budget deficit and for financing state investments.

Municipal and city bonds are issued by municipalities and cities to finance municipal investments (tax relief applies for them!).

Bonds of republic institutions and companies are issued by state-founded institutions (privatisation agencies etc.) and state companies (Pošta Slovenije) in their own name and for their own account – such institutions and companies will not go bankrupt (therefore the return is lower than the return on corporate bonds!).

- Short-term financial investments
- Treasury bills

Treasury bills – short-term state securities with solid interest rate and with up to one year maturity: purchased by financial institutions and large companies.

III. INVESTMENTS IN FINANCIAL INSTITUTIONS

- Shares and bonds of investment funds,
- Financial investments in banks and savings banks as deposits and bills,
- Securities (transferable deposits) – certificates about deposits,

- Tax relief supported pension plans,
- Forms of insurance offered by insurance companies.

IV. DERIVATIVE FINANCIAL INVESTMENTS

- Option,
- Equity warrant,
- Futures contract.

Options – securities that enable holders the option to buy or sell an investment or subject of current consumption at a determined price in a determined price period or on a certain date

Call option vs. put option.

Options are bought and sold for insurance against risks and against speculations (from the aspect of speculation, options are venture investments).

Equity warrant is actually an added right (but not an obligation) to the block of bonds, i.e. the buyer of the block buys ordinary share at a certain price (the right to purchase is significantly longer – to 5 or more years; issued by the basic investment issuer).

Futures contract – obligation to sell or buy usually on a determined date (initially: the purpose of ensuring the price to the producer or buyer; today: betting slip on which index will apply on the date of expiry of the contract).

Investment in knowledge

Investments in knowledge are becoming more profitable for individuals and institutions.

Investments in knowledge are usually high and their expected return is risky.

Considering the extremely rapid growth of investments in knowledge, the ratio between risk and return of investment is very beneficial.

R&D is the indicator of excepted future operating performance – major correlation between the company's business results and investments in R&D (such investments can be very risky).

Real investment

As with financial investments, a part of current income of the company in real investments is not spent for current purposes, but saved – it can be invested directly into something real (not financial), with an expectation of a certain benefit (return) in the future.
Real investments involve:

- Investments in real estate (land and buildings),
- Investments in equipment (machinery, vehicles, communications etc.),
- Investments in permanent consumables (washing machine, car etc.).

Real estate can bring return by enabling a profitable activity.

Real estate rate of return is difficult to measure, as is difficult to measure their risk.

Usually, real estate prices sink more during economic recession than the rate of return of other investments, thus we can assume that they are investments with a high-risk rate, but they can also have a high rate of return.

2.2 Temporal value of money

Economic entity – entrepreneur
today renounces
the use of currently available money
for a determined promised quantity of money in the future
– and demands a certain compensation for it.

The longer the time or renouncement, the higher compensation is demanded – this means:
TIME IS MONEY.

The goal of company operations:

to maximise the market value of a company.

Market value of a company at certain risk is higher if it brings more money to the owner – entrepreneur.

But, besides the quantity of money, temporal allocation of this money is important.

A. Future value

Future value = the sum of money of accumulated investment (e.g.. deposit in a bank) in a certain time period.

Application of the the compound basis calculation, if the time period is longer than the time period to which the interest rate applies.

Future value for one time period:

FV1 0 PV + (PV x r) = PV (l + r)

Future value for n time periods:

PVn = PV (l + r)n

Symbols:

FV – future value
r – interest rate
PV – present value
n – time period (year, half year, quarter of a year, month, day)
t – time (in proper time unit)

Usually, interest is added to the principal at the end of the period, subject to the interest.

Compound basis calculation:

In the next period, interest is calculated as per the principal increased by the interest amount – the result of such calculation: future value.

Expression (l + r)n – future value factor

Future value should be higher if the interest rate r is higher and the number of periods n is higher.

Future value EUR 1 with regard to time and rate of return

Usually, payments are made multiple times and at various times.

The general equation of the future value for multiple payments:

lt – payments in period t

B. Present value

Present value (PV) = common denominator that enables the comparison of financial or cash flows at various moments of time.

The calculation of PV shows how much money an entrepreneur should have today to achieve a certain future value in a certain period of time.

Present value equation:

r – discount rate
Discount rate = equity opportunity cost: it tells us what it costs an entrepreneur to spend todayinstead of in 1 year. In financial theory, r is the required rate of return.

Expression 1/(1+r)n is according to the future value factor analogy called the present value factor – we frequently use the term discount factor DF.

At a given discount rate and given future time moment, the discount factor tells us the present value of the money unit price.

Present value calculation is future value calculation reversed.

t	r1	r2	r3	FV	PV1	PV2	PV3	
0	2	5	10	1	1	1	1	
1	2	5	10	1	0.980392		0.952381	0.909091
2	2	5	10	1	0.962269		0.907029	0.826446
3	2	5	10	1	0.942322		0.863838	0.751315
4	2	5	10	1	0.923845		0.822702	0.683013
5	2	5	10	1	0.905731		0.783526	0.620921
6	2	5	10	1	0.887971		0.746215	0.564474
7	2	5	10	1	0.870560.710681		0.513158	
8	2	5	10	1	0.853490.676839		0.466507	
9	2	5	10	1	0.836755		0.644609	0.424098
10	2	5	10	1	0.820348		0.613913	0.385543
11	2	5	10	1	0.804263		0.584679	0.350494
12	2	5	10	1	0.788493		0.556837	0.318631
13	2	5	10	1	0.773033		0.531321	0.289664
14	2	5	10	1	0.757875		0.505068	0.263331
15	2	5	10	1	0.743015		0.481017	0.239392
16	2	5	10	1	0.728446		0.458112	0.217629
17	2	5	10	1	0.714163		0.436297	0.197845
18	2	5	10	1	0.700159		0.415521	0.179859
19	2	5	10	1	0.686431		0.395734	0.163508
20	2	5	10	1	0.672971		0.376889	0.148644

2.3 Equity securities

Considering the fact how their value is determined, shares differ from bonds as follows:

- Future return on ordinary share is not promised in a certain amount (as applies to most bonds);
- Return on ordinary share are in two forms:
- as a dividend and
- as the increase in price of ordinary share, which is the result of reinvesting part of return (retained profit) in the company.

Ordinary share is a security which has no maturity for the issuer (eternal company!) and brings monetary amounts to the holder in two forms:

- As regular cash flow – dividends that are paid at the end of each period (dividends Divn can be different);
- As a monetary amount in the amount of the value of an ordinary share at its sale PVn.

Other indicators

$$\text{Payment ratio} = \frac{\text{Paid dividend}}{\text{Profit per share}} \times 100$$

$$\text{Total equity value of shares} = \frac{\text{Reported reserves Company's capital + company}}{\text{Number of shares issued}}$$

Balance sheet value of shares arises from capital and reserves of a public limited company (as can be seen from the published balance sheet).

3. ACCOUNTING – LANGUAGE OF BUSINESS FINANCE

3.1 Financial statements

Financial (accounting) statements are intended for all interest groups in a company.

Company as an organisation of interest groups

Interest groups	Contribution	Interest
BUYERS	Financial resources	Satisfaction of needs
PARTNERS	Funds invested	Financial award
WORKERS	Work, skills	Financial award, safety
COMMUNITY	Operational framework	Compliance with the legislation
OWNERS	Capital	Financial award

Connection between finance and accounting:

- Accounting data are the key material for the financial analysis and business decisions.
- The main goal of financial statements is to establish the company's financial performance.
- Accounting data are the basis for forecasting the future.
- A wide array of other application purposes.
- Despite the unification of measurement and presentation, accounting is not an exact discipline.

Financial or accounting statements present information about company's operation in the form of:

- Profit and loss statement
- Balance sheet
- Cash flow statement

The purpose of financial statements:

- Rational investment and financial decisions
- Assessment of amounts, maturity time and reliability of cash flows
- Evaluation of property and sources of financing
- Presentation of company's performance
- Presentation of acquiring and spending money
- Information about the managing board's economical management with owners' assets.

Profit and loss statement

Revenue + profit – expenses – losses = profit

Balance sheet

Liabilities equity capital = assets

Cash flow statement

Cash inflows – cash outflows = change in monies

Example

PROFIT AND LOSS

Sales revenue 5000
+ Other revenue 200
= TOTAL REVENUE 5200
- Costs of sold quantities 3000
= GROSS PROFIT ON SALE 2200
- Costs of sales and management 1000
- Amortisation 300
- Other expenses 200
= OPERATING PROFIT 700
+ Revenue from financing 0
- Expenses of financing 200
= REGULAR OPERATING PROFIT 500
+ Extraordinary revenue 200
+ Extraordinary expenses 300
= TOTAL PROFIT 400
- Tax on profit 100
= NET PROFIT 300
Net profit for ordinary shares 100
Net profit for preference shares 0
Undistributed net profit 200

Profit and loss statement items present business events in:

- Regular operations
- Financing
- Extraordinary events

Example

BALANCE SHEET

ASSETS

NON-CURRENT ASSETS 2200
FIXED ASSETS 2000
Land 200
Buildings 800
Equipment 1000
LONG-TERM FIN. INVESTMENTS 200
+
CURRENT ASSETS 800
Inventories 200
Trade receivables 400
Short-term financial investments 100
Cash 100
=

TOTAL ASSETS 3000

LIABILITIES

EQUITY CAPITAL 2000
Preferred shares 0
Ordinary shares 1800
Profit from previous periods 200
+
LONG-TERM LIABILITIES 500
+
SHORT-TERM LIABILITIES 500
Liabilities to suppliers 300
Liabilities to workers 50
Liabilities to the state 50
Short-term loans 100
=
TOTAL LIABILITIES 3000

Example

CASH FLOW STATEMENT

1. BUSINESS ACTIVITY 200
+
Net profit 300
+
Amortisation 200
-
Change in short-term operating receivables 200
+
Change in short-term operating liabilities -100

II. INVESTMENT ACTIVITY 200
+
Investments in fixed assets 300
-
Disposal of fixed assets 100

III. FINANCIAL ACTIVITY -100
+
Issue of shares 0
-
Purchase of shares 100
+
Change in short-term financing liabilities 200
+
Change in long-term financing liabilities -100
-
Dividends paid 100

CHANGE IN CASH (I. –II.+III.) -100

CASH FLOW FROM OPERATING ACTIVITIES

PROCEEDS FROM SALES, OTHER PROCEEDS - PAYMENTS FOR INPUTS = CASH FLOW FROM OPERATING ACTIVITIES

CASH FLOW FROM INVESTING ACTIVITIES

PROCEEDS FROM THE SALE OF NON-CURRENT ASSETS - PAYMENTS FOR THE PURCHASE OF NON-CURRENT ASSETS = CASH FLOW FROM INVESTING ACTIVITIES

CASH FLOW FROM FINANCING ACTIVITIES

PROCEEDS FROM BORROWINGS, ISSUE OF SHARES - REPAYMENT OF BORROWINGS, DIVIDENDS = CASH FLOW FROM FINANCING ACTIVITIES
=
CHANGE IN CASH FLOW

Free cash flow is the amount of available monies that belong to the company owners, decreased by the necessary investment and financial expenses.

Free cash flow
=
net profit
+
amortisation
+
change in long-term debt
-
change in working capital
-
investments in fixed assets

Outflows of cash in the free cash flow definition are those outflows, without which no cash flows can be achieved in long term (e.g. the increase in cash in the volume which the company normally uses to settle its liabilities, is not included in the change of working capital).

There are two calculation methods:

- Direct method – proceeds minus payments
- Indirect method – on the basis of profit and loss statement and balance sheet.

Example

PROFIT AND LOSS STATEMENT	2007	2008
Sales revenue	1200	1500
- Costs of sold quantities	520	650
= Gross profit on sale	680	850
- Other costs	420	450
- Amortisation	150	150
= Operating profit	110	250
- Expenses of financing	70	67
= Total profit	40	183
- Tax on profit	12	55
= Net profit	4	128

Amortisation rates
Buildings: 5%
Equipment: 20%

Investments
Buildings: 0
Equipment: 150

BALANCE SHEET	2007	2008		
Current assets	554	566		
Cash	54	66		
Trade receivables		300	250	
Inventories	200	250		
Non-current assets		1500	1600	
Buildings	1000	950		
Equipment	500	550		
Long-term fin. investment		0	100	
Total assets	2054	2166		
Short-term liabilities	450	454		
Liabilities to suppliers	200	189		
Financial liabilities	250	265		
Long-term liabilities	500	480		
Equity	1104	1232		
Called-up capital		800	800	
Profit from previous periods		300	304	
Undistributed profit for the current year			4	128
Liabilities	2054	2166		

What was the free cash flow of the company in 2008?

3.2 Financial analysis

The purpose of a financial analysis is to find:

- the financial situation of the company,
- the trend of financial operations,
- the ratios and laws from the past to plan the future.

Approaches and methods of a financial analysis

- we systematically arrange financial statements,
- annual data must be mutually comparable (by the same accounting guidelines),
- data are recalculated:

- to fixed prices,
- we calculate structures,
- we calculate growth indicators.

The company is analysed

- in time
- in comparison with other companies in the sector

Profit and loss statement analysis

- trend
- deviation
- mutual relationships
- current situation
- seasonal influences

⇨

- sales revenue
- other revenue
- operating expenses
- financing expenses
- individual profit categories
- fixed and variable costs
- business leverage

Balance sheet analysis

- trend
- deviation
- mutual relationships
- current situation
- seasonal influences

⇨

- fixed assets
- long-term financial investments
- equity
- short-term liabilities
- long-term liabilities
- financial liabilities
- off-balance sheet liabilities

3.2.1 Breaking point analysis

Breaking point is the volume of sale where operating profit equals 0.

$OP = S - VC - FC$

OP	operating profit
S	sales
VC	variable costs
FC	fixed costs

Permanent (fixed) costs do not change with the sales volume.

Mathematical derivation of a breaking point:

$OP = S - VC - FC$
$OP = S - (VC/S) \times S - FC$

if $OP = 0$, then

$0 = S - (VC/S) \times S - FC$

0 = S x (l – VC/S) – FC
S* = FC/(l – VC/S)

S* breaking point
VC/S share of variable costs in sales
l- (VC/S) share of coverage in sales
coverage = fixed costs + operating profit
or
= sales – variable costs

The breaking point can also be determined for the number of sold units of a product or service:

S* = FC/(P – VCE)

FC fixed costs
P product price
VCE variable cost per product unit

Tabular determination of a breaking point

Sales	Variable costs	Fixed costs	Total costs	Operating profit
100	60	100	160	-60
150	90	100	190	-40
200	120	100	220	-20
250	150	100	250	0
300	180	100	280	20
350	210	100	310	40

VC/S=0.6

S* = FC/(l – VC/S) = 100/(l - 0.6) = 250

The breaking point analysis can be used as a quick tool for:

. determining minimum company's capacities,

. determining sales prices,

. negotiations about purchase prices of raw materials, salaries,

. cost analysis,

. decisions about financing,

. evaluation of investment eligibility.

3.2.2 Business leverage

Under the breaking point loss increases, above it profit increases.

We want to know how quickly this happens?

Business leverage rate tells us for how many % operating profit changes if sales change by 1%.

PV = % change in operating profit
% change in sales

Sales	Profit
300	20
350	40
+ 16.6%	+ 100%

PV = 100%: 16.6% = 6

MATHEMATICAL FORM:

PV = 1 + 100/20 = 1 + 5 = 6

Business leverage

- The higher the share of fixed costs is compared to variable costs, the higher the business leverage is.
- Profit increases rapidly above the breaking point (when all fixed costs are covered), if the business leverage is high.
- And quite contrary, loss increases below the breaking point.
- If the business leverage is higher, the profit's reaction to sales change is greater.
- The relationship between fixed and variable costs is strongly determined by technology.
- If sales increase, the business leverage rate decreases – it is not defined in the breaking point, then in drops and asymptomatically comes near value 1.
- High business leverage represents higher operating profit variability or higher business risk.
- Business risk can decrease with the higher volume of sales and/or operating profit.

EXAMPLE

An entrepreneur wants to reduce operating costs by replacing manual work with machines. Fixed costs (additional machine amortisation) increase due to the purchase of a new machine and variable costs decrease (lower labour costs). Let's consider that total costs really reduce.

Company A

Sales	Variable costs	Permanent Costs	Total costs	Operating profit
200	120	100	220	-20
300	180	100	280	20
400	240	100	340	60

Company B

Sales	Variable costs	Fixed costs	Total costs	Operating profit
200	100	130	230	-30
300	150	130	280	20
400	200	130	330	70

If the volume of sales remains unchanged, the rate of business leverage increases and thus business risk increases (the variability of operating profit in the last column of the table increases).

If the forecasts for sales increase are reliable, then the business decision was appropriate.

In the opposite case, the entrepreneur has increased operating risks – if sales go down, the loss from operations will be higher than without an investment in a new machine.

Assumptions (limitations) of breaking point analysis

- Variable costs and sales have a linear connection.
- Costs are divided in fixed and variable costs.
- Fixed costs do not change with regard to sales volume.
- Sales prices do not change.
- The analysis is static.
- It does not consider cash flows.

Possible solutions to application

- non-linear equations of costs,
- including costs of interest,
- including the desired profit.

3.2.3 Financial leverage

Financial leverage rate tells us for how many % total profit changes if the operating profit sales changes by 1%.

$$FV = \frac{\%\text{ change of total profit (after interest)}}{\%\text{ change in operating profit}}$$

Total profit = operating profit – interest

If FV = 1, fixed interest equal 0, meaning the company is not indebted.

The financial leverage rate is higher, if the greater part of total liabilities to sources of financing encompasses debt, subject to interest.

Greater debt therefore works as a leverage that changes total profit by a greater percentage than the percentage of the operating profit.

The leverage effect is triggered by fixed expenses for interest (similar to the fixed operating costs in business leverage).

The negative side of a financial leverage is additional variability of total profit – like business leverage increases business risk, financial leverage brings additional financial risk.

EXAMPLE

Operating profit 120
Fixed interest 80
Total profit 40

FV = 120 / 40 = 3

If profit before interest increases (decreases) by 10%, total profit increases (decreases) by 30%.

When a company significantly uses both leverage, even a small increase in sales strongly increases net profit.

And quite contrary, a moderate drop in sales can cause inproportionally high loss (because a company has to cover high fixed operating costs and interest!).

Due to the leverage effect, high profit growth rates are frequently only at moderate operations growth.

RULE: DO NOT PUT A HIGH FINANCIAL LEVERAGE ONO TOP OF A HIGH BUSINESS LEVERAGE!

3.2.4 Total leverage

Total leverage rate measures the percentage change of total profit with regard to the percentage change in sales.

Total leverage rate is calculated as the product of the business and financial leverage rate:

$$CV = \frac{\%\text{ change in total profit}}{\%\text{ change in sales}} = PV * FV$$

Both leverages represent business and financial risks of an individual company.

Companies with high business leverage (capital-intensive – with high fixed costs) are therefore usually less indebted as companies with low business leverage.

3.2.5 Cash flow analysis

- Cash flow connects three main activities of a company – operations, investing and financing, thus enabling their undisturbed progress;
- cash flow statement connects the balance sheet and profit and loss statement thus explaining:
- the changes in monies of a company in time,
- cash flow presents what is not visible from the profit and loss statement or the balance sheet – how company's activities impact cash flows,
- cash flow statement is made on the basis of the analysis of changes in balance sheet items in the calculation period;
- statements can be drawn for individual time periods, from one day to one year,
- the features of cash flow depend on the branch, technology, company's life cycle rate etc.

3.2.6 Cash flow components analysis

Working capital = current assets – short-term liabilities

Operating cycle:

Current assets: money > inventories of raw materials > production > inventories of half-products > inventories of end products > sales > trade receivables > money.

Short-term liabilities: purchase of raw materials > liabilities to suppliers > payment.

Investments in fixed assets

- expansion of production (sales, ecological, safety) capacities,
- replacement of used means,
- sale of means increases cash flow.

Change in debt

Debt at the beginning of period + new loans – repayments

3.3 Financial and operating indicators

Purpose of the analysis:

- as part of financial analysis it enables the understanding of the rate of return and the risk of real and financial investments;
- enables the assessment of past and current financial performance of a company,
- highlights the financial advantages and weaknesses of a company;
- experience from the past enable forecasting the future,
- enables the verification of new strategies, restructuring etc.

We analyse
. trend
. deviation
. mutual relationships
. current situation
. seasonal influences

By using indicators:

- in time and
- compared to other companies in the branch we establish:

1. Liquidity
2. Return
3. Activity
4. Indebtedness

We provide comparable data

- For the calculation of indicators.
- When we compare data about the current situation with flow data, we usually take the average at the beginning and at the end of the period.
- We compare data that refer to the same time periods.

a) Liquidity indicators

- Liquidity means the ability to settle short-term liabilities at maturity.
- The level of company's liquidity is shown by comparing current assets with short-term liabilities.
- Since current assets comprise assets with various liquidity levels (convertible to cash), we measure several types of liquidity.

	2006	2007	2008
Liquidity Cash/short-term liabilities	0.12	0.16	0.21
Current liquidity (Cash+buyer)/short-term liabilities	0.90	1.20	1.30
General liquidity Current assets/short-term liabilities	1.09	1.60	1.70

Higher coefficients mean a higher liquidity rate and higher safety of creditors, on the other hand, an extensive volume of working capital reduces free cash flow.

b) Profitability indicators

- Show how successfully a company manages its assets.
- Indicator indirectly express the decisions of the managing board about operations, investments and financing.
- Return on equity ratio is most important for the owner, while return on assets is most relevant for creditors.

	2006	2007	2008
Net profit/revenue in %	-2.7	1.0	2.3
Return on equity in % Net profit/equity	-1.1	0.4	0.9
Net return on assets in % Net profit/assets	-1.7	0.2	0.7
Return on assets in % Operating profit/assets	-1.8	0.3	0.8

c) Activity indicators present

- the efficiency of asset and liabilities management,
- the utilisation of assets at generation of sales,
- management of short-term liabilities,
- payment deadlines.

4. FINANCIAL PLANNING

4.1 Subject and starting point for financial planning

For the adoption of weighted business decisions about

- operations,
- investments,
- financing.

Financial planning is a part of strategic and business planning and the first phase in the use of many financial tools and techniques:

- operational business,
- evaluation of investment projects,
- evaluation of shares (companies),
- restructuring of companies,
- takeovers of companies,
- determination of the optimal capital structure.

Financial planning is understood as

- planning the investments of cash surpluses and cash deficit financing – short-term,
- planning of future financial needs and assets of the company – long-term.

Since the goal of company operations is to maximise cash flow,
the
main subject of financial planning is cash flow.

Other potential goals of the company as not as comprehensive as cash flow:

- – profit maximisation,

• problems:
- accounting category,
- time period risk,
- costs of capital,
- investments,
- taxation,

- – market share maximisation,
- – long-term survival,
- – full employment.

planning period	
day	cash flow
week	cash flow
month	profit and loss statement
year	balance sheet
usually 5-10 years	business plan
to 20 years in the future	strategy

How is cash flow planned

We draft a financial model – mutually connected profit and loss statements, balance sheets and cash flow statements.

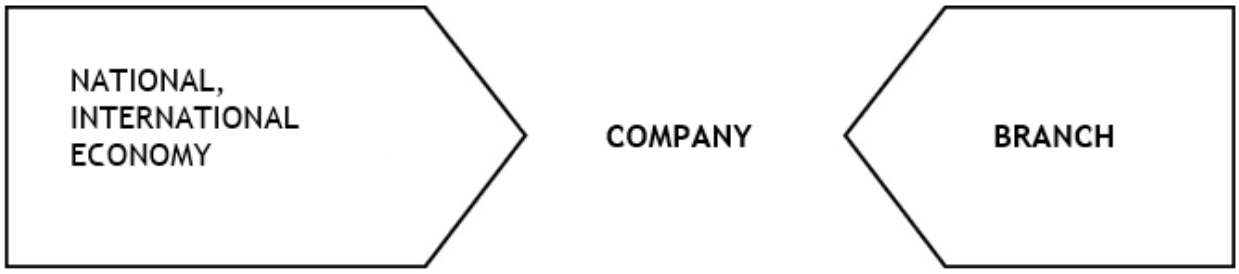
Profit and loss statement Balance sheet Cash flow statement
sales fixed assets operations
operating costs current assets investing
financing costs short-term financing
tax on profit long-term liabilities

Forecasts of financial statements can be made with fixed prices.

Financial planning (modelling) is based on assumptions.

Attention: waste out!

Therefore, a thorough preliminary company analysis and the analysis of its environment are required.



ENVIRONMENT COMPANY
Domestic economy 1. Business area analysis
International economy Sales
Market web
BRANCH ▫ product
Attraction ▫ price
Life cycle ▫ distribution
Key success factor Promotion
Size Suppliers
Competitive forces Buyers
▫ Threat of entry Production
▫ Company competitiveness Technology
▫ Negotiating power of buyers Labour force
▫ Negotiating power of suppliers Management
Distribution paths Strategy
Technology
Demographic factors 2. Financial analysis
Fashion, habits Profit and loss statement
Balance sheet
Financial and operating indicators

STRENGTHS ADVANTAGES
THREATS WEAKNESSES

4.2 Profit and loss statement planning

Two approaches:
a. determine target profit and establish necessary sales,
b. determine the target sales volume and derive profit.

a. Target profit

- the approach is usually applied for new companies,
- it can contain entrepreneur's labour compensation,
- compensation for invested equity capital,
- return on equity = necessary return rate * invested capital,
- necessary return rate = non-risky return rate + risk premium.

Example

Invested capital 10,000
No-risk return rate 3%
Risk premium 9%
Required return rate 12% (3%+9%)
Required profit 1200 (10,000 * 12%)

Breaking point model
Fixed costs 5000
Variable costs in sales 70%

S = (fixed costs + required profit): (l – share of variable costs in sales)

S = (5000 + 1,200):0.3 = 20,667

Required sales volume = 20,667

We can use a comprehensive financial model instead of a breaking point model, only that we build it from bottom up – recommended!

b. Target sales volume

- More appropriate for distinguished companies
- Originates from the market and sales possibilities
- With iterary change of model we approach target profit

Sales planning

Sales revenue

- Forecast period
- Quantity, price, value
- Domestic market, export
- Harmonised with capacities
- Impact of investments
- Impact of own activities

Taken into account:

- The past growth in sales
- Macroeconomic forecasts
- Branch forecasts
- Competition
- Price elasticity
- Expected price movement
- Production web

Assumptions with regard to sales are very important because they usually drive the entire financial model – they mostly impact the solution – net profit or free cash flow.

Income planning.

Direct costs.

Costs of material, services and goods

Define the types of fixed (absolute fixed, relatively fixed) and variable costs (proportional, degressive, progressive):

- on the basis of previous relationships and trends,
- on the basis of comparison with the companies in the same branch,
- on the basis of own analyses and preliminary invoices (calculations).

Determine the absolute amount of fixed costs.

Example Sales percentage method

Sales forecast 8000
Variable costs in sales 40%
Variable costs forecast 3200

Labour costs

- Envisaged scope of activity
- Working hours utilisation norm
- Hourly rate

Amortisation

- Amortisation rates
- Fixed assets from the balance sheet forecast
- Amortisation in the calculation period

Other costs

- Start-up costs
- Regular costs
- Extraordinary costs

Indirect (general) costs

General production costs
General administrative costs
General sales costs

- Costs of material, services and goods
- Labour costs
- Amortisation
- Other costs

Financing expenses

- Envisaged interest rates
- Debts from the balance sheet forecast
- Calculation of expenses for interest

Tax on profit

- Tax rate
- Relief on investment

4.3 Balance sheet planning

Working Capital

- Analysis of financial and operating indicators
- We calculate the indicators of current assets movement and short-term operating liabilities.
- Determine target and forecast return indicators.
- With sales revenue and costs forecasts we calculate the forecasts of desired items.

Example

In the past year, the company had:
Trade receivables 200
Net sales revenue 1460

Calculate the days of fixed trade receivables = 365 * 200: 1460 = 50 days

For the next year we envisage a 30% in sales and the prolongation of the number of days of fixed receivables for a period over 60 days. What is the new balance of receivables?

Trade receivables = 60 days * 1460 * 1.3 365 = 312

- Items that are variable with regard to sales, are assessed according to the sale percentage method or with projected return indicators.
- The calculated projections are checked with liquidity indicators.
- Projected return indicators can be modified by years.

- Working capital movement is the result of marketing, production and financial decisions.

- Planning excessive working capital reduces cash flow, if the planned working capital is too low, this can cause illiquidity and suspension of operations.

- Planning stimulates savings (better recovery of claims, more effective inventories management, rationalisation in production, sales, purchasing etc.).

- Planning enables timely verification of various forms of working capital financing.

Example

Working capital planning according to the sales percentage method.

	2008 actual	Percentage sales	2009 projection	
Current assets	1,400		1,556	
Inventories of goods	400	22.2%	444	
Short-term trade receivables	800	44.4%	889	
Cash and cash equivalents	200	11.1%	222	
Short-term liabilities	900		1,000	
Short-term liabilities to suppliers			600	33.3% 667
Liabilities to the state	100	5.5%	111	
Liabilities to workers	200	11.1%	222	
Sales	1,800		2,000	

Example

Working capital planning with return indicators

	Actual	Goal
Days sales outstanding	45	30
Days inventory outstanding	28	25
Days liabilities outstanding		
To suppliers	40	42
Sales	1,800	1,800
Costs of sold quantities	1,200	1,200
Short-term receivables	222	148
Inventories	136	123
Liabilities to suppliers	132	138
Working Capital	226	133
Change in working capital		
General liquidity indicator	2.7	2.0

Fixed assets – investments

- The projection of fixed assets was implemented on the basis of investments projection FA t+1 = FA t + i – a

FA –fixed assets
i – investments

a – amortisation

- In a new company, investments usually comprise the evaluation of minimum fixed assets required for the start of operations.

- In an operating company, investments are necessary for the replacement of used assets or for the expansion of capacities, required for the envisaged growth in sales.

- Estimated values of investments are obtained from suppliers or available market data.

- With planning, we are considering the envisaged available financial means and harmonise desired investments with them.

- Fixed assets lease can be a better alternative than purchase.

Financial liabilities

- The final step and goal of financial planning is closing the gaps between the necessary and own available financial means.
- Gap financing method depends on various factors (short-term debt, long-term debt, additional equity capital, increase in capital, hybrid financial instruments).

- If the gap exceeds financing abilities, we return to the beginning of the financial model and try to decrease all necessary financial means.

- Besides the scope of necessary financial means we also establish the suitability of capital structure of the company, short-term + long-term financial liabilities + equity.

- Major indebtedness means higher financial risk, on the other hand, financial leverage increases the profitability of equity.

- In the planning phase, we envisage the optimal structure of capital and plan the volume of indebtedness.

- This is also enabled by the indebtedness indicators analysis.

4.4 Cash flow statement planning

- On the basis of the profit and loss statement projection we can plan the cash flow statement.

- Cash flow statement plan can be presented in concise form as free cash flow or as a comprehensive cash flow statement that comprises operations, investing and financing.

- The starting points for net profit distribution to dividends or stakes in profit and the retained profit can also be determined in the financing cash flow statement.

How to benefit from financial planning:

- Data must be accurate and timely – monthly profit and loss statements maximum 10 days after the end of the month.

- Data are distributed according to the frequency of use – for instance:

monthly – inventories
- trade receivables
- liabilities to suppliers

weekly – cash balance

- cash expenditure
- cash income
- new sales
- balance of orders

- results are compared with planned results,

- we prepare weekly reports with data that are key for company's success – financial data must be provided to managers and key workers.

4.5 Short-term cash planning

- Cash flow statement incorporates cash income and expenses in a time period.

- A company has surplus in some time periods, and deficit of cash inflow over outflow in certain time periods.

- Deficit can be covered from own cash reserves (giro account, short-term financial investments) or from external sources.

- Cash flow plan helps us establish when a company needs money and external financing and prevents sudden deficit of money.

- It enables more effective investing of cash surplus.

- It enables savings in paid interest and additional revenue from received interest, discounts on quantity and cash.

- The plan can be drafted for a day, week, month, year, depending on seasonal sales trends, but at least one year in advance by months.

- It bases on paid and not on calculated realisation (accounting standards base on calculated realisation).

Cash flow statement

Before drafting a plan (preliminary calculation) of the cash flow statement, we should determine:

- the minimum cash balance,

- sales plan,

- cash income plan,

- cash expenditure plan,

- closing balance of cash at the end of the month.

Minimum cash balance

- We draw upon past experience, e.g. in the amount of 5-day sales.

- We determine different amounts due to seasonal oscillations.

Sales plan

- The key factor of cash inflows and outflows on the basis of past sales, with the help of quantitative techniques, market analysis.
- In the form of scenarios – optimistic, pessimistic, most likely.

Cash income plan

- Sale for cash.
- Sale for deferred payment – in 1, 2, 3, 4 ... months.

Cash expenditure plan

- Amount and payment deadline known in advance – fixed costs
- Variable amount and payment deadline – variable costs
- Salaries
- Rents, taxes
- Management and sales expenditure
- Interest
- Investment plan
- Loan repayment

External financing plan
Cash flow plan: January – June

Cash management

Trade receivables

- Check buyer's rating
- Prepare your loan policy and explain payment terms to each buyer;
- Continuously issue invoices;
- Do not take orders until due receivables are paid;
- Monitor major buyers separately;
- Demand partial prepayment;
- Be determined at recovery of debt;
- Hire a payment recovery agency, if no other remedy helps;
- Non-cash operations.

Liabilities to suppliers

- Settle liabilities as late as possible, but not to the disadvantage of the company's rating;
- Never settle liabilities before due date;
- Make a payment schedule;
- Distribute creditors by priority;
- Use cash discounts;
- Distribute the payment of liabilities equally over the month.

Inventories

- They are often too extensive and improperly composed – too little of something and too much of other things;
- Cost of inventories: cost of interest + cost of storage + cost of manipulation + labour cost + transport cost;
- It frequently pays of more to sell goods with discount than keep it in stock;
- Follow inventory cycle coefficients for various types of inventories;
- Choose a supplier with the shortest delivery terms (ant equal other conditions);
- Make an inventories purchasing system.

Expenses

- Reduce indirect costs.
- Check if lease is more favourable than fixed assets purchase.
- Loan repayment should be agreed in periods of high cash inflows.
- Second hand equipment can have the same quality as new equipment, but there are major savings.
- Implement supervision over costs.
- Invest surplus of money in safe and liquid financial investments.

5. DECISIONS ABOUT LONG-TERM COMPANY INVESTMENTS

Decisions about long-term investments have a tremendous impact on future company operations – they can involve positive and negative effects on the performance of operations.

Preparation for decisions about long-term investments can be time consuming and multilateral.

5.1 Characteristics and importance of decisions about long-term investments

Most long-term investments of a company are usually referred to as tangible long-term (fixed) assets of a company in amortisation – their value is gradually written off or changed in company expenses in the envisaged multi-annual life period.

Decisions about long-term investments – so-called investment decisions – refer also to some investments within current assets.

New production demands long-term increase in inventories of material and work in progress.

A company must invest long-term in those current investments that are always present – the so-called "permanent current assets".

The finance department must also study expenses for research and development, since their benefits show in a time period, longer than one year, i.e. by using the same logic as for long-term investments in machinery and buildings.

5.2 Decision-making process about long-term investments

The decision-making process about long-term investments comprises six steps:
1. creating ideas,
2. designing quality proposals,
3. collection of relevant information,
4. system analysis and proposal assessment,
5. decision-making,
6. implementation and monitoring of effects.

5.2.1 Creating ideas

The company has to create a working environment and the atmosphere for constant creation of good and practicable ideas.

The most important factors for generating new ideas are the openness of the company management for new ideas and open ways For providing information and communication between various management levels.

5.2.2 Designing quality proposals

The company should built an effective mechanism that stimulates the generation of quality of ideas from the aspect of performance and long-term company strategy.

An important part of such mechanism is a structured remuneration system that financially awards good ideas.

5.2.3 Collection of relevant information

Proposals that are harmonised with the company strategy and potentially successful, must base on gathered relevant information necessary for the final analysis and assessment.

Financial and market performance as well as production capacities of individual proposals can be assessed on the basis of gathered information.

5.2.4 System analysis and proposal assessment

This is the most complex and responsible step for a successful long-term company investments.

If the proposal about long-term company investment is harmonised with the company strategy, a quantitative analysis is used to establish its acceptability.

Various methods are used in practice to determine the suitability of a company's long-term investment; the internal profitability level method is used, but the most popular and used method is the net current value method.

6. NET CURRENT ASSETS MANAGEMENT

6.1 Short-term company investments management

Short-term company investments is a financial and not an accounting term (the term "current assets" was used before); from the financial aspect, short-term company investments comprise financial and real investments.

We will focus on:

- cash and cash equivalents,
- short-term financial investments,
- short-term receivables,
- inventories.

6.1.1 Cash and cash equivalents

6.1.1.1 Reasons for cash retention

- Investment liquidity (individual assets) represents the rate of a potential change of investment into money, and the money itself represents a complete liquid investment.
- A company is liquid (has short-term payment capacity) if it can settle its contractual obligations regularly.
- A company needs money for its operations due to various reasons:

a. Transactions

- Every company needs a certain amount of money in cash; this quantity can be changed daily.
- The minimum quantity of money of an individual company differs on the type and activity of the company; in the past few years, the need for money for transactions has changed due to the development of various payment instruments.

b. Security reasons

- There is a need for money due to unpredictable reasons (negative impact on operations).

c. Speculations

- If a company has enough money on its giro account, it can quickly purchase something if there is extraordinary opportunity to do so.

d. Reasons, connected to various business options

- A company with a certain amount of money on its giro account is financially flexible (enabling it to

utilise various discounts on immediate payments etc.).

6.1.1.2 Reasons for keeping minimum cash

Cash in hand or on bank account (BA) is an investment that normally has no return or is very low; this involves opportunity costs of an investment in money, which can vary a lot.

With long- and short-term financing, company has costs (interest, dividends etc.) which must be covered with return on investment.

a. Interest rate amount

Market interest rate is linearly increasing with the opportunity costs of keeping money.

At high market interest rates, financing costs of a company are higher so that the pressure on reducing an investment in money is higher.

b. Inflation

At inflation, the opportunity cost of keeping money is higher (inflation causes negative return on investment – real value of an investment is decreasing).

Normally, an interest rate must be higher than inflation rate, if the financial investment preserves its value and brings a certain real return.

c. Restrictive monetary policy terms

Restriction of monetary policy, which is shown in low availability of loans, has an additional impact on the opportunity costs of money retention.

Opportunity costs that reflect the reduction of purchases for regular operations, are extremely high, therefore, a company normally reduces the average balance on the BA in such situation.

6.1.1.3 Proper cash volume

▫ Development of the financial system, technology changes, competitiveness changes and changed operation conditions have significantly impacted the policy with regard to the volume and time allocation of money retention on a BA and in hand – this results in:

- more attention dedicated to investing in money,
- significant decrease of the average share of such company investments.

6.1.2 Decisions about necessary cash volume

Short-term company investments were named "current assets" in the past.

It depends on the cycle rate, how much money a company needs (see the cycle chart on the next page!).

Essential elements of money application are:

a. prediction: exact forecast of the volume and time of cash inflows and outflows,

b. rate of payment receipt: the effectiveness of the system of concentration of received payments in cash and the information system are important,

c. delay in payment: it is important that the company does not pay its liabilities before due date,

d. effective surplus investment: safe and profitable investment of surplus money,

e. low-cost deficit financing: financing money deficits with low costs.

6.1.3 Short-term financial investments

Planning money surplus and their effective investing (depending on the size of the company and the possibility of tax relief) is one of the money management elements.

Two things matter in the process of financial surplus investments:

- to preserve maximum liquidity,
- to achieve maximum security,

cash and cash equivalents must be invested in liquid and safe investments.

All conditions above are met only by some short-term financial investments:
a. Bank of Slovenia bills

- guarantee by the state,
- determined maturity,
- active secondary market.

b. Republic of Slovenia treasury bills

- short-term securities,
- variable maturity,
- active secondary market,
- solid guarantee.

c. Banks' bills

- relatively safe,
- normal maturity periods of 30, 60 and 90 days,
- their liquidity before maturity is very low,
- they are mostly repurchased by the issuer banks.

d. Major companies' commercial papers

- there are relatively few papers in Slovenia,
- variable maturity,
- no secondary market,
- their risk depends on how the state pledges for the liabilities of an individual fund as an eventual issuer of commercial papers.

e. Various deposits at banks

- fixed time deposits in days,
- redeemable deposits (liquid but with lower return),
- fixed deposits are illiquid until maturity.

f. Short-term loans to other companies

- High-risk investments but their return can be quite high.

6.1.4 Trade receivables and buyer crediting policy

If a company receives a promise that the payment for a sold product/service will be made on a certain future date instead of money payment, this provides the buyer a loan – the company presents this as trade receivable.

We need to assess the financial risk and benefit of sales (many loans are given to insolvent buyers!).

Trade receivables are less liquid investments of companies than money or short-term financial investments.

Financial aspects of crediting buyers involve market decisions about the necessary sales volume.

A company generates its crediting policy which sets the principles of approving loans. Crediting policy usually refers to:

- types of buyers,
- payment period,
- offered discounts,
- method of recovery.

There is a potential hazard that the larger volume of non-recoverable trade receivables can financially destroy a company.

6.1.4.1 Crediting decision factors

When a company approves another company – buyer a loan, the following factors should be considered:

- buyer's character,

- solvency,
- insurance,
- financial strength and
- economic situation.

For each loan decision, the company must weigh its relative importance and consider what is more important.

Companies measure buyer's ability to pay by how much current cash inflows are expected by the buyer, the buyer's financial strength is assessed if the company has equity.

Decisions on approving deferred payments are relatively difficult and responsible, therefore, diligent weighing takes a lot of time and errors are also quite common.

The company also determines the limit value, which is the upper or lower limit of the loan.

6.1.4.2 Crediting conditions

Crediting conditions can vary and depend on many factors.

Only the most common types of consumer loans will be presented. These are often approved to buyers by retailers:

- Interest-free payment deferral is approved automatically at each purchase (permanent buyer is involved), which equals the number of days from purchase until the normal day of the month when invoices for monthly purchases are issued, extended by e.g. 10 days, when the invoice must be paid.

6.1.4.3 Crediting policy assessments

In certain time periods, a company has to analyse its buyer crediting policy and the used procedures.

6.1.5 Inventories

6.1.5.1 Inventories management

Similar findings in relation to trade receivables apply for investments in inventories.

Financial departments must strictly control the volume of capital in inventories.
Inventories are a balance sheet category and belong under real current assets. We differ:

- inventories of raw materials, materials and small tools,
- inventories of work in progress,
- inventories of products,
- inventories of trade goods.

Business systems have a lot of assets in inventories; their size depends on the volume of operations and on the rate of their return; the dependence of inventories on rate of return (days outstanding) can be determined as follows:

turnover (use) in the calculation period x days outstanding
inventories =----------
number of days in the calculation period

The expression above can be used for inventories planning as well as for analysing their real return.

With regard to inventories and their influence on liquidity, we should also mention that every business system should find and maintain the optimal balance of inventories.

Optimal balance is the balance of inventories that mostly contribute to company's profit; realising this principle requires diligent management; this does not only apply in connection with inventories, but also with purchasing, production and sales; inventories management should be effective, thus it is one of the most demanding areas of operations.

Every business system should adapt its inventories policy to general economic situation. At high interest rates, inventories will be reassessed than at times when the interest rates are low or even negative; it is important that the company effectively adapts to market conditions, i.e. events that happen at purchases or sales.

Inventories assessment policy is important for business system liquidity; low assessment favours liquidity and vice versa; a business system can regulate is results via changes in inventories assessment.

Inventories management is very important for each business system (especially in production or trade activity). It is not economical if the business system has excessive material and more end products in stock; this fixes an excessive volume of the valuable capital, because the available funds could be spent differently or rationally invested.

If the business system does not have sufficient end products in stock at a given moment to satisfy the needs of buyers, the latter will turn to another producer or merchant.

If the business system lacks raw material or material in stock, this will cause disturbances in the production process; production standstill does not only cause high permanent costs and insufficient coverage, but also opportunity loss, loss in realisation etc.
Poor inventories management is caused by a poor balance between market, production and financial aspects of their management.

The balance between the market, production and financial aspects of inventories is the balance between the goals of different departments:

- sales department wants large inventories of end products or merchandise (so that sales opportunities are not lost),

- production wants large inventories of material and incomplete products (to ensure undisturbed production),

- purchasing department wants low prices at purchase of inventories of material and merchandise (this is achieved in block purchases, which again accumulates large inventories),

- finance department has to harmonise these goals with the financial aspect of the amount and quality of inventories that refer to the volume of money, invested in inventories, costs of obsolescence and destruction as well as the costs of financing investments in inventories.

- Finance managers must always weigh the benefits and costs of inventories and propose appropriate policies.

Interests present a very important cost of inventories, because interests change linearly with the optimal volume of inventories (the increase of interest rate decreases the optimal volume of inventories).

Therefore, this section includes the issue of inventories optimisation.

6.1.5.2 Determining the minimum and optimum volume of inventories

- A business system can find itself in trouble if it does not have sufficient material in stock; it is also not fine, if there is too much raw material and material in stock; certain costs emerge in both cases; these costs involve procurement and purchasing costs as well as inventories maintenance costs.

- Company has to determine the optimum volume of inventories of raw materials and material with minimum total costs – costs of procurement and costs of inventories maintenance.

- At the same time, a company should also determine the minimum volume of inventories of raw materials and material which still enable the company safe operations without endangering simple reproduction.

- If a company gets work items at the moment it needs them, it could renounce any such inventories, thus reducing all costs which depend on inventories; however, the lack of work items at the moment when they are necessary for the production process, could cause significantly larger damages to the company; therefore, a certain volume of inventories of work items always necessary.

- The volume of material inventories is affected by:

• the scope of daily usage of certain work items.

6.2 Financing a company with short-term debt

6.2.1 Short-term debt features

6.2.1.1 Repayment conditions

Short-term debt is due in a period to one year.

A short-term loan should be repaid in a relatively short period of time with funds, generated by regular operations (internal resources).

A typical short-term loan is intended for temporary increase of current assets (seasonal increase of inventories, trade receivables).

Bank loan can be uninsured (trust in company and its operations). If the sales do not suffice for loan repayment and interest payment, the bank demands an appropriate insurance of the loan.

6.2.1.2 Short-term debt sources

Commercial banks are the common source of short-term company financing.

Major companies can get short-term debt by issuing commercial papers.

The major source of short-term company financing are other companies – in the form of short-term liabilities to suppliers; this source does not require special negotiations with the financial institution.

Short-term deferred payments for purchases of goods and services are the decisive source of company financing in the first phases of development.

6.2.1.3 Adaptability

The volume of short-term debts increases or decreases in accordance with the expansion or shortening of the volume of operation.

Extensive flexibility of the short-term financing volume applies for liabilities to suppliers – especially for financing inventories and short-term investments (trade receivables).

6.2.1.4 Availability

Availability is the most important feature of short-term debt.

The most basic example is a loan approved by a company – seller to a company – buyer with payment deferral for purchased goods for a defined time period – so-called business-to-business commercial loan.
Two aspects of business are included in the approval of such loans:

- market (increase in sales),
- financial (as company's credit rating evaluation).

When the availability of bank loans is low, large companies extend payment deadlines to companies – buyers.

- Large companies have easier access to such loans.
- Companies preserve markets (large companies keep companies – buyers alive).

With deferred invoice payments, large companies – suppliers are used as the source of their short-term financing (if this is cheaper than bank loans).

6.2.1.5 Short-term debt costs

Deferred payments virtually offer free short-term financing of a company.

The cost of financing can be included in the price of goods or services (implicit interest).

Other suppliers can offer the same goods or services at a lower price and shorter payment deadlines.

Actual costs of short-term company financing differ with regard to the source of financing and company's credit rating.

6.2.2 Short-term debts at banks

Credit claim or request for bank loan approval comprise:

- intention of credit use,
- repayment time plan,
- economic eligibility of the project (promised profit),
- additional information about the expertise and personality characteristics of the management, financial statements about past operations and company operations plans.

Keep good relationships with bankers (no surprises!).

6.2.2.1 Features of short-term debts at banks

a. Maturity

The most frequently used short-term bank loan is a loan that repays itself or the so-called season loan for purchasing current assets (inventories).

The maturity of such loans is adapted to financial needs of each company (maturity of such loans abroad is approximately 3 months).

Loan reprogramming is very popular in Slovenia (determining a new maturity date); many short-term loans are never repaid and reprogramming is permanent (these loans were actually approved for permanent current assets).

b. Insurance

Uninsured bank loans are approved on the basis of company's credit rating and are not covered with a specified asset of the company.

Insured bank loans are usually insured:

- with inventories,
- with trade receivables,
- with other company's assets,
- with various financial instruments (bill of exchange, order for acceptance, securities),
- with personal property of owners of companies.

It is sensible to insure a loan with inventories if:

- inventories can be stored (perishable goods!?),
- inventories can be used to determine volume.

Companies can sell trade receivables or sell them gradually – so-called factoring – factor is a special financial institution that deals with purchasing receivables (see more about factoring!).

Other assets used to insure short-term bank loan include long-term financial investments (bonds or shares) – lombard credit and real estate – short-term mortgage and equipment.

Owners of small companies often have to insure bank loans with assets privately owned by the owner.

b. Bank loan promise

A bank can promise to approve a loan to a company in advance on the basis of planned financial needs (cash flow plan), i.e. on a certain date in the future.

A bank promise is more or less formal and can be provided as a contract (for a bank, this promise means the takeover of contractual obligation that carries risk and costs) and the bank charges commission.

Bank's obligation can also mean that a company can acquire a short-term loan at a bank at any time up to a certain total amount – credit line: in such cases, the commission is paid for the unexploited part of the

credit line.

A bank promise can also be informal – oral promise that the credit claim will be considered as a priority (no commission).

Short-term bank loans should be used only for occasionally increased needs of financing company's operations and not as a permanent financial source.

6.2.2.2. Costs of short-term debts at banks

Costs of indebtedness at a bank are currently relatively high in Slovenia compared to other developed countries.

Costs of short-term indebtedness are normally lower than costs of long-term indebtedness.

Bank interest rate greatly depends on the loan size and drops with the increase of loan volume.

A company must have certain funds on its account until the loan is repaid.

If the deposit on the bank account is higher than before the loan approval, additional cost depends on the difference between the interest rate which must be paid for a loan by the company, and the interest rate caused by the deposit on the bank account.

There are two methods of interest calculation and loan repayment:

- decursive method (interests are normally paid at loan maturity),
- anticipative method (interests are paid at loan approval).

Repayment of a short-term loan can be made in a single amount at loan maturity, or repaid in annuities.

Interest rate can be variable – changes during loan period (depends on the trends of certain short-term market interest rates).

6.2.3 Commercial papers

Large companies can be financed in short-term by issuing short-term loans – commercial papers with normal maturity from 1 to 270 days.

Commercial papers are issued by large companies or via agents.

The largest buyers of commercial papers are financial institutions.

Commercial papers are uninsured promise of payment, therefore,they can only be issued by companies with high credit rating (distinguished and large companies).

Credit line with a bank represents an additional insurance of commercial papers (in the amount of issued commercial papers).

Normally, commercial papers are sold at a price that represents an appropriate discounted value of a paper at maturity (similarly as zero coupon bonds).

Costs of financing with commercial papers issue can be quite lower for large companies and distinguished companies than the costs of short-term loans (assets are obtained under special conditions offered by banks, only that there are no high bank costs).

Commercial papers are an important competitive method of short-term financing of companies' work and forces banks to lower their operations costs.

6.2.4 Short-term indebtedness in companies

Short-term debt financing between companies is rare in the developed world; as a rule, short-term indebtedness originates from business-to-business trading.

In financial practice, short-term indebtedness between companies is known under the expression "business-to-business commercial loan" – a payment deferral that the company or seller approves to the company or buyer for purchased goods or services.

The conditions of such financing comprise three basic elements:

- date of invoice,
- date of payment for the goods or services (for discount approvals),
- final date of payment maturity.

6.2.4.1 Crediting conditions

Conditions under which a company can obtain loan with its suppliers, depend on:

- the features of supplied goods,
- credit rating of a company,
- certain other market aspects.

Companies in the same branch offer similar crediting conditions (branch competitiveness and the characteristic of goods, for which payment deferral is approved).

- The greater the competition becomes, the more similar the credit conditions are.
- If the sold goods have a more permanent nature and higher value, the loan is given for an extended term.

Credit conditions are also significantly impacted by some market aspects of sale on credit (sale of seasonal products, for instance) and general economic situation (economic rise, when suppliers extend payment dates; or recession, when the situation is contrary).

6.2.4.2 Costs of supplier liabilities

The price of short-term company financing with deferred payment can be diverse.

In general, it is not very beneficial to pay too early or too late; if, for instance, the company pays too early, this means that the company renounces the use of money before this is necessary; if the payment is made too late, this means that the company's credit rating is questionable (leading to stricter crediting conditions in the future).

7. FINANCING A COMPANY WITH EQUITY

A company has to have equity since the beginning.

Equity is invested in a company in:

- monetary form,
- non-monetary form: land, building, equipment etc.

7.1 Forms of equity

The need for additional equity increases as the volume of operations increases.

Additional equity is contributed by:

- Existing owners:
- In the form of profit – retained profit,
- In the form of new external capital – increasing the deposits of partners (in limited liability companies) or purchasing a new block of shares (in public limited company).
- New owners

In open public limited companies new blocks of shares are also purchased by new owners (increasing the number of company owners by increasing the volume of equity).

The examples above include direct equity.

Indirect equity = equity that emerged by replacing debt capital to equity (example: creditors replace part of their receivables into equity).

Conditional equity = debt capital which can be replaced by owners with equity (example: convertible bonds).

The most common forms of equity are:

- Ordinary shares (shares)
- Preference shares
- Equity warrants
- Convertible securities (convertible bonds)

7.1.1 Ordinary shares (shares)

Shares can be considered as direct investments of owners in two forms:

- investment at share purchase,
- delayed investment in the form of retained profit.

Dividend policy = decisions,

or

pay net profit in dividends

or

retain a part of entire net profit in a company.

7.1.1.1 Ownership rights of a shareholder

a) Right to dividends

Right to dividends = the right to net profit.

The supervisory board decides on dividend payment.

Key dates, related to dividend payment:

- proclamation date (when the supervisory board adopts a decision on dividend payment),
- payment date (when dividends are paid),
- date of registration (when a shareholder is registered in the share register),
- date after dividend (defined in the number of days from the purchase of share until the registration in the share register).

b) Right to other assets after end of operations

When all liabilities are paid after the termination of operations, ordinary shareholders have the right to the remaining company assets.

c) Voting right

A share equals an automatic right to vote.

Voting is conducted at shareholders' assembly meetings (usually once per year).

1 ordinary share has 1 vote.

Shareholders vote about:

- election of members of the supervisory board,
- auditing company,
- share splitting,
- mergers etc.

d) Pre-emptive right to new shares

This shares provides shareholders the possibility to purchase new issues of ordinary shares, before they are launched on the open market for purchase.

The main point is that existing shareholders can preserve their existing share in total ownership (if they want and can).

e) Right to transfer

Ordinary shares are usually transferable and there is a secondary market of shares where they can be sold and/or bought.

There are major or minor transfer limitations (this applies for closed companies – the aim is to prevent existing owners to lose control over the company too quickly and uncontrollably).

7.1.1.2 Basic features of ordinary shares

a) Maturity date

Ordinary shares usually have no maturity.

b) Nominal value

Nominal value the value of an individual share is the stated value of an issued security – this means that the share can be registered as per accounting standards.

c) Types of ordinary shares

For various reasons, several types (classes) of ordinary shares can be issued (for instance: owners have different wishes regarding dividend payment – in cash or in shares).

7.1.1.3 Advantages and weaknesses of financing with ordinary shares

a) Advantages

Ordinary shares have minimum limitation in company operations – the company is not contractually bound to pay dividends and also not time-bound to pay the "principal".

b) Weaknesses

The issue of new shares impacts the reduction of net profit per share and the reduction of price of an individual share.

There fore: companies issue ordinary shares when the demand in the ordinary shares market increases and their prices are increasing.

The issue of ordinary shares causes existing shareholders to share control over the company operations with new shareholders.

7.1.2 Preferred shares

Preferred shares = long-term source and permanent source of company financing.

7.1.2.1 Basic features of preferred shares

a) Ownership rights

Preferred shareholders have:

- the right to the volume of the remaining revenue after the settlement of all liabilities and
- the right to a certain volume of the remaining assets after the settlement of all liabilities at termination of operations.

The risk of preferred shares is lower than the risk of ordinary shares.

b) Voting rights

Owners of preferred shares except conditional voting right have no voting right.
Conditional voting rights become actual voting right, when dividends for preferred shares were not paid for a certain number of time periods.

c) Dividends

Dividends are determined in percentage of the nominal valueand are paid if the achieved current net profit or retained profit from previous years enables this.

Preferred shares where the amount of dividends depends on the market movement of interest rates (market value of such preferred shares is close to the nominal value) are more common.

d) Cumulativeness

The majority of preferred shares is cumulative – this means that the past unpaid dividends on preferred shares are added to a certain dividend for the current period and present pre-emptive right.

Dividends of ordinary shares cannot be paid until all dividends on preferred shares are paid.

e) Participativity

If a company is very successful, the owners of preferred shares have the right to additional dividends.

The success rate is measured with the payment of dividends on ordinary shares that are higher than some normal dividends – preferred shareholders participate in the payment of dividends in a certain percentage of the entire and normal payment.

f) Option of recall and redemption

Some companies issue preferred shares with the option of recall – a type of intermittent account can be open for a gradual redemption of preferred shares.

The major advantage of recall is that the company determines the price at which it can recall (redeem) preferred shares in the future.

The option to recall determines the time period of recall.

7.1.2.2 Advantages and weaknesses of financing with preferred shares

a) Advantages

The advantages of financing a company with preferred shares are:

- It enables the acquisition of capital that demands more or less fixed return (no participation in successful operations).
- Return is not a contractual obligation for a company (partially participates in unsuccessful operations).
- Selling preferred shares involves the sustainability of acquired capital.
- Control over company operations by existing ordinary shareholders is preserved (if the company is successful).

b) Weaknesses

The major weakness of financing a company with preferred shares is high cost of such financing.

Preferred shares carry more risk than debt capital, therefore the required return is higher – taxes play a special role here.

Interest for debt capital involve deduction item on the tax on profit base, dividends on preferred shares are not considered as a deduction item.

7.1.3 Equity warrants

Equity warrant = security that gives a right (not an obligation!) to buy an ordinary share at a certain price in a certain time period.

If the price, at which the owner of an equity warrant purchases ordinary shares, is lower than the market price, the owner will use the equity warrant and buy an ordinary share.

If they do not have the money to buy shares, they will sell the equity warrant at a suitable price, and the seller will most probably buy an ordinary share.

The company will gain ordinary equity at relatively low sales costs.

Determining a suitable price of ordinary shares in advance is a difficult task and carries a risk.

7.1.4 Convertible securities (convertible bonds)

Companies issue convertible securities – bonds to ordinary shares so that they are converted into ordinary equity and to achieve a lower demanded rate or return for them.

The conversion price determination is important – the number of ordinary shares resulting from the conversion of a certain nominal value of convertible bonds.

Companies therefore ensure the option to force a part (or all) holders of such papers to convert them with the option of recall at a certain price.

If a company operates successfully, it will issue convertible bonds with relatively low interest rate – after a certain time period, when the market value of ordinary shares increases enough, they will be converted to ordinary shares.

7.2 Sources of equity

There are many sources for financing equity (especially in economies with a developed financial system).

At establishment, entrepreneurs and their families invest equity in the company.

An appropriate volume of equity represents the basis for indebtedness (for settling liabilities to lenders).

In the next development phases, a company can acquire additional equity from various sources.

7.2.1 Informal sources

These are of key importance in the first phases of company development – these sources are limited and refer to:

- relatives, friends, previous business partners,
- potential suppliers and buyers,
- large companies investing equity and ensuring technical assistance.

7.2.2 Formal sources

All formal sources of equity are institutions.

7.2.2.1 Financial institutions providing venture capital

There is a series of financial institutions providing venture capital:

- small private institutions,
- relatively large institutions, subsidies of investment banks,
- state institutions (in the form of direct shares, loan guarantees, land provision or provision of state-owned buildings etc.).

When selecting companies where these institutions invest their equity, the latter are very diligent (verify the prospects of such companies and assess the management's abilities).

There are 15 different funds in the Republic of Slovenia (venture capital institutions).

There is a SLEVCA Association which is also the member of the EVCA (European Venture Capital Association).

7.2.2.2 Local and state funds and companies

These institutions have been founded to stimulate economic development in a certain area.

A minor part of their activity also refers to equity investing in first phase companies – they also provide other types of assistance:

- beneficial conditions for purchasing land and buildings,
- tax relief.

The Republic of Slovenia has:

- a series of municipal development funds,
- our economy development fund,
- fund for the demographic development of an endangered area.

The afore mentioned institutions provide debt financing to companies, give guarantees for loans and subsidise interest rates.

7.2.2.3 Investment banks

Investment banks are financial institutions providing sale of new securities – they organise all transactions connected to sale.

The major risk is assumed by an investment bank when it entirely purchases ownership securities from a company and then tries to sell them in advance at a higher price.

An investment bank is a source of equity for a company – a bank demands higher return for greater risk – therefore, the price for securities is relatively low.

An investment fund is becoming quite an important source of equity.

7.2.2.4 Independent closed sale

There are many companies that sold their equity shares or equity securities without investment bank as an agent solely to a few investors – this is called a closed sale.

Effect: low costs but a higher risk for new owners.

Companies acquire equity in the Republic of Slovenia mostly indirectly by replacing liabilities to suppliers and banks to equity investments – so-called unwanted equity investments.

8. FINANCING A COMPANY WITH LONG-TERM DEBT

A long-term debt brings many advantages to a company and has a significant impact on operations.

A new company usually obtains a debt after acquiring equity – in long-term, a company obtains a loan in hhigher phases of development.

Long-term debt = debt due for payment (when it has to be repaid) in over one year.

Long-term debt of a company can be determined as debt capital.

Equity and debt capital = total capital of the company.

Capital structure is used to describe the method of long-term and permanent financing. It tells us:

what is the equity share and what is the (long-term) debt financing of a company.

8.1 Impact of long-term debt

The decision about obtaining a long-term debt is very important and can in case when the long-term debt is too large, cause the inability to settle contractual obligations – it can cause a company to go bankrupt.

8.1.1 Financial leverage

Financial leverage means "greater operations risks since planning future operations is more difficult and the possibility of errors is greater".

A company can use debt financing to increase the return on capital, invested in the company by owners, if the profitability of the company, financed by debt is greater than the costs of debt (interest).

Capital structure impacts the amount of financial leverage.

If the share of debt capital in total capital is higher, the volume of contractually determined interest is higher.

The financial leverage effect can be presented on a case of two companies.

The impact of capital structure on the profitability of ordinary shares:

In EUR											
Sales revenue	1,000	800	1,200								
Costs of sales	900	720	1,080								
Operating profit		100	80	120							
	Company A		Company B		Company A		Company B		Company A		Company B
Interest	50		50		50						
TOTAL PROFIT	100	50	80	30	120	70					
Taxes 30	15	24	9	36	21						
Net profit	70	35	56	21	84	49					
No. of ordinary shares in 000		100	50	100	50	100	50				
Net profit per share (SIT)		0.7	0.7	0.56	0.42	0.84	0.98				

At the sale of EUR 1,000.00 EUR operating profit equals 100% invested capital (= required return on debt capital).

If sales drop by 20% ordinary shareholders of company A, which is financed solely with ordinary shares, return per share will be higher.

If sales increase by 20% shareholders of company B, which is partially financed with long-term debt, will have higher return.

The example shows that the use of debt for company financing means the replacement of a potentially lower but more stable return per share with a potentially higher but less stable return.

8.1.2 Loan conditions

The company operations are significantly impacted by the conditions determined by creditors of a company.

The following limitations are known for bonds:

- determined maximum possible indebtedness,
- limitation of bond recall,
- intermittent account.

Additional conditions of creditors:

- limitation of dividend payment until a long-term debt is repaid,
- demanded interest rate (slightly higher than with short-term debt),
- the obligation to pay high interest also in case the market interest rates decrease subsequently.

The process of negotiating with creditors is very important.

8.2. Long-term indebtedness decision factors

When obtaining a debt, a company must consider several factors:

8.2.1 Type of company

Companies differ by stability of revenue from sales and costs – this also affects the indebtedness of a company.

Stable sales revenue and costs are typical for some public companies (post, railway, electric energy production ...) – such companies have a greater share of capital in the form of long-term debts.

Companies with a high financial leverage level have a low share of debt capital (services companies).

8.2.2 Profitability

If the company operations are profitable, it can carry the burden of debt (costs of interest) – there is no fear of illiquidity.

Let us compare two companies in the same branch with the same operations conditions – data can be seen in the chart on the other page.

In EUR

	Company A	Company B	Company A	Company B
Sales revenue	100,000	80,000	100,000	80,000
Costs	(70,000)	(59,500)	(80,000)	(68,000)
Operating profit	30,000	20,500	20,000	12,000
Interest	(15,000)	(15,000)	(15,000)	(15,000)
TOTAL PROFIT	15,000	5,500	5,000	(3,000)
30% tax	(4,500)	(1,650)	(1,500)	
Net profit (loss)		10,500	3,850	3,500 (3,000)

Companies differ only in the effectiveness of operations.

How does profitability of operations impact the ability to cover long-term liabilities if sales drop by 20%?

Company A which operates more effectively will in the following year be able to fulfil its obligations to lenders from generated profit.

8.2.3 Company assets

The volume of long-term indebtedness is also impacted by the features of company assets – we are interested in asset liquidity – the ability to sell them.

Fixed assets that can be sold quickly and without major losses are relevant (e.g. rent-a-car companies).

Creditors also demand the insurance of loans with mortgage or equipment trust certificate.

8.2.4 Long-term loan availability

The share of debt capital in total capital changes due to the change of situation in the capital market.

Only some companies manage to refinance their due long-term debts.

Debt refinancing = to pay due debt and get a new one.

8.2.5 Debt costs

Debt costs = interest + other costs (at issue of debt securities or debt insurance).

The lender bases the required interest rate on the credit rating of a company that depends on:

- the type of company,
- past, present and future profitability,
- current indebtedness,
- asset liquidity.

Credit rating = combination of the volume of potentially approved loan and the required interest rate, i.e. borrower's risk.

If the risk for the lender is higher, the required interest rate is higher.

The ability of the company to offer loan insurance with assets presents a lower risk for the lender and a lower interest rate.

The form of debt impacts the costs of debt.

Long-term debt is normally more expensive than short-term debt.
Debt in foreign currency is more risky (currency risk) than debt in local currency.

Interest on obtained loans paid by the company present a deduction item on the tax base, while dividends on ordinary and preferred shares are not a deduction item on tax base and the company pays them from net profit.

Interest rates are adjusted to compare the costs of financing in equity and debt financing:

Interest rate after taxes = interest rate before taxes x
x (1 – tax rate) = 12% (1 – tax rate) = Y %

The result of such adjustment are relatively low debt costs compared to equity costs.

Important: higher debt can mean the reduction of credit rating of a company, leading to a higher interest rate for additional loans.

Higher debt can also mean higher variability of return per share (greater risk of shares and thus the reduction of their value) and increased possibility of bankruptcy.

Conclusion: companies must finance their operations with long-term debt in such volume that the positive impact of lower debt costs is not outweighed with negative impact of a potential bankruptcy or other financial problems.

8.3 Sources of long-term debt

The method of acquiring debt capital depends on the company development phase.

In the first development phases, a company can acquire long-term loan from informal and formal sources.

A company can obtain a long-term debt by selling (transferring) securities (bonds) to a creditor or to make the creditor's loan more or less non-transferable (futures loan).

8.3.1 Private sources

A private source means that a company obtains a debt at individuals or non-state financial institutions (even if the state collaborates with institutions providing warranties for loans).

Direct debt: an individual sells real estate to a company with a long-term mortgage and movable property with a long-term loan insured with an equipment trust certificate.

A futures financial loan can be approved to the company.

Closed sale: represents the major part of privately-funded debt – this involves a sale of securities to individual financial institutions as well as for acquiring futures loans from such institutions.

In a closed sale, only a limited number of determined financial institutions give loans to the company.

8.3.2 Public sources

Public sources are referred to open sale of debt securities which enables the purchase to any "public person" on the long-term debt market.

An investment bank is involved in an open sale – its role in the formation of the bond and determination of its interest rate is important.

The goal in bond formation:

to prepare an insurance system for buyers of bonds enabling a comprehensive sale of bonds at minimum required interest rate and with minimum limitations.

Closed sale is simpler than open sale.

Obtaining loans from individual financial institutions (closed sale) is often cheaper for companies.

In closed sale, the company must disclose its operations results only to the financial institution approving the loan.

In open sale, company credit rating analysis must be drafted (financial institutions often demand higher return).

8.3.3 State sources

Local and state authorities influence the company's ability to acquire debt capital with:

- direct crediting,
- approving guarantees and
- other forms of assistance (interest rate subsidising).

8.3.4 Leasing

Leasing can be conditionally considered as the method of company financing.

There are two types:

- financial lease and
- business lease.

8.3.4.1 Financial lease

Financial lease is a long-term contract between the owner of a fixed asset and lessee, with a maturity period at the end of the life period of a leased fixed asset.

Lease contract can be revoked only with a consent provided by both sides.

All costs in relation to fixed asset maintenance are carried by the lessee.

The lease amount covers the owner's costs of fixed asset purchase and the required return.

Financial lease is an alternative to long-term debt and fixed asset purchase, where loan repayment comprises costs of fixed asset purchase and the payment of interest the required return.

With a loan and purchase, the company owns the fixed asset, while it does not own it in case of financial lease.

The decision on financial lease of a certain fixed asset with a long life period is very difficult.

8.3.4.2 Business (operating lease)

The duration of a business (operating) lease is shorter than the life period of a fixed asset.

The contract on business lease can be revoked by an owner or lessee at any time on the basis of proper (timely) notification on lease termination.

The contract contains the owner's obligations to maintain and carry all fixed assets maintenance costs.

Business lease is used mostly to lease equipment, cars, trucks and computers.

Potential lessee should compare the costs of lease with the costs of fixed asset purchase – this involves the weighing of advantages and weaknesses of ownership and non-ownership of a fixed asset.

Most factors of weighing the ownership and non-ownership are of financial nature – they refer to:

- lease conditions,
- costs of maintenance at lease (if not carried by the owner),
- tax effects of lease,
- value of fixed asset at the end of life period, and
- costs of financial means required to purchase a fixed asset.

All those costs of lease and costs of purchase must be envisaged for every year of fixed asset life period and the current value of expenses for both options must be calculated.

Tax effects of lease and purchase must be determined.

With lease, the lease amount with maintenance costs is a deduction item on tax base, with purchase, the deduction item include costs of maintenance, amortisation and paid interests.

An important advantage of financial lease is that, in market economy accounting, it is not presented as a liability in the balance sheet (liability from financial lease must be considered for credit rating).

The tax-related effect is usually the essential factor when deciding about a financial lease (for lessee and owner).