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Business Management in the Czech Republic

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INTRODUCTION

This course covers a wide range of topics and due to the high number of lecturers (more than one topic for a lecturer) it familiarizes students mainly with the focus of the Department of Corporate Economy. The course is designed especially for foreign students and it provides them, among others, with an overview of issues dealt with by contemporary Czech corporate economy. Students will further explore some present-day problems in the Czech Republic, their causes and solutions.

Students will be introduced to the transformation of the corporate sector after 1989 and its development (focusing on industry) up to the present day. The topics further include foreign investments and their importance for the Czech Republic and Czech companies, environmental management and multistage decision-making. Students will also examine the economic impact of the accession of the Czech Republic into the EU, the financial analysis for evaluation of the impacts, and accounting standards used in Czech businesses. Moreover, the course makes students familiar with forms of strategic partnerships and their importance particularly for small and medium enterprises, Czech consumer protection and the Czech National Quality Program. The course also provides an insight into development and structure of retail in the Czech Republic, advertising and promotion, and the recent phenomenon of m-commerce.

From the above-mentioned list of topics it is obvious that the course covers a relatively wide spectrum of issues. Its aim is not to go into great details about the extensive and complex structure of Czech corporate sector, rather, it intends to outline the individual topics and attract students further to a deeper study of selected topics in other courses. Therefore we hope that the course Business Management in the Czech Republic, represented by this textbook, will provide a welcome stimulation for students in their studies.

Authors

1 ECONOMIC TRANSITION OF CORPORATE SECTOR: FROM CENTRAL PLANNED TO MARKET ECONOMY

1.1 The Methods of privatisation

The question regarding the various methods of privatisation has attracted widespread discussion in the economic literature concerning the transition process of the former socialist countries to market-style economic systems. There exists a wide range of proposals on how to privatise state companies and assets.

These proposals and forms can basically be divided into **direct and indirect methods of privatisation of state-owned enterprises**.

The direct methods include forms such as public auctions, tenders, public invitations, capital privatisation and employee or management buy-outs.

Indirect methods include different distribution schemes elaborated to privatise a large bundle of state-owned enterprises in a mass privatisation programme. Much more interesting, however, is an analysis of the restructuring and efficiency-enhancing progress following the ownership change.

1.1.1 Theoretical elements of privatisation

Privatisation should result in a new private and institutional ownership structure replacing the old sclerotic state-administered system with its low efficiency pressure and distorted market and price signals. There is little doubt that private ownership leads to an incentive system in which the costs of production are minimised according to the relative price structure and the output structure is oriented toward market signals given by the preference structure.

Privatisation-in connection with deregulation and demonopolisation-is expected to reform and overcome the inherited industrial structure characterised by, to some extent extreme, **horizontal and vertical concentration**. The new definition of the principal-agent relation serves as a reformed framework for cost-effective and profit-oriented market behaviour.

In the framework of a general hardening of budget constraints, privatisation of state-owned enterprises is conceived to be fundamental, accompanied by the enabling of market entry and the consequent enforcement of market exit. Nevertheless it has been emphasised that necessary financial, organisational and technological restructuring has to take place in the state-owned industrial sector before privatisation. Hence privatisation attempts to overcome the `no-entry, no-exit economy', which is characterised by soft credit constraints, laxity in tax collection, direct subsidies for industrial policy motives, protectionism and selective sectoral policies.

Widespread privatisation, necessarily including the banking sector, is thought to remove the inefficient capital and labour allocation that are well known defects of socialist economic systems. Capital wasting and labour hoarding as effects of distorted relative prices and market structures can only be eliminated in the framework of a microeconomically sound ownership structure.

A socioeconomic argument in favour of privatisation is strongly related to Hayek's conception of a pluralistic society of owners as the basis of a modern market economy and even of democracy. This has nothing to do with widespread and diffuse `people's capitalism', in which

hardly anyone would be able to exert control rights, but more with the creation of a middle class and solid market-oriented management and entrepreneurship in companies.

1.1.2 Speed of privatisation and restructuring

In these discussions the term 'gradualism' has often been the subject of serious misinterpretation, as many authors favoured, more or less, a big-bang approach with rapid and simultaneous introduction of shock elements. A more gradual approach, however, is not considered to mean the maintenance of old, ossified structures or the prevention of necessary economic adjustments, but rather the search for an 'optimal' path of transformation, in which unnecessarily high social costs of transition are avoided.

The **negative attitude** towards the term 'gradualism' stems from the disastrous results of gradual macroeconomic programmes in developing countries. There are nevertheless key differences between the economic transformation of Central and Eastern Europe and the stabilisation and adjustment in middle-income or developing countries.

Theoretical contributions to the issue of the pace of the transformation and especially of the privatisation and restructuring processes attempt to deal with the various trade-offs between efficiency gains through radical adjustment and social costs of transformation. The decision between radical and gradual reforms has to be regarded as a consideration of the impact of full or partial reforms. It can be argued that a full reform provides faster and higher allocative efficiency gains, but also higher `transformation costs'. Transformation costs emerge as a consequence of structural adjustments to a real relative price system and consist of financial compensation to different kinds of 'losers' in the process (i.e. as a result of higher unemployment). Financial compensation has to be borne by the public financial system and is a threat to fiscal stabilisation especially in times of declining state revenue owing to an output collapse.

Partial reforms, however, would lead to moderate efficiency gains and lower transformation costs because financial compensation through the state budget would be lower. The choice of the more gradual approach is then justified if the difference between high efficiency gains (radical) and moderate efficiency gains (gradual) is smaller than the difference between higher financial compensation (radical) and lower financial compensation (gradual). Moreover, the fact that the financial room for manoeuvre through revenue policy (especially tax collection) is, at least in the beginning, rather limited must be taken into consideration.

To summarise, the achievement of an irreversibly privatised capital stock is an important condition for the stability of the process, whereas the level of transformation costs and its implications limit the possibilities of implementing the big-bang approach. Credibility and coherence of the reform packages play a decisive role in overcoming ossified property structures through a well-elaborated privatisation strategy.

1.1.3 Ownership change and restructuring progress

The restructuring process is conceived as a microeconomic adjustment process with organisational, financial and technological restructuring steps. It will be seen that mere ownership change is insufficient to ensure that the intended restructuring measures are taken. What is decisive for the reallocation of factors are learning processes initiated through raised efficiency pressure, a reformed incentive structure which leads to wide-ranging restructuring efforts and adjustments to changing relative price information. The identification of dynamic processes of factor reallocation plays an important role in this context, just as does the transfer of foreign capital and know-how to upgraded production structures. In addition to the

importance of foreign capital, management concepts and new technologies, the role of banks in initiating adjustment measures deserves a thorough examination.

Restructuring efforts rely not only on ownership structure and its changes but to a large extent on the elimination of deficits in establishing a sound competitive environment and an institutional setting which accomplishes the actual ownership transfer.

Competitive markets are a necessary precondition for exerting pressure on restructuring in privatised companies. Imperfections on product and factor markets lead to maintenance of inherited dysfunctions in relative prices and lack of cost awareness and demand orientation. Despite widespread liberalisation and deregulation, market structures are characterised by a lack of pressure through competition and the enforcement of market exit. Hence, hardened budget constraints cannot bite efficiently into concentrated markets.

The creation of flexible labour markets has to face various rigidities which contributed to a drastic increase in long-term unemployment. Institutional imperfections exist owing to labour regulations and increasing resistance on the part of the losers in the transition process, who were laid off because of massive over-employment and labour hoarding. The absence of appropriate wage differentials, flexibility of the real wage and labour mobility impede the restructuring efforts, since the surplus factor labour cannot be allocated in an efficient way.

Weak financial and capital markets, due to infrastructural shortcomings and systematic financial underdevelopment in socialist systems, indicate that urgently necessary capital resources for the implementation of restructuring measures are not being provided. The scarcity of capital is aggravated by the fact that the demand for credits cannot be met because of an underdeveloped banking system. A restrictive and stability-oriented monetary policy and high real interest rates, which arise because of high interest spreads in the banking system, hamper access to credit especially for small and medium-sized enterprises. Moreover, fiscal deficits lead to the well-known `crowding out' effect, which reduces the share of enterprises in the overall credit volume in an economy.

1.1.4 Restructuring and the role of the state

Even if the privatisation and ownership reform in the Visegrad countries has been progressing steadily in the past years of transformation to a market economy system, the influence of the state and its agencies remains strong and persistently interventionist. Equity holdings and industrial policy motives dominate especially in those sensitive and problematic sectors in which state influence is supposed to be retained because of dubious public good justifications. Although privatisation in industry already achieved a level in 1995 which can be compared with fully fledged market economies and definitely goes beyond a threshold level which makes the reform process irreversible, many other areas are still exempted from the ownership reform.

The high figures for the industrial sector in the Czech Republic are the result of the application of non-standard methods of distribution through coupons. In fact, a less clear picture of the separation between state ownership and private forms of property appears because of institutional connections with investment companies and funds in which the state is either directly or indirectly present or exerts influence through state-owned banks. In both countries the state and its agencies still have a strong sway in aspects of industrial and structural policies, especially in sectors in distress. Hence it is no surprise that the importance of the market exit mechanism and competitive rules in problematic and sensitive areas is undermined by politically oriented motives which do not reduce state interventions.

The conclusion is that the ownership change exerts a significant influence on the adjustment process and performance of enterprises. The difference between privatised and remaining stateowned firms is evident in all countries considered. That can be attributed to the overall hardened budget constraints in which tough market exit enforcement and significantly hardened credit constraints play a major role.

Although the privatisation progress has initiated a radical new definition of the state's role and activities in an economy, a number of dysfunctions and dilemmas can be identified because of continued state interventionism.

In addition to the existing state ownership shares in enterprises held in public holdings and the resulting direct influence on the allocation of factors and resources, the danger arises that interventionism will be perpetuated for industrial policy reasons. 'Conservation' of horizontal and vertical channels of negotiation and ossified organisational structures adversely affect the modernisation of old production technologies and structural change through far-reaching restructuring efforts.

In the course of the coupon privatisation, which started with the aim of reducing state influence drastically, indirect intervention through direct share holding or via financial institutions partially owned by state authorities is still prevalent. Sectors of strategic importance are especially the target of political interventions to secure the state's 'grip' on economic development. The defence industry, engineering, banking and insurance companies belong to the category of sectors of strategic interest. Despite the formal dissolution of the Czech Ministry of Privatisation, the role of the National Wealth Fund as a direct or indirect owner of shares in partially privatised companies remains strong.

The government's intention is often to maintain state influence and property forms because of the government's multiple target function. State property is hence characterised by the dominance of insiders and the exclusion of competition. The exertion of state control and corporate governance activities-partially also in respect of operational management-encounters similar restrictions to those in the former socialist system. Administrative shortcomings, the mutual overlapping of industrial and social policy objectives and particularly the vertical structure of negotiations for scarce factors and resources undermine efficiency orientation and cost awareness. A state portfolio consisting of company shares and government resistance to giving up its sphere of intervention in selected production areas lead to perverse incentives for restructuring and adjustment. Private (foreign) investors are then excluded from take-overs and share participation. The consequence of an absence of commitment to a market-based privatisation conception is that external sources of investment in the form of venture capital are retarded and the solution of the conflict between the principal and agents, elimination of which is an essential goal of the microeconomic adjustment process, is far from being resolved.

1.2 Transformation in the Czech Republic

In 1989 the private sector produced a small share of GDP in these three countries: less than 5% in Czechoslovakia, approximately 15% in Hungary and about 20% in Poland. Thus the potential scope for privatisation-through divestiture of state activities as well as from private start-ups-was enormous.

It is important to distinguish **three concepts** of transformation of a state-owned enterprise (SOE).

Corporatisation creates a new separate legal entity for the firm by converting an SOE into a joint-stock company (JSC) all of whose shares are (initially) held by the State Treasury.

Commercialisation implies that the new JSC, unlike the former SOE, will be run as a profit-seeking business.

Privatisation entails divestiture of (some of) the JSC's shares by one or a combination of various methods, such as initial public offerings, public tenders, management and employee buy-outs, and auctions of shares for vouchers distributed free under a mass privatisation scheme.

Corporatisation by itself clarifies property rights, now to be exercised by the government agency representing the state as shareholder in the JSC. Corporatisation may regain for the state as shareholder some property rights previously ceded to, or usurped by, enterprise managers or workers. Also, by expressing ownership in numerous separate JSC shares, corporatisation facilitates privatisation-by disposal of blocks of shares-when an enterprise is too large to be sold in its entirety to a single buyer.

In the Czech Republic commercialisation without privatisation was supported by some SOE managers and some government officials who wanted a very slow and thus selective privatisation process. However, the government adopted a broad privatisation programme that divested a large amount of state property within a few years.

Because the Ministry of privatisation (MOP) and the National property fund (NPF) did not have sufficient qualified staff for a broad and rapid privatisation programme, they delegated some of the negotiations with buyers of state property to enterprises. Also, the privatisation agencies hired foreign consulting firms for a wide range of assignments, including advice on basic privatisation strategy, review of specific privatisation projects, identification of potential foreign investors, and negotiations with them. However, the foreign consultants often lacked appropriate experience for their tasks, as well as familiarity with local conditions and the Czech language. There was a large turnover in foreign advisers, with a long and costly learning process. Foreign consultants' fees were considered high for the services furnished.

The Czech privatisation process was weak in many aspects of transparency. The MOP did not reveal the multiple criteria (and their relative weights) for its choice among competing privatisation projects. The NPF lacked standard procedures for public tenders and firm deadlines for decisions about them. Also, the NPF did not always enforce buyers' obligations to pay as scheduled for assets obtained in tenders or direct sales.

Czech privatisation was characterised by extensive corruption. There was excessive administrative discretion, because the legislative framework was too broad, stating only general principles and leaving key features to executive branch decrees and ad hoc bureaucratic decisions. The system of laws and rules was vague and weak. A striking instance of misappropriation occurred in 1991 when a government official bought a wholesale book distributor with prime real estate in central Prague for a nominal price. Though not accused of personal impropriety, the head of the NPF resigned in 1994 after disclosure of irregularities in the privatisation of specific companies, such as the sale of shares to a buyer not included in the approved privatisation project. The director of the Centre for Voucher Privatisation was arrested in 1994 for taking a cash bribe to arrange the sale of shares in a dairy company.

Mass privatization refers to the transferring en masse of the ownership of SOEs to various combinations of workers, citizens, and other types of investors. Stated differently, privatization is a means to meet societal needs through greater reliance on private institutions while de-emphasizing the government's role. It is a means to attain economic benefits equivalent to creating long-term investor wealth. **Five conditions** have to be fulfilled, to attain privatization:

1. On a micro-scale, the enterprise has to be sold off and management control and ownership have to be firmly rooted in the private sector.
2. Privatization works best if it is carried out in a competitive environment so that the SOE has to cope with liberalized markets-in which barriers to entry are minimized-for its products.
3. State subsidies and policy loans should be eliminated.
4. The SOE monopoly prices have to be regulated with a pricing formula that keeps pressure on management to improve efficiency.
5. The markets that surround the SOEs on the output and input sides must be liberalized at the same time.

Furthermore, the motivation that drives the government-owned companies to privatize may provide evidence as to whether these conditions for success will be met. In the case of the Czech Republic, as well as other former communist countries, privatization became the vehicle used to return the property that was taken from the people back to the people. Thus, the privatization process was accelerated in an effort to gain public support.

Privatization of the Czech SOE`s came under the leadership of former Prime Minister Vaclav Klaus. Privatization took place in two waves of auctions and involved approximately 3,000 targeted firms. Completed in 1992, the first wave involved 1,490 companies with 93% of the offered shares taken up by investors. By the beginning of 1995, the second wave was completed, and approximately 80% of the economy had been privatized.

There are **many possible methods** to attain privatization, including **government contracts with private firms, government franchises with private organizations, entrepreneurial ventures, and vouchers**. Czech government officials selected **two basic methods** of privatizing the SOEs:

1. corporatization and the subsequent sale of formerly SOEs to private bodies
2. voucher privatization, a nontraditional privatization technique based on free distribution of the SOEs' shares to the general population.

Under the latter approach, every adult citizen ages 18 and older was given the opportunity to buy investment vouchers-i l,000 points of investment money with limited maturity-for a registration fee of Kcs 1,000 (U.S. $34), representing approximately 25% of the average monthly wage. These vouchers, in turn, entitled Czech citizens to bid for ownership shares of any company privatized by the voucher method or to allocate their shares to an investment fund that would make investment decisions for them.

Although this approach eliminated any privatization sales proceeds that the government might have otherwise collected, it allowed for a quick transition to investor ownership and corporate restructuring. Furthermore, it guaranteed that a maximum number of Czech citizens could participate in the process despite their obvious lack of capital. The voucher system thus created a property-owning middle class that, in turn, was expected to increase the efficiency of corporate management and raise the productivity of the resulting economy.

The Czech voucher program was considered a unique approach because it was carried out from the bottom up. All state enterprises considered eligible for privatization were required to reorganize as corporations and select one of the methods of privatization. The process unleashed a sense of freedom in managers to reshape their companies. At the same time, it provided a positive momentum that steered the countrywide reformation.

Early critics of the voucher process suggested that only those firms not attractive to potential buyers (i.e., the weakest firms) would be privatized through vouchers. However, a study by the Czech Statistical Bureau found the opposite. On average, profitability of those enterprises involved in the voucher scheme was considerably higher than the average reported profitability of any and all Czech firms. Specifically, voucher firms comprise 31.6% of all profit-making firms but only 13.4% of loss-making firms. Contrary to expectations, individuals with majority holdings in investment privatization funds became intimately involved in the corporate decision-making of the enterprises. As a result, more structural changes were seen in these firms, including alterations of products and production.

Although voucher privatization was publicly applauded, did it result in economic benefit for the stakeholders of these newly liberated firms? After 40 years of communism, the financial markets and local participants were relatively inexperienced. The deregulation of the banking industry was fraught with problems, such that the majority is still government controlled. Similar problems erupted with the stock market, established shortly after the fall of the Communist government. These problems, coupled with the fact that the voucher process impeded the ability to have a concentrated ownership share, made it quite difficult to force significant management/employee change. Consequently, many of the early privatized firms have exited the market. Many others have aligned with foreign partners.

Mass privatization of state owned companies is a challenge given that domestic financial markets are under-developed or non-existent. Not only is there little private capital for investment in these companies, but the lack of financial markets also means the lack of useful asset pricing signals. Further, there is generally a lack of appropriately trained analysts and other professionals necessary for valuing companies being privatized. The auction process used in the Czech voucher-based mass privatization process was designed to overcome these limitations. It was unique when it was implemented and it was widely considered to be a success in distributing Czech state owned companies.

1.3 Appendix 1 - Situation in the Industry of the Czech Republic after 1997

In 1997 there was a crises in monetary area in the Czech Republic, that caused a decrease of Czech economy. The Czech government provisions led to a diversion of this monetary crisis (with the help of a monetary restriction), but on the other hand caused the economic fall and it influenced most of the enterprises in the Czech Republic negatively. The year 1997 was a turning point, which started a new stage of development of enterprises in the Czech Republic. What was the situation in the enterprises of industry after the year 1997?

1.3.1 Output, employment and productivity in year 1998

Industrial production increased by 1.6% and receipts (in constant prices) by 0.6% (in 1997 by 4.5% and 6.1% respectively). After fast advance of the growth rate in the 1st quarter the rate of expansion slackened in the 2nd and particularly the 3rd quarter, to plunge into decline in the 4th quarter in connection with depression of external and internal demand and with the deterioration of the financial situation of enterprises.

In the course of 1998 the financial situation of large enterprises substantially worsened. Though the order books among many of them showed satisfactory demand for their products,

they had no possibility of receiving credits and to finance their production. In this respect the Ministry of Industry and Trade is taking measures to improve the situation.

Employment in industrial organisations with 20 and more employees **declined** by 3.0% (of individual branches most considerably in manufacture of coke and refined petroleum products, by 12.5%, and in manufacture of leather and leather products, by 10.2%). Growth of employment was registered only in manufacture of rubber and plastic products (by 3%) and in manufacture of electrical and optical equipment (by 2.9%). **The average nominal wage** increased by 10.5%, but with real wages dropping by 0.2% (in 1997 the corresponding figures were the growth of 13.5% and 4.6%).

Labour productivity (from the index of industrial production) in organisations with 20 and more employees increased by 4.7% (in manufacturing by 5.2%, in mining by 2.2% and in energy sections by 3%). **The real wage** (deflated by the index of industrial producers) grew by 5.3%.

1.3.2 Output, employment and productivity in year 1999

Industrial production declined on a year-on-year basis by 3.1%, **receipts from industrial activity** in constant prices by 0.5% (production in 1998 increased 1.6% and receipts 0.6%). After a marked decline in the 1st quarter and its gradual deceleration in the 2nd and 3rd quarters, production resumed its growth again in the 4th quarter, in connection with expanding exports. As compared with the 1990 yearly average, industrial production was 14.3% lower.

Table No. 1: Production, sales and employment in 1999

Indicator		Unit	**1997**	**1998**	**1999**	**2000**
Industrial production index		%	104.5	101.6	96.9	105.1
		bln CZK	1507.7	1620.7	1645.3	1849.0
Sales from industrial activities	curr. p.	%	110.6	105.2	100.6	112.6
(constant prices – 1994 yearly		bln CZK	1295.1	1324.3	1332.2	1432.2
average)	const. p.	%	106.1	100.6	99.5	107.7
Monthly average 1990 = 100	const. p.	%	85.7	86.2	85.7	-
Share of non-state sphere (end of period)		%	78.3	84.1	-	-
		th. pers.	1295	1290	1217	1165
Average number of employees		%	95.7	97.0	94.8	97.3
Labour productivity*)		%	109.2	104.7	102.2	108.0
		tis. CZK	83.3	85.5	91.3	102.5
Average sales per employee	const. p.	%	110.9	103.7	104.9	110.7
		CZK	10780	11876	12656	13566
Average monthly wage		%	113.5	110.5	106.6	106.2

Source: www.czso.cz

Employment was curbed by 5.2% (in the individual quarters the rate of decline accelerated). In the framework of manufacturing the largest reduction was recorded in the chemical and pharmaceutical industry (by 11.3%) and the leather industry (by 10.5%). Employment failed to increase in any branch; it grew, however, in the sector under foreign control.

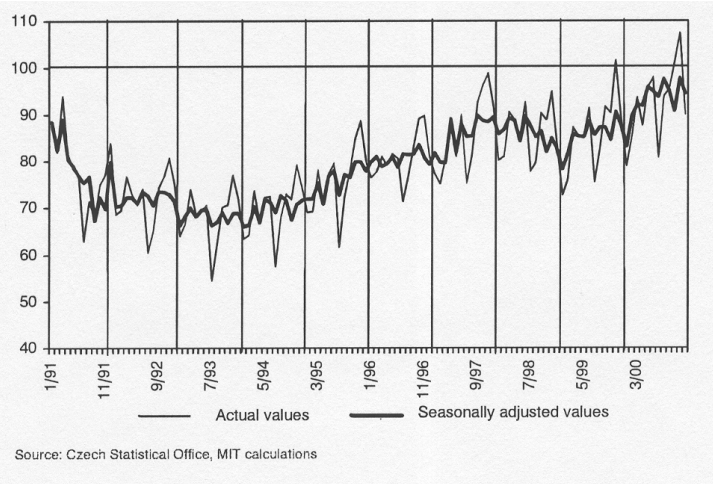
The average nominal wage increased by 6.6%, **real wages** by 5.5% (deflated by the price index of industrial producers) and by 4.4% (deflated the by index of consumer prices). **Labour productivity** from the index of industrial production picked up by 2.2% (in manufacturing by 2.2%, in the energy sector by 1.7%, but in mining it shrank by 0.6%). **Advance of the growth rate of labour productivity over the rate of growth of real wages** was not achieved in any of the three industrial aggregates and in only six branches (out of the total number of 14 branches) within manufacturing.

1.3.3 Output, employment and productivity in year 2000

Industrial production in year 2000 reached the highest growth since the transformation of the economy and almost approached the 1990 whole year average (see graph No. 1). There were only 7.6% missing and the interannual improvement was 6.7 points. From the point of view of the individual months, the 1990 level was exceeded for the first time in 1999 by 1.6%, and then in October 2000 by 1.3%, significantly again in November by 7.4% (according to the MIT calculations). When compared with the 1995 whole year average, the total industrial production was higher by 12.4%. Industrial production increased in 2000 interannually by 5.1%, the receipts (in constant prices) increased by 7.7% (the production declined interannually in the previous year by 3.1% and the receipts decreased by 0.5%).

Graph No. 1 Long-term development in the industrial production

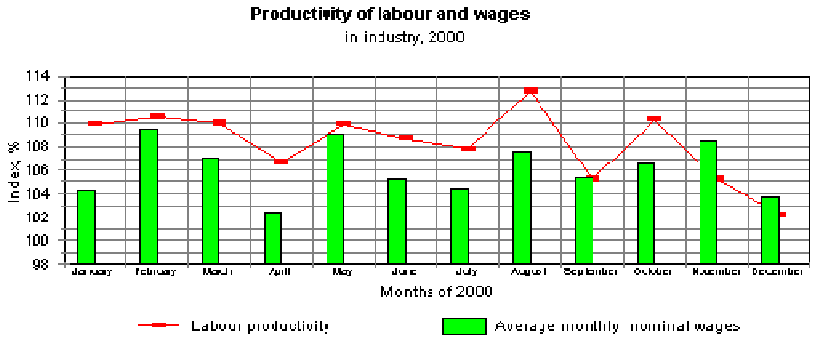
(Indices in constant prices, 1990 monthly average = 100)



Source: www.czso.cz

The **number of employees** in December 2000 dropped by 0.8%, compared with December 1999. Total employment in industry in January to December 2000 fell by 2.7% year-on-year, the decrease decelerating gradually during the year. The **average monthly nominal wages** (including those accounted but not paid) went up by 3.7% y-o-y in December 2000 and reached CZK 14 689 per employee. The **average monthly real wages** (calculated using the consumer price index) decreased by 0.3% in December 2000 y-o-y, while the **productivity of labour** grew by 2.2%. The average nominal wages in January to December 2000 were up by 6.2% y-o-y and amounted to CZK 13 566 per employee. Real wages in the same period were higher by 2.2% and the productivity of labour rose by 8.0%. The rise in the productivity of labour was higher than the growth in the average nominal wages.

Graph No. 2: Productivity of labour and wages



Source: www.czso.cz

1.3.4 Output, employment and productivity in year 2001

Compared with the average month of the base year 1995, industrial production in November 2001 was by 30.6% higher. Industrial production in November 2001 grew by 6.6% year-on-year. Against October 2001, industrial production in November 2001 rose by 3.8%. Compared with the some period of 2000, industrial production in January to November 2001 was by 6.8% higher. **Sales in industry** reached in November 2001 by enterprises (legal and natural persons employing 20 people or more) grew by 4.0% year-on-year at constant prices (2000 average prices).

The number of employees in November 2001 in the whole industry fell by about 13.4 thousand persons i.e. 1.1%, compared to November 2000. The decrease was recorded in the mainly industrial branches, except for manufacture of wood and wood products, manufacture of rubber and plastic products, manufacture of basic metals and fabricated metal products and manufacture of transport equipment. **The average monthly nominal wage** (incl. those accounted but not paid) amounted to CZK 16 906 per employee in November 2001 and grew by 4.3%. The highest average monthly nominal wages were reported in 'electricity, gas and water supply', the lowest were in manufacturing (in manufacture of leather and leather products amounted to CZK 9 811). **Labour productivity** in November 2001 grew 5.2%. The highest figures were observed in 'electricity, gas and water supply' (109.4%), in 'mining and quarrying' reached 104.8% and in 'manufacturing' 104.1%. Unit wage costs were 0.9 percentage point lower y-o-y.

1.3.5 Output, employment and productivity in year 2002

Compared with the average month of the base year 2000, **industrial production** in December 2002 was by 8.3% higher. Industrial production in December 2002 grew by 6.6% year-on-year. Compared with the some period of 2001, industrial production in January to December 2002 was by 4.8% higher.

Sales in industry reached in December 2002 by enterprises (legal and natural persons employing 20 people or more) increased 5.3% year-on-year at constant prices. The growth of industrial sales occurred in mining and quarrying and manufacturing. The highest industrial sales were measured in manufacture of electrical and optical equipment (22.0%). Industrial foreign-controlled enterprises raised their sales 5.1% at constant prices (2.5% at current prices), y-o-y.

Table No. 2: Industry sales in 2002

INDUSTRY: SALES				
	Index			
	October	November	December	January to December
Industry of the CR				
Sales				
Current prices	100.0	102.8	103.1	100.2
Constant prices of 2000	103.3	105.8	105.3	103.4
Direct exports sales				
Current prices	106.7	115.7	115.2	107.7
Constant prices of 2000	114.9	123.8	121.4	115.7

Source: www.czso.cz

The number of employees in December 2002 in the whole industry fell by about 48.9 thousand persons i.e. 4.1%, y-o-y. Decreases were recorded in the mainly industrial branches, namely in manufacture of textiles and textile products and mining and quarrying, while increases occurred in manufacture of rubber and plastic products and transport equipment. **The average monthly nominal wage** in December 2002 amounted to CZK 16 794 per employee in December 2002 and grew by 7.0% y-o-y. **Labour productivity** (sales per employee) was 9.8% up in December 2002. Unit wage costs were 2.6 percentage points down, y-o-y.

Table No. 3: Employment and wages in industry in 2002

	Index			
	October	November	December	January to December
Industry of the CR				
Average registered employment	96.3	96.0	95.9	97.1
Average monthly wage, nominal	105.8	103.7	107.0	106.0
real	105.2	103.2	106.4	104.1
Average hourly wage	108.1	106.1	104.1	106.3
Labour productivity	107.3	110.3	109.8	106.4

Source: www.czso.cz

1.3.6 Output, employment and productivity in year 2003

Compared with the average month of the base year 2000, **industrial production** in December 2003 was by 18.0% higher and grew by 8.9% year-on-year. Compared to November 2003, it went by 14.2% down. These indices are not adjusted for working days.

Sales in industry of the enterprises (legal and natural persons employing 20 people or more) reached in December 2003 108.7% or 106.2%, if working days adjusted (year-on-year at constant prices, 2000 average prices). There was one more working day in December 2003 compared to December 2002. 'Manufacture of rubber and plastic products' (38.3% up), 'manufacture of machinery and equipment' (23.6% up) and 'manufacture of transport equipment' (19.0% up) were responsible for the high growth of total sales in industry. The sales dropped most in 'manufacture of leather and leather products' (15.4% down) and 'mining and quarrying of energy producing materials' (5.3% down).

Table No. 4: Industry sales in 2003

	October	November	December	January to December
Industry of the CR				
Sales				
Current prices	105.0	100.5	109.4	105.4
Constant prices of 2000	104.4	99.6	108.7	105.4
Constant prices of 2000 2)	104.4	104.2	106.2	105.4
Direct exports sales				
Current prices	110.6	103.4	115.8	109.7
Constant prices of 2000	108.1	101.1	114.2	108.8

2) Adjusted for work days

Source: www.czso.cz

The **average number of employees** in the industry fell by 3.6% (41.9 thousand persons) y-o-y. The employment fell in most CZ-NACE activities, especially in 'manufacture of leather and leather products' and 'manufacture of textile and textile products', and increased in 'manufacture of rubber and plastic products' and 'manufacture of electrical and optical products' **Average monthly nominal wage** amounted to CZK 18 053, rising by 7.0% y-o-y. Average hourly wage stood at CZK 150.1 and rose by 1.9% y-o-y. Labour productivity (sales per employee) was by 12.8% up and unit wage costs down by 5.1% y-o-y.

Table No. 5: Employment and wages in industry in 2003

	October	November	December	January to December
Industry of the CR				
Average registered employment	96.0	96.3	96.4	96.7
Average monthly wage, nominal	105.7	106.5	107.0	105.7
real	105.3	105.4	105.9	105.6
Average hourly wage 2)	105.4	111.7	101.9	105.5
Labour productivity	108.7	103.5	112.8	108.9

2) Calculated as the ratio of the volume of wages cleared to the number of hours worked in a given period

Source: www.czso.cz

1.3.7 Output, employment and productivity in year 2004

Industrial production in December 2004 grew by 8.3% year-on-year. Compared with the average month of the base year 2000, **industrial production** in December 2004 was by 27.8% lower. Industrial production in December 2004 went down by 16.2% month-on-month. These indices are not adjusted for working days.

Sales in industry of the enterprises (legal and natural persons employing 20 people or more) were higher by 8.6% or 4.0% (WDA) in December 2004 (year-on-year at constant prices, 2000 average prices). There were two more working days in December 2004 compared to December 2003. High growth of 'manufacture of electrical and optical equipment' (+27.3%), 'manufacture of transport equipment' (+22.8%) and 'manufacture of rubber and plastic products' (+17.9%) contributed to the increase of total sales in industry.

Table No. 6: Industry sales in 2004

	October	November	December	January to December
Industry of the CR				
Sales				
Current prices	112.3	119.5	113.5	114.3
Constant prices of 2000	106.5	113.9	108.6	109.8
Constant prices of 2000 2)	111.2	108.8	104.0	109.4
Direct exports sales				
Current prices	116.8	123.0	119.8	119.7
Constant prices of 2000	114.5	121.4	118.4	117.0

2) Adjusted for work days

Source: www.czso.cz

The **average number of employees** in the industry dropped by 0.3% (-3.9 thousand persons) y-o-y. The employment fell most in 'manufacture of leather and leather products', 'manufacture of textiles and textile products' and 'mining and quarrying of energy producing materials', and increased in 'manufacture of transport equipment', 'manufacture of rubber and plastic products' and 'manufacture of electrical and optical equipment'. The **average monthly nominal wage** amounted to CZK 18 870, rising by 4.6% y-o-y. Unit wage costs were 3.9% down. The average hourly wage increased by 1.1% and stood at CZK 151.30. Labour productivity (sales per employee) was 8.9% up and productivity per hour grew by 5.3%.

Table No. 7: Employment and wages in industry in 2004

	October	November	December	January to December
Industry of the CR				
Average registered employment	100.1	99.9	99.7	99.5
Average monthly wage, nominal	104.8	108.5	104.6	106.9
real	101.3	105.4	101.8	104.0
Average hourly wage 2)	111.1	100.6	101.1	104.5
Labour productivity	106.4	114.0	108.9	110.4

2) Calculated as the ratio of the volume of wages cleared to the number of hours worked in a given period

Source: www.czso.cz

1.3.8 Output, employment and productivity in year 2005

Industrial production in December 2005 grew by 7.1% year-on-year. Compared with the average month of the base year 2000, **industrial production** in December 2005 was by 36.8% higher. Industrial production in December 2005 went down by 16.2% month-on-month. These indices are not adjusted for working days.

Sales in industry in December 2005 (year-on-year at constant prices, 2000 average prices) reached 107.1% or 108.4% (working days adjusted). There was one working day less in December 2005 compared to December 2004. High growth of 'manufacture of transport equipment' (+20.0%), 'manufacture of machinery and equipment' (+11.7%) and

'manufacture of rubber and plastic products' (+10.3%) contributed to the increase of **total sales** in industry.

Table No. 8: Industry sales in 2005

	October	November	December	January to December
Industry of the CR				
Sales				
Current prices	107.2	108.9	106.9	108.0
Constant prices of 2000	109.5	111.3	108.4	108.1
Direct exports sales				
Current prices	104.9	105.9	104.0	106.8
Constant prices of 2000	108.8	110.2	106.7	110.2

Source: www.czso.cz

The **average number of employees** in the industry went up by 0.2% (+2.2 thousand persons) year-on-year. Year-on-year, employment increased in 'manufacture of rubber and plastic products', 'manufacture of transport equipment' and 'manufacture of chemicals, chemical products'; and decreased most in 'electricity, gas and water supply', 'manufacture of textiles and textile products' and 'mining and quarrying, except of energy producing materials'. The **average monthly nominal wage** rose by 3.7% year-on-year and amounted to CZK 19 629. The average hourly wage increased by 5.7% and was CZK 160.6. Labour productivity (sales per employee) increased by 8.2% and productivity per hour by 10.3%. Unit wage costs were down by 4.2%.

Table No. 9: Employment and wages in industry in 2005

	October	November	December	January to December
Industry of the CR				
Average registered employment	100.2	100.1	100.2	99.9
Average monthly wage, nominal	104.1	105.2	103.7	104.6
real	101.5	102.7	101.5	102.6
Average hourly wage 2)	102.7	105.7	105.7	105.2
Labour productivity	109.3	111.2	108.2	108.2

2) Calculated as the ratio of the volume of wages cleared to the number of hours worked in a given period

Source: www.czso.cz

1.3.9 Output, employment and productivity in year 2006

The industrial production achieved the growth of 9.7% in 2006 (the highest increase since the founding of the independent Czech Republic). Revenues of industrial companies (in constant prices) increased by 10.3%, while the revenues from direct exports (in constant prices) by 11.6% (they participated in the total revenues of industry with 54.2%).

Production of the manufacturing industry increased by 10.5%, the revenues (in constant prices) by 10.9%, and the revenues from direct exports (in constant prices) by 11.2% (they participated in the revenues from sales of own products and services with 58.2%). High

growth in production was reported also by the manufacture of transport equipment (by 20.6%), the manufacture and repairs of machines and equipment (by 18%), the manufacture of electrical and optical equipment (by 16.3%), and the manufacture of plastic and rubber products (by 14.6%). On the other hand, the manufacture of textiles, textile products and clothes decreased by 1.6%. The main decline took place in the manufacture of clothes (by 20.1%).

Table No. 10: Industry sales in 2006

	October	November	December	January to December
Industry of the CR				
Sales				
Current prices	114,4	109,4	105,9	110,2
Constant prices of 2000	113,8	108,8	104,9	109,4
Direct exports sales				
Current prices	115,3	112,1	109,7	112,2
Constant prices of 2000	115,9	112,5	109,6	112,3

Source: www.czso.cz

The dynamic increases in the production and the fast growth in new orders reflected in **increasing employment (by 1%)**. **The manufacturing industry** participated in this with the increase by 1.5%, while employment decreased in the energy section by 5.2% and in the raw material section by 2.9%.

The high growth in revenues despite the improvement in the total employment reflected in the growing **labour productivity by 9.2%**. The raw material section reported the increase by 13.7%, the manufacturing industry by 9.3%, and the energy section by 7.3%. The favourite growth in the labour productivity allowed companies increases in **the average nominal wages** by 6%. The energy section reported the increase by 8.1%, the raw material section by 7.6%, and the manufacturing industry by 6%. **The real wage was higher** by 3.4%. When recalculated with the consumer prices index and the industrial producer prices index, the increase equalled 4.3%.

Table No. 11: Employment and wages in industry in 2006

	October	November	December	January to December
Industry of the CR				
Average registered employment	100,4	100,1	100,3	100,5
Average monthly wage, nominal	107,6	105,9	105,0	106,1
real	106,2	104,3	103,2	106,7
Average hourly wage 2)	101,1	105,1	109,4	105,0
Labour productivity	113,3	108,8	104,6	108,9

2) Calculated as the ratio of the volume of wages cleared to the number of hours worked in a given period

Source: www.czso.cz

1.3.10 Output, employment and productivity in year 2007

On the supply side of the economy, industrial production saw an annual increase of 8.2%. In comparison with 2006, this shows a certain slowing trend, but the development was accompanied by desirable changes in favour of a "lighter" production structure, which was characterised mainly by accelerated growth of economic sectors with a greater value added (automobiles, electronics and the computer industry).

Table No. 12: Industry sales in 2007

	October	November	December	January to December
Industry of the CR				
Sales				
Current prices	110,3	108,6	103,8	107,8
Constant prices of 2000	109,3	107,6	102,4	106,8
Direct exports sales				
Current prices	112,6	110,2	100,5	109,8
Constant prices of 2000	112,8	111,0	101,9	110,4

Source: www.czso.cz

Relatively low and stable inflation was maintained only through the beginning of the year. After the 1st quarter, consumer prices gradually rose with smaller fluctuations. After September, this growth progressively continued, reaching an annual increase of 5.4%, in December.

The number of employees working in the national economy increased by 1.9% (to 4.9 million), in comparison with the previous year. The average yearly unemployment level fell to 6.6%, representing an annual decrease of 1.5 percentage points and was at its lowest level since 1998. Salary development accelerated, with 7.1% growth in the average salary.

Table No. 13: Employment and wages in industry in 2007

	October	November	December	January to December
Industry of the CR				
Average registered employment	101,1	101,2	101,2	101,1
Average monthly wage, nominal	109,3	106,2	105,2	107,2
real	105,1	101,1	99,8	104,9
Average hourly wage 2)	106,1	104,9	111,3	106,8
Labour productivity	107,4	105,5	100,5	104,8

2) Calculated as the ratio of the volume of wages cleared to the number of hours worked in a given period

Source: www.czso.cz

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2 CONSUMER'S RIGHTS IN THE CZECH REPUBLIC

Although it might be hard to believe, Czech consumers were protected against unfair practices of producers or sellers even during the socialist era. Majority of the rights that exist now were covered by legislation. The present structure of the supervisory bodies was created at that time as well. Many parts of the special act – Act on Internal Trade – were transferred into the contemporary Act on Consumer Protection. The same we can say about the Civic Code. One of the reasons of the positive situation is that the Czechoslovak Republic was a member of the United Nations Organization, which has contributed to the basic general rules (or rights) of consumer protection. These rules – or the eight consumer rights – as well as consumer protection guidelines are not obligatory, but many countries follow them, to a more or less extent.

Hard times for the Czech (or formerly Czechoslovak) consumers started after the Velvet Revolution in the year 1989. Several years of a kind of anarchy in this area followed, when many entrepreneurs misused the new opportunities in the market not covered by any legislation. Bad work of the courts of justice concerning the extreme length of the legal processes and very high expenditures made the situation even worse. Poor legal acts – for instance the Code of Civil Law or Civil Procedure Code - have caused serious problems to consumers with consequences up till now.

The accession process of the Czech Republic into the European Union, which started in the year 1993, was a significant turning point. Consumer policy and consumer protection form very important part of the EU interests because unsatisfied consumers present quite a great barrier for the free movement of goods or/and services. In addition, consumers' claims on defected goods amount to the productivity fall and increase of the company's costs, which might lead to the whole EU's uncompetitiveness.

The Czech government had to accomplish many tasks before the entry into the EU to ensure comparable conditions for Czech consumers. Two basic conditions had to be met:

- legislation "reconstruction" and formation ensuring consumer rights as well as obligations and on the other hand, obligations for the entrepreneurs in the area of consumer rights and
- organisations structure – i.e. all the spheres of the consumer policy have to be given in charge of the bodies with the clear tasks, responsibilities and "rules of the game".

Today we can claim that the situation of the Czech consumer is on the same level as that of any citizen of any member state in the EU.[1] In reality, however, this statement has many different levels. There are still some problems with consumer protection – mostly in the new EU countries – to be solved. Parallel to that, the EU consumer policy develops all the time and new tasks must be implemented into practice.

The EU countries have to work out, realize and monitor formal programme documents concerning the strategies and plans in the area of consumer interests, called – as it was mentioned above – "consumer policy". These documents should correspond with the EU consumer policy programme prepared by the Directorate General for Health and Consumer Affairs (or DG SANCO) reflecting specifically the tasks coming from every country's situation in the sphere of consumer protection.

[1] Although there is a common level of protection in the whole European Union, in fact there are quite great differences between the North and South and the West and East based on their history and culture.

The first Czech formal consumer policy was formulated and implemented in the years 1999-2000. One of the main goals of this document was to create a base for the consumer organizations activities. At the beginning of the 2006 the new third programme of consumer policy has been prepared, which should be followed until the year 2010. All national consumer policies stem from the European one, but they are modified to suit the actual needs in every country.

This programme gives us a clear picture of the present situation concerning the consumer protection in the Czech Republic, the main directions of future development as well as the institutional framework.

Who are the "stakeholders" of the consumer policy? There are several groups with different interests and positions, functions and level of involvement: the government, supervisory bodies, consumer organisations, consumers themselves as well as independent organizations and entrepreneurs. We will pay special attention only to the first three subjects; some others are mentioned in the Consumer Policy 2006-2010 programme, which is dealt with further in the text.

Czech government – creates legislation, formulates consumer policy, establishes and manages special organisations, e.g. supervisory bodies in the sphere of the consumer policy, supports (also financially) projects and programmes concerning the goals of consumer policy (e.g. education). There is a special governmental body – the Sectoral Consumer Protection Group within the Ministerial Coordination Group, which is responsible for coordination and provision of relevant activities. The Ministry of Industry and Trade represents the umbrella organisation with the most responsibilities.

Other competent central state administration authorities (especially the Ministry of Health, the Ministry of Agriculture, the Ministry of Finance, the Ministry of the Environment, the Ministry of Regional Development, the Ministry of Justice, the Ministry of Informatics, the Ministry of Transport and the Ministry of Education, Youth and Sports) provide information concerning consumer protection issues, including information required to safeguard cooperation in the implementation of common approaches.

Some of the Ministries have founded supervisory bodies, which take care of the observation of the rules on the market. The others are "less active". They prepare legislation proposals, makes surveys or ensure the needed information for consumer policy implementation. The Ministry of Industry and Trade is also responsible to some extent for the existence of the ECC Prague (European Consumer Centre) founded on 1st January 2005 within the financial support of the European Union, which offers free of charge information and advice on consumer rights in the EU. It also offers free of charge cooperation and assistance to consumers when setting their complaints as to quality of products and services being bought, complaints concerning behaviour of entrepreneurs in other EU Member States, as well as in Norway and Island. It further works as a contact point for the free of charge assistance to consumers at out-of-court settlements of their disputes in the same region.

Let us introduce some of the supervisory bodies:

Czech Business Inspectorate (Ministry of Industry and Trade)

The supervisory authority over the introduction to the market and sales of non—foods products and services — product safety, product technical requirements, fairness of sales, provision of fair and accurate information about products and services, prohibition of

misleading of and discriminating against consumers, and the quality of petrol, consumer loans and tourism services, etc. This body works under these acts:

Czech Trade Inspection Act, No. 64/1986 Coll., as amended

Consumer Protection Act, No. 634/1992 Coll., as amended

Act on Technical Requirements of Products, No. 22/1997 Coll., as amended

Act on General Product Safety, Act No. 102/2001 Coll., as amended

Act on the Liability for Damage Caused by a Defective Product, No. 59/1998 Coll.

Act on Some Conditions for Concluding a Consumer Loan, No. 321/2001 Coll.

Civil Code Act. No. 40/1964 Coll., as amended

Commercial Code, Act No. 513/1990 Coll., as amended.

Czech Agricultural and Food Inspection Authority (Ministry of Agriculture)

The CAFIA inspects foodstuffs, ingredients for their production, agricultural products except for meat and meat products, fish and eggs, soaps and detergents, and tobacco products. This competence applies to production, warehousing, transport, and sales (including imports). Its work concerns monitoring and protection of economic interests of both consumers and the state – consumer protection from foodstuffs that are risky to human health, falsely labelled, sold despite their expired use-by-date or of unknown origin. The manufacturing and sales conditions form an integral part of the target inspection. The term food safety means the control of microbiological requirements and contents of contaminants (e.g. chemical substances, additives, pesticide residua, etc.). The term quality control means the control of analytical characteristic features (e.g. the contents of fat and sugar, humidity, etc.), or the control of sensory characteristic features. Product labelling and its adequacy are assessed separately.

The legislative ground for the CAFIA activities is formed by:

Act on Foodstuffs and Tobacco Products No. 110/1997, Coll., as amended

Act on CAFIA No. 146/2002 Coll, as amended

Act on State Control No. 552/91 Coll, as amended

as well as by a great range of governmental orders or ministerial decrees.

State Veterinary Administration (Ministry of Agriculture)

The main tasks of this authority are the protection of consumers from products of animal origin likely to be harmful to human health, monitoring of animal health situation and maintaining it favourable, veterinary protection of the state territory of the Czech Republic and the care for animal welfare and animal protection. SVS works under the Veterinary Act No. 166/1999 Coll, as amended and many governmental orders and ministerial decrees.

Food Safety Information Centre - The Institute for Agricultural and Food—Related Information (ÚZPI) (Ministry of Agriculture)

- performs the role of a food safety information centre. The ÚZPI created and operates the "Food Safety" information portal, through which it informs specialists, as well as consumers

at large, about food safety issues in the broadest context (from the safety of food ingredients, to food production, and to the way it is served on a consumer's table).

Regional Public Health Authorities (Ministry of Health)

Public health protection authorities check that products intended for daily use are not harmful to health — products for children less than three years of age, products which come into contact with foodstuffs, toys, cosmetics, and public dining. Other areas of interests are the quality of drinking water, air or environment, healthy living and working conditions and the protection against epidemic diseases.

The basic legal acts important for the activities of these authorities are:

Act No. 258/2000 Coll., on the Protection of Public Health

Act No. 320/2002 Coll., as an authority for the protection of public health

State Institute for Drug Control (Ministry of Health)

The Institute performs state supervision with respect to the qualities of human medications in all the areas they are used in. With respect to health resources, the Institute performs checks with health care providers, investigates undesirable incidents, and checks clinical assessments.

Assay Office (Ministry of Industry and Trade)

The Assay Office, as a state authority, carries out state administration in the field of assay marks (hallmarking) and precious metal testing. Above all, it conducts on-site assay inspections of the producers and retailers of products made of precious metals, imposes sanctions for any shortcomings ascertained, and verifies or otherwise ascertains the fineness of products or other items made of precious metals, etc. On its web pages the office informs public about the false hallmarks on the Czech market.

Czech Authority for Weapon and Ammunition Testing

Carries out testing and expert tasks concerning firearms, ammunition, pyrotechnical products, explosives, propellants, and protective means resistant to bullets, shell fragments, and knives.

Czech Metrology Institute

Ensures the uniformity and precision of measures and measuring in all fields of scientific, technical, and economic activity. The Institute provides services in three categories of metrology, namely in legal metrology, fundamental metrology and dissemination of units – calibration.

The basic legal acts are:

Law No. 505/1990 Coll., on Metrology, as amended

Law No. 20/1993 Coll., on State Administration Discharge in the field of Technical standardization, Metrology and Testing

Law No. 22/1997 Coll., on Technical Requirements for Products, as amended

There are also several consumers' organizations, which play the advisory role aiming at the consumers. Some of them also help with the supervision of the market. The most active – which are given here – are also the members of the leading international consumers´ associations.

Consumers Defence Association — SOS

- provides consumer consultation, publishes the magazine "Shield of Consumer", publishes leaflets, brochures and CD-ROMs to help with the education of Czech consumers, monitors food safety etc.

Civil Consumer Association

- offers the same advice and services as the previous one, but is more active in testing the products. It publishes the magazine TEST.

Civil Consumer Association TEST

2.1 The Consumer Policy Programme for 2006-2010

The basic objectives of consumer policy in 2006-2010 include the protection of consumers from risks and threats that they are unable to influence themselves (especially the safety of products and services, consumer aspects related to the use of new technology, including electronic trading and sales via mobile phone, and the ethical behaviour of entrepreneurs), consumers' ability to make better-informed decisions on their interests, consideration for consumer interests in other policies, including the preparation of legislation with consumer-related impacts, and active participation in the events within the European Union and other international organizations.

The 2006-2010 consumer policy programme also strives to safeguard the basic rights of consumers, such as the right to:

a) the protection of health and safety

b) the protection of economic interests

c) compensation

d) information and education

e) representation in the handling of claims

f) form consumer protection associations

g) relevant choice in relation to the environmental and social impacts of consumption.

To meet the general objectives of consumer policy for the upcoming period, some elementary priorities need to be set. These priorities have been identified as follows:

a. increased awareness in the field of consumer protection, the development of proactive information and educational activities to the benefit of consumers.

There will be a particular focus on price comparison systems, indications of consumer attitudes and satisfaction, the reinforcement of product and service safety, a restriction of their

negative environmental impact, the protection of consumers' warranted interests in the use of telecommunication services, energy procurement, transport service provision, etc.

Consumer organizations will be able to have a say in the development of the knowledge base through their own research and evaluations of consumer enquiries and complaints, and will be able to use the information base that has been built up.

b. the greater efficiency of regulation

Besides the protection of consumer health and safety, the protection of consumers' economic interests also needs to be strengthened in the form of legislative amendments and through the provision of information about rights and methods of exercising these rights. An important step in this area in the upcoming period will be the transposition of the Directive (EC) 2005/29/EC concerning unfair commercial practices and measures to ensure the corresponding standard in the effective enforcement of the law. In connection with this new legislation and the recodification of the Civil Code, it would be expedient to review the current Consumer Protection Act and adapt it to the new conditions.

At the same time, it is advisable to support the creation of codes of ethics connected with the manufacture and sale of products and the provision of services. Consumer protection from incorrect measurements in commercial and administrative transactions is one of the fundamental roles of legal metrology, focusing on measuring devices subject to inspection under the law. The problems that need to be tackled in the immediate future concern the roles of legal metrology in an area harmonized with the European Union and, on the other hand, in an area that has not been harmonized and is subject to national law, where the aim is to achieve the highest possible level of compatibility between systems. It is also necessary to find an optimal solution for measuring devices that are not subject to Act No 505/1990 on metrology, as amended, and which, given their significance, are subject to ministerial regulations (e.g. in the fields of transport, food and health). As new digital technologies are developed, the need to protect consumers in relation to the use of these technologies has also surfaced. As regards European legislation, active participation is required in the preparation of new legal regulations (both in the field of consumer protection and in fields with a consumer impact, such as the Services Directive) and in the review of the consumer acquis that is being prepared.

c. the support of self-regulation, dialogue between state institutions and consumers, and dialogue between enterprises and consumers

The main areas here are:

- intensification of dialogue between consumers and state institutions, mainly by fostering conditions for consumers, or their representatives, to take part in discussions of matters that affect consumers; the opportunity to put forward comments in the legislative process, involvement in various working parties on specific areas, such as the creation of standards etc.
- the promotion and capacity-building of consumer organizations, reinforcement of consumer organizations and their capacities in areas and regions,

d) the increased effectiveness of market oversight

The effectiveness of market supervision needs to be enhanced in the following areas:

- the safety of products and services on the market, including involvement in warning information systems on the occurrence of dangerous products on the Community's internal market,
- the protection of consumers' economic interests,
- financial and travel services,
    - e-commerce,
    - reactions and searches for appropriate instruments to handle damage to consumers in the light of new problems, such as sales over mobile telephone, the limited possibility of using new technology,
    - effective cooperation among market oversight bodies within the Community's common internal market,
    - the education of persons responsible for enforcing the law,
    - the creation of a user-friendly interconnected system of information run by supervisory bodies and accessible to the general consumer public.

Consistent with the Regulation (EC) No 2006/2004 of the European Parliament and of the Council on cooperation between national authorities responsible for the enforcement of consumer protection laws, from the end of 2006 new control procedures will be applied in cross-border cooperation between the oversight bodies of individual Member States.

e) support for the development of out-of-court settlements to consumer disputes

In the case of consumer dispute mediation, there will be an improvement in the activities in place today, carried out primarily by nongovernmental consumer organizations in the scope of their projects and supported by state authorities. The Ministry of Industry and Trade will continue to provide financial grants for these projects. At the same time, it will be expedient to raise awareness among the consumer public of the possibility of applying this means of resolving disputes.

As regards arbitration for consumer disputes, it will be necessary to assess existing legislation and the suitability or possibility of using this legislation for all consumer disputes, with consideration for certain specific features (the conclusion of contracts by implication, liability for defects, etc.); it will subsequently be essential to propose legislation that will safeguard easy consumer access to this form of extra-judicial settlement.

f) support for activities connected with the sustainable development of consumption

Communication with citizens needs to be reinforced and improved in order to provide them with the necessary information important for the protection of their consumer interests, especially for qualified decisions on the goods or services they purchase. Support will be provided for the projects of nongovernmental consumer organizations focusing on intensifying the information provided to consumers on the technical, safety and health parameters of selected types of products throughout the chain: manufacturer, distributor, seller, consumer. Communication needs to be developed at the level of state administration authorities, supervisory bodies and consumer organizations. It is also important for consumers

to be informed of the results of market inspections, e.g. as regards prices, cross-border purchases and the related handling of disputes, fraud, accidents and injury.

Sustainable consumption programmes place suitable pressure on the conduct of the parties concerned (the producer, the retail chain, institutions and enterprises as consumers, individual consumers, and the media). Programmes to promote sales of environmentally friendly products (e.g. Government Resolution 720/2000), green public procurement in general, sales of fair-trade products, the selection of 'green power', and healthy and local organic foods, are good, proven instruments that need to be reinforced in the Czech Republic.

In connection with the task of educating consumers, an emphasis should be placed on the following activities:

- the issue of publications (general and specifically specializing in selected themes of consumer protection)

- regular Internet updates, including the creation of a section on 'consumers' frequently asked questions'

- an evaluation of, and any necessary adjustments to, the curricula of primary and secondary schools as regards the teaching of consumer affairs, including matters related to sustainable consumption

- training in the field of consumer rights for consumers and business entities

- media coverage of consumer rights

- in cooperation with the Ministry of Education, Youth and Sports, greater awareness of the range of products on sale ('merchandise education') will be initiated.

g) support for activities and development of consumer organizations

The main aims of support will be integration and improvements in the consulting and information services provided to consumers, involvement in educational and awareness activities, the implementation of collective cases protecting consumer interests, increases in the membership and sponsors of consumer organizations, improvements in the ability of consumer organizations to help consumers, the monitoring of unfair trading, consumer warnings, and representation of the interests of consumers at national and international level.

From the long-term aspect, it is necessary to support the ability of consumer organizations to generate their own resources, whether from the provision of services to consumers, subscription fees, etc., or in connection with legislative amendments currently being considered (tax assignment, the bringing of collective actions for compensation, etc.).

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3 THE CZECH NATIONAL QUALITY PROGRAM

According to The European Quality Charter, the quality is at the top of decisive the factors of competitiveness of enterprises as well as countries in the global world economy. Although the entrepreneurs can be considered to have the most important role and responsibility for quality and business excellence, even in advanced market economies they are not left without some kind of the governmental support.

National Quality Programs (or policies) came into being on incentive of governments in more than 80 countries in the world. Some are based on promotion and support of quality system certification according to the ISO 9000 management quality system standards, others on the support of total quality management programs with national quality awards. The Czech National Quality Policy is a combination of the above-mentioned approaches. But in nearly every country, where some form of national government interest for quality exists, November is “celebrated” as the month of quality and the second Thursday in November as the “World Quality Day”.

With a little exaggeration we can say that the Czech (or Czechoslovak) economy missed the start of a new quality era, which has begun in the 1980s and is mainly connected with the Total Quality Management Concept or Business Excellence Quality Awards. On the other hand, the speed of acceptance of quality importance in the Czech society during the last years (especially at the beginning of the 21st century) is really remarkable and comparable to the quality perception in the most advanced countries. This statement is possible mostly thanks to the self-interest of the Czech entrepreneurs, raised by the need to be competitive not only at the internal market, but also abroad, and the effort of the Czech government.

It may be interesting that the first official government support of the National Quality Policy is connected with the membership of the Czech Republic in the NATO, which was followed by the entry into the European Union. Many Czech enterprises appeared to be potential suppliers to the NATO army (or were suppliers of the Czech army at that time) and started the process required for obtaining the AQAP (Allied Quality Assurance Publications) certificate of quality according to the NATO standards.

According to the requirements of NATO, each member state has to have its own system of state quality assurance (GQA – Government Quality Assurance), determining the standards for suppliers in the case of deliveries into other states or in the case of common army programs. The basic procedures concerning GQA are stated in the document STANAG 4107. Mutual acceptance of government quality assurance and usage of allied quality assurance publications was ratified in December 1999 and fully implemented in January 2002.

In the Czech Republic, the sector of state quality testing for the army supplies is in the competence of the Main Authority for Standardisation, Cataloguing and State Quality Verification of the Ministry of Defence (MASCSQV MD).

In the frame of the accession process of the Czech Republic into the European Union, the European Commission recommends to declare the National Quality Policy to be an integral part of the affiliation program of the Central and Eastern European countries.

The first working meetings and consultations with a EU’s expert took place in March 1998. This visit resulted not only in a report for the EU about the situation in this field in the Czech Republic, but also led to the concept of the "National Quality Policy", project elaborated in co-operation with the Czech Society for Quality – we will pay attention to this organisation later in the text.

The final form of the National Quality Policy Program was elaborated as the governmental declaration and special decree two years later.

According to this "Decree of the Czech Republic government No. 458 of 10th May 2000 about the Czech Republic National Quality Policy" there are some responsibilities of the chosen subjects in the main areas of national quality policy. For instance:

- the vice-president of the government, the Finance Minister and the Minister of Industry and Trade are charged by the government of the Czech Republic to update the National Policy continuously according to developments in the EU;
- since the year 2001 ministers are in charge of working out projects for the support of quality always till October 31st of the preceding calendar year;
- the Czech Society for Quality is commissioned by the Minister of Industry and Trade to act as secretariat and as National Policy Information Centre.

The main and general goals of the National Quality Policy are:

- to strengthen the competitiveness of the Czech economy and its subjects in the European and world markets
- to support the economic growth
- to help to protect the environment and natural resources
- to upgrade the quality of work ad services in the public sector (including state bodies and organizations)
- to help to build the image of Czech quality and to influence the changes in the citizens´ perception and attitudes to the Czech products
- to support the quality of work and services in the public sector, state administration, public transport, power industry, health service, school system, police, banking, insurance and others.

The Quality Council of the Czech Republic as the advisory coordinating and managing governmental body had been established and is affiliated to the Ministry of Industry and Trade. The council supports the management and application of all methods and instruments, which help to promote quality in all areas of the Czech society's life. The coordination of state institutions' activities means better relations between branches of the State administration and their policies (e.g. industrial policy, environmental, social policy, regional policy, structural funds etc.). This area also includes quality education in schools, promotion in mass media, publishing of promotional and professional publications, support of citizens' associations and initiatives acting in the quality field, education and improving consumers' knowledge.

Council members are representatives of all branches of the State Administration, of entrepreneurs' associations and of non-profit nongovernmental organisations dealing with quality. The National Information Centre for Quality Promotion acts as the Council Secretariat. The Centre administrates – among others – several databases containing for example the documents of the National Quality Policy, the certification and inspection bodies, National register of the certificated organizations, of the magazines published by the Centre, Press news etc.

The Decree is quite simple in its contents because the heart of the matter is the material worked out every year (with the same heading plus the current year) and full of various (about 200) activities from different areas concerning quality. These activities are ensured by several

dozens of organisations – nongovernmental and non-profit as well as profit-aimed enterprises – in the areas of education and training, consultancy, accreditation, certification, standardization, metrology and testing, environmental care, health and safety at work and consumer protection, banking, mass media. In some cases the actions are planned for every month or even week. Regarding, for example, mass media (especially those operating under public law), their role is mostly to popularise National Quality Policy principles among the general public. They publish for instance examples of successes of the leading organisations concerning the quality issues.

Let us present some examples from the material for the year 2006:

- 15th annual international conference "Quality 2006"
- "The Excellent Product of the Year 2006" – competition organised by the Design Centre of the Czech Republic (governmental organisation)
- National Quality Award 2006
- "Czech Quality" Award Programme
- "Manager Excellence" training course
- "Software for Quality Management" training course
- Controlled Quality in Health and Social Care Sphere Congress
- seminar ISO 22000:2005 on food safety
- publication: "Good Manufacturing and Hygienic Practice – HACCP – Manual for Boarding Services"
- publication: "Handbook for Workers Responsible for Conformity Assessment of the Construction Products".

Beside the above-mentioned goals we can divide the main tasks of the National Quality Policy into the following three areas of interest:

a. protection of public interests[2] – to optimise legislation and associated activities including the work of inspection and surveillance bodies;
b. support of entrepreneurs/companies - to create conditions for the development and support of all activities aimed at business success, improvement of domestic product quality, improvement of the position of Czech products on world markets and increasing the citizens' trust in domestic producers (service providers) and their products;

Concerning this point there is also an area for the indirect influencing, which includes e.g. support of projects of nation-wide importance, support of entrepreneurial subjects in implementing permanent quality management improvement programs (systems of quality and environmental management according to standards ISO 9000, ISO 14000, integrated

[2] Under public interest we understand, for purposes of this paper, safety of products, production processes and services with respect to health, protection of persons and property from being endangered by defective or dangerous products and processes, safety of building structures, environmental protection, customer protection and assurance of high quality of means financed from public sources. This also includes protection against undesirable activities of entrepreneurial subjects and surveillance and inspection activities.

management (IS0 9000 + 140000 + safety and health protection at work – British standard BS 6079-1996), HACCP (Hazard Analysis Critical Control Point[3]), EMAS (Environmental Management Assurance System), implementation of the European TQM model leading to Business Excellence[4], the program of the Czech Republic National Quality Award (see further in the text), product and service quality verification and labelling systems, verification and labelling of environmentally friendly products, European Quality Award for small and medium enterprises etc.

The certification of quality systems according to ČSN EN ISO 9000 standards found understanding in the entrepreneurial sphere in the Czech Republic; about 8000 organisations as well as enterprises have been certified up to now (year 2006). As a point of interest, the number of ISO certificate holders in this country has risen fivefold over the past seven years. The certification is a partial advantage and/or a necessity while gaining public and private orders. Apart from ISO 9000, there is a growing interest in ISO 14000 certification (Environmental Quality Management).

ISO certification can also be financed through the European Union's Phare 2003 – Technology Program. So far, Czech enterprises have drawn about 18 million euros (540 million CZK) from the program, which is arranged by the state agency CzechInvest. Money from this program can be used for implementation of new technologies, acquiring know-how, or for getting ISO certificates. Up to the year 2006 Czech enterprises have drawn money for 85 such projects.

Another example is from the public – private – partnership sphere. In the year 2006 CSOB (Česká obchodní banka – the Czech Commerce Bank) in cooperation with The **Economic Chamber of the Czech Republic** has launched special loan programme to support and help small firms employing less than 39 people with obtaining ISO certification.

When we discuss the promotion of domestic products quality, there are several points to be mentioned:

1) marketing promotion of Czech food products – The National Quality Mark KLASA (in the frame of the Czech National Domestic Food Promotion Programme), which is awarded for three years since the year 2003; and the quality is regularly assessed and monitored by the Czech Agriculture and Food Inspection Authority;
2) Programme "the Czech Quality" (since the year 2002) which aim is to create a unified system of credible marks objectively assessed by the independent organisation (accredited testing laboratories). Holders of the mark can use the logo "Czech Quality" on their products. Up to the year 2006 there are about 2500 products (along with services) on the Czech market – e.g. footwear, furniture, gas equipment along with marks for chosen products of the retail chain TESCO or the chain Metro.
3) the support of the mark "Ecologically Saving Product" (EŠV – "ekologicky šetrný výrobek").
4) Czech Republic National Quality Award (examples of the award holders are: T-Mobile Czech Republic a.s., Eurest, a.s., Gity holding, IBM Czech Republic, Třinecké železárny, a.s.)

[3] see the Act No. 110/1997 Sb., on food and tobacco products
[4] EFQM (European Foundation of Quality Management) Business Excellence

6. others: - to support continuous development of standardisation, metrology and testing primarily in relation to the protection of public interests; to ensure the development of public service quality (health care, transport etc.); to support the quality of the environment; to support upbringing and education at schools, lifelong education, employee re-qualification according to market needs as well as employee education, training and re-qualification as well as to ensure the state quality verification system managed and coordinated by the Ministry of Defence in connection with NATO defence structures.

National Quality Policy Program contains also actions for motivation of entrepreneurial subjects - especially attitudes of top managers - to implement programs for permanent improvement of management and product quality.

Another task is to create a unified system of quality assurance of public orders and to support the use of the CAF (Common Assessment Frame) in public sector for the quality management self assessment and organizational improvement.

Except for the above-mentioned authority - Quality Council of the Czech Republic – there is another important subject bringing quality issues into practice - Czech Society for Quality (CSQ or ČSJ). The CSQ was the first nongovernmental body established in the year 1989 to promote the importance of quality and it is not a mistake to say that its position in the National Quality Policy is irreplaceable.

There is not enough space to introduce all activities of this organisation, therefore we mention just some of them. For instance, CSQ cooperates very closely with the Association for the Czech Republic Quality Award to realise the program of the Czech Republic National Quality Award. Presently CSQ participates in the European Quality Award program for small and medium enterprises, which started at the end of 1996 and offers entirely non-discriminative access to Czech organisations.

The Czech Society for Quality is also a member of the Czech Association of Management Education and Training Institutes Network. In 1995 CSQ has obtained, as the only organization in the Czech Republic, an Accreditation Certificate of the European Organization for Quality and it is accredited to certify workers active in the area of quality assurance of production enterprises, laboratories and organisations of the administration in several areas:

- Quality Manager
- HACCP Manager
- Metrology Manager
- Environmental Management System Manager
- Quality Professional
- Quality Technician
- TQM Leader
- VDA Auditor etc.

CSQ Consulting Centre also offers consultations in the following areas, e.g.:

- development of quality systems according to standards of the family ČSN EN ISO 9000 in production and services;

- implementation of quality systems according to requirements of VDA, QS 9000, HACCP and APQP;
- optimisation of costs of processes and systems;
- measuring and improving productivity;
- implementation of statistical quality control methods and for solving specific problems of application of statistical methods;
- the application of FORD's methods of process improvement.

CSQ cooperates with the world leading organisations in quality matters: European Foundation for Quality Management, European Organization for Quality, Global Benchmarking Network, American Society for Quality and Institute of Quality Assurance.

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4 CZECH RETAIL AND ITS DEVELOPMENT

4.1 Retail development

Retail in the Czech Republic, as well as in majority of the Central and Eastern European (CEE) states has been developing incredibly dynamically since 1989. During one decade the market with a continually sub marginal offer with explicit supplier's dominance has been transformed into the market with prevalence of offer, predominance of business firms and increasing customer's influence.

Mainly multinational supply companies established new, more efficient and modern distribution channels. They were the initiators of this sweeping transformation. While in 1990 there were 0.3 m^2 of retail floor space per inhabitant, the number in 1999 increased up to 0.9 m^2 (Czech Statistics Office: Retail census). In the sphere of quick turnover goods, the market proportion of hypermarkets, supermarkets and discount stores is comparable to the Western European countries.

In this context it is necessary to highlight that business concentration and internationalization as well as their growth had a key impact not only on the entire branch, but they influenced the whole country's economy as well. The pressure that retailers put on the suppliers was indirectly spread into the entire business sphere, which finally resulted in productivity increase and general competitiveness of many companies.

4.2 Retail & Hypermarkets

According to Z. Skála from Incoma Research company (Skála, 2006), the Czech retail market went through 3 phases of change. The first one lasted from the privatization of state-owned shops until the mid 1990s and represented the coming of new companies to the market and retreating of independent trade simultaneously. Except for the company Lidl, all of the current biggest actors came to the Czech Republic during these years. Discount type of shops developed in those times above all. The level of competitiveness was moderate.

The second phase started with the expansion of hypermarkets. The first hypermarket was opened in the Czech Republic only in 1997 and their number increased to more than 100 in five years. The vast majority appeared within the period between 1999 and 2001. No European country has experienced as rapid boom in hypermarkets as the Czech Republic.

Nevertheless, even this short period was long enough for hypermarkets to become the most preferred retail format for Czech customers. At the beginning of the 90s most Czech households did their grocery shopping in smaller self-service stores. Then supermarkets took over the leading role, but not for a long time. At the end of 2001, hypermarkets have overtaken the lead – they were preferred by 29% of Czech households.

The third phase began with the new decade and continues up to date. Hypermarkets gained control over one third of the market of quick turnover goods. However, their expansion was not on account of independent shop keepers and cooperatives anymore. It was the supermarkets and smaller self-service stores that lost some customers (decline to 26% and 20% respectively), while discount stores (oriented mainly to price sensitive shoppers) have kept on increasing slightly – they are preferred by 18% of households.

The increase of hypermarkets' share has stopped. Large retail chains in the process of increasing their market position escalated the competition by building more new outlets. In some cities the supply has already outgrown the real consumer spending potential of its area

(e.g. Opava, Karlovy Vary, Hradec Králové – see table below), which negatively affected the stores´ turnover results. The probability that some of the newly built shops will have to be closed down due to their bad economic results is growing. Julius Meinl, Edeka, Carrefour, Droxi or Delvita are retail chains that had to sell all their outlets and left the Czech market. They were probably not the last ones.

Table 14: Cities with the highest shopping center space per 1,000 inhabitants

Western Europe *		**Eastern Europe**	
Leonding (Austria)	1,558 m2	Ljubljana (Slovenia)	1,667 m2
Sankt Pölten (Austria)	1,444 m2	Karlovy Vary (Czech Republic)	1,343 m2
Wiener Neustadt (Austria)	1,406 m2	Hradec Kralove (Czech Republic)	1,040 m2
Stockholm (Sweden)	1,165 m2	Plzen (Czech Republic)	922 m2
Geneva (Switzerland)	891 m2	Olomouc (Czech Republic)	899 m2

*) exept for France and Germany

Source: GFK, GfK GeoMarketing publishes European Retail Location Guide, 2007.

That is also a proof of the market consolidation. The share of the top-five retailers in the Czech Republic is 45%, which is significantly less compared to the majority of Western European countries (e.g., in Austria the share of the top-five retailers is 73%) (PwC, 2006). This shows the potential future evolution of the market.

What was the reason for such extreme hypermarket boom after the year 2000? Hypermarkets have rated higher than most other types of stores in most key parameters such as price, product range and offer quality. The popularity of large retail centres and hypermarkets stems from the fact that most Czech household enjoy the possibility of doing their entire shopping "under one roof". It also goes along with the Czech consumer's increased mobility: three-fifths of Czech households have become accustomed to regular use of their car when shopping.

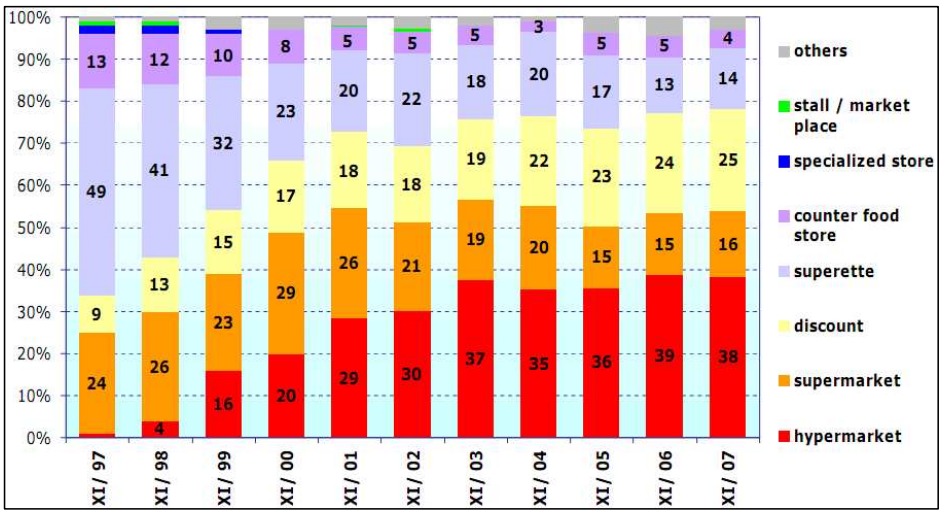
Today's retail market does much more than offer goods for a price – it also offers a kind of shopping experience. Increasing numbers of customers consider the value of their time as well as the price of goods when shopping. They want to spend the time pleasantly and efficiently.

Data also show that Czech customers are more and more demanding. Their satisfaction with shopping conditions is relatively high, however, in the last year we can observe a growing criticism. Besides the traditionally important factor of price, goods quality, product range or store accessibility, speed of service or availability of parking facilities are of growing importance.

"Customer survey has shown a high satisfaction of shoppers with Globus, which is perceived as the chain with the widest assortment range and the highest quality and freshness of goods. Kaufland has the best price perception. Customers of Globus and Interspar are the most satisfied with the quality of shopping environment." (GfK, 2008)

The customers´ claims had its impact on the discussions about the opening hours of shops. Pressure from labour unions and certain political parties led to proposal of the law limiting opening hours (generally speaking from 6:00am to 10:00pm). The law was not accepted in the end. Opinion polls carried out in the Czech Republic have shown that Czech consumers as well as small entrepreneurs are against any restriction of opening hours in large stores (GfK, 2005).

Graph No. 3 The main shopping place for food (1997-2007)



Source: Incoma Research and GfK Praha (2007)

4.3 Latest facts about Czech retail

Hypermarkets are preferred shopping places for 38% of Czech shoppers. Preferences for hypermarkets got stable, even though number of hypermarkets is still growing, especially in smaller towns, whereas bigger cities are (over)saturated by now. With 16 new hypermarkets (mainly of smaller concept) built in 2007, there are 231 hypermarkets operating n the Czech Republic in the beginning of 2008. At present, Kaufland operates the biggest number of hypermarkets (84 stores at the beginning of 2008), Hypernova (56) and Tesco (52) follow. (GfK, 2008)

Twenty-four percent of households mention discount shops as their preferred places of shopping. The main attractions of discount shops are the low price levels, the proximity of these shops, goods on sales, the easy access by cars, and the satisfactory capacities of the parking lots. The strengthening of the discount shops' position is happening to the detriment of supermarkets as preferred shopping places. Their popularity declined in the Czech Republic from 20% down to 15%. This kind of shops is currently preferred by fewer customers than small self-service shops and shops selling over the counter. These more traditional shops still remain the main shopping places for 22% of customers (GfK, 2005).

Shopping via the Internet is advancing as well – according to the research of Faktum Invenio, 28% of Czechs aged 15 years and older have personal experience with purchasing via the Internet. Two years ago , in 2006, the share amounted to 16% only. However, only 6% used the Internet to purchase consumer product more than ten times. A few years ago, a typical Internet customer was a university educated young male. Nowadays the customer base includes a much wider age spectrum of Internet customers and an increasing percentage of e-shopping women. However the situation lags the advanced West European countries, mainly due to lower Internet penetration. The most often purchased items are electronics, books, air-tickets, trips, CDs, DVDs, and clothes (Faktum Invenio, 2008).

Concerning the trends, there is a distinct shift of modern shopping complexes to the proximity of city centres. The Tesco's strategy can be example of this. Another apparent trend is the growth of an average size of shopping centres.

In spite of the growing popularity of large centres, there will also be space for smaller stores on the market. Small stores must accurately profile their orientation according to the local market situation, define their target group and pay more attention to their customers – impersonal hypermarkets can hardly compete with smaller stores in this respect.

"The demand side of the Czech retail market is entering the new development stage. Given that 10 years ago the demand trends played in favour of hypermarkets and 3 years ago in favour of discount shops, at present there is a new space opening for the expansion of convenience stores" (Incoma Research, 2007). Many retailers actually work on building of such new formats (e.g. COOP or TESCO, Zabka).

Alternative Trade Channels (independent convenience stores; stalls in shopping centres, shops in gas stations, railway stations or in multiplexes) have chances to succeed. PriceWaterhouse Coopers expects more than 50% of food to be traded here - outside classical retail. This will be a response to population aging, singles, incomplete families, and lack of free time. For traditional multi-member families the Alternative Trade Channels will be the next place to shop after hypermarkets, in which they do their weekly shopping.

4.4 Central and Eastern European shoppers – are they similar?

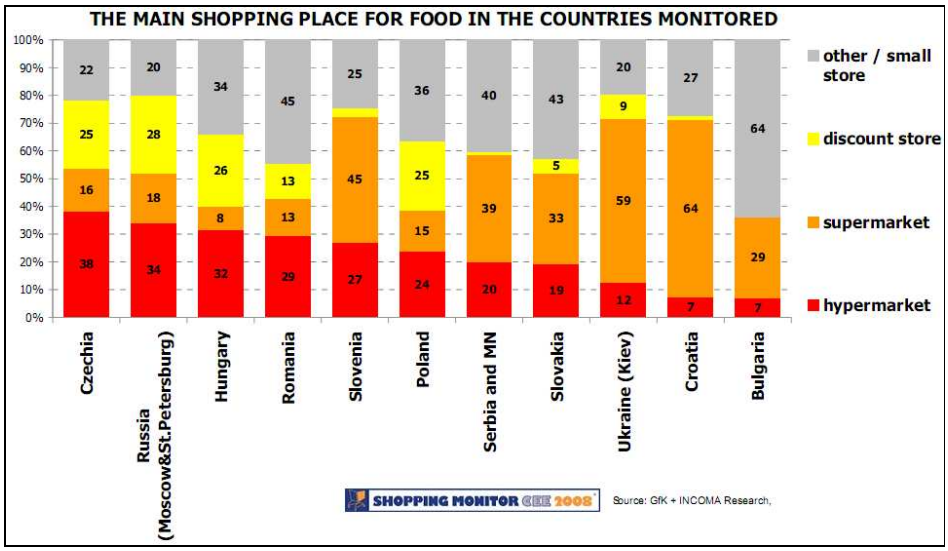
Hypermarket represents a retail format, which has achieved the highest increase of consumer preferences among consumers in countries of the Central European region. According to the GfK study - Shopping Monitor (GFK, 2008), hypermarkets are preferred as the main shopping place among 25 % of customers in the monitored Central and Eastern Europe (CEE) region. In the Czech Republic the penetration of hypermarkets is the highest in the Central European region. There are 16 hypermarkets per million inhabitants in the Czech Republic, compared to 14 in Slovakia, 8 in Hungary and 6 in Poland.

Discount stores are the main shopping place for 18 % of the households; however, their share shows stable growth in a long term and they are slowly replacing supermarkets, still the strongest retail format in the CEE region with its 21 % share.

Despite this general trend, there are still significant differences in shopping preferences of people in particular countries. The most developed retail markets of the Eastern European region are in Hungary, Czech Republic, Poland and Slovakia where hypermarkets stand very strong. In the Czech Republic and in Hungary, approximately 35 % of households prefer hypermarket as the main retail format when shopping for food, on the other hand smaller self-service stores such as superettes are very popular in Poland, Slovakia and Hungary; counter food shops still prevail in Bulgaria. Romania's results indicate the highest dynamics of the retail market transition. (GfK, 2008)

The differences in shopping behaviour have a number of reasons – historical, cultural and economic. This issue is the subject of many researches. Information on one of these can be found at www.gfk.com/lifestyleresearch - it is a research of value orientation and attitude of inhabitants of particular European countries. Its core is a sociological research and the results are useful in strategy making and marketing of trading companies. You can find some useful information in the researches done by GfK. It is generally valid that consumers in Central and Eastern Europe show some interesting similarities and differences with their counterparts in Western Europe:

Graph No. 4 The main shopping place



Source: GfK Praha

The no.1 value across the region *(i.e. Europe)* is protection of the family. Other values such as stable personal relationships, self-reliance, friendship and authenticity are high both in the (three surveyed) Central and Eastern Europe markets and (in the six surveyed) Western Europe markets" (GfK, 2006).

Whereas a minority of 38 per cent of Western Europeans is more interested in material possessions than in personal development, it is almost 46 per cent of Central and Eastern Europeans (GfK, 2005).

"It is often assumed that consumers in Central and Eastern Europe in particular are more prone to price watch. However, at 51% their pure focus on price (i.e. placing price considerations before quality) is scarcely higher than in the west (49%). In fact it is actually lower than in Germany (56%), with one exception – Poland – which ranks highest among all central and Eastern Europe countries (62%). But if we think about the rate at which markets are expanding in central and Eastern Europe this overall lower fixation with price (compared to Germany) is quite important, not to say positive" (Enke, 2005).

Marketing in the retailing often works with "buyers' typologies". Understanding the reasons and wishes of particular buyers´ types is important for the precise aim of services provided by retailing. The mentioned studies in Middle and Eastern Europe found out about this matter that despite all the differences in government systems and traditional structures, closer analysis of the value systems relating to consumption reveals that eight distinct consumer groups of varying lifestyles can be identified, which can also be found in Western Europe. However, whereas, for example, the consumption-oriented "dreamers" group constitutes 8 per cent of the West European population, the proportion in Central and Eastern Europe is one and a half times as many. Whilst the size of the individual groups still varies in both economic areas, the buying preferences and media interests of individual groups in Central and Eastern Europe are similar to those in Western Europe (GfK, 2005).

Another example - the most common shopping type in the monitored CEE region - is the "Thrifty Shopper" who represents more than 8.5 million of households, i.e. 17 % of the monitored population. This type of shopping behaviour is characterized by clear focus on price that is apparent mainly in usage of various special offers and action prices. The representation of the "Thrifty Shopper" differs throughout the monitored CEE region, though. It is the most common shopper type in Romania and Bulgaria where it reaches 29% and 23%, respectively, whereas this type is much scarcely represented in other monitored CEE countries such as Croatia with only 8% share, in Hungary (9%) or in the Czech Republic (11%) (GfK, 2005).

4.5 Appendix - definitions of retail formats

Hypermarket - very large store; a very large self-service store that sells products usually sold in department stores as well as those sold in supermarkets, e.g. clothes, hardware, electrical goods, and food.

Supermarket - big food store; a large self-service retail store selling food and household goods.

Discount store - store selling discounted merchandise; a store that sells merchandise at prices that are reduced from those recommended by the manufacturers.

Cash and carry – inexpensive store; a store selling inexpensive goods that are paid for in cash and taken away by the buyer. Cash and carry type usually means that the seller does not provide any more services than needed.

Sometimes the criterion of floor space is used to distinguish hypermarkets from supermarkets. Hypermarkets are then of the size of 2500 m^2 or more and supermarkets 400 m^2 – 2500 m^2 (Encarta, 2006).

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5 ADVERTISING IN THE CZECH REPUBLIC

The following chapter is concerned with the changes in the field of business marketing during the transformation of Czech economy. The main focus is on the present events. The topics will be the size of advertising industry in the Czech Republic, significance of marketing and marketing research in Czech businesses and special attention will be paid to advertisement and brands.

5.1 Advertising industry in the Czech Republic

A dynamic growth of the advertising market has been an integral part of the economic transformation in new member states of the EU. In fact, advertising is one of the most striking outcomes of this process. In the central planned economies, advertising as well as the expenditures on it had a marginal position. Speaking generally, the situation in advertising was far away from the practice of standard market economies. There were several marketing companies on the Czechoslovakian market only. Lets name the most important ones: Rapid, Merkur, Made in Publicity, Brněnské výstavy a veletrhy.

The companies had its defined market segments and task, so we can hardly speak about competition among them. Rapid promoted domestic products on foreign markets as well as imported products on Czechoslovakian market. Rapid carried out PR activities in abroad, having promoted domestic industries and Czechoslovakia as trademark. Rapid was "vertically integrated" company, i.e. it realised all necessary activities concerning promotion in-house (screenwriting, making of ad-films, design of printed materials, arranging of exhibitions). Another example is Merkur company, which produced hundreds of TV-commercials and posters for domestic market (Tichá).

After the downfall of communism in Central and Eastern Europe, the advertising industry began approaching the situation of traditional market economies. Lots of new-established advertising agencies did not survive the rapid economical transformation at the beginning of the 1990s. The situation became consolidated during the late 90s. One of the reasons for that was the establishing of voluntary professional associations like AČRA M.K (the Association of Czech Advertising Agencies and Marketing Communication in 1992) or APRA (the Association of Public Relations Agencies in 1995).

There are several institutions in the Czech Republic that try to develop and cultivate a new form of marketing, the Internet marketing. A professional association of significant subjects working in the field of Internet advertising – SPIR – is very active. It focuses on an Internet advertising research (projects called NetMonitor and AdMonitoring) and the cultivation of Internet advertising. Together with the Czech Publishers Association (Section of Internet titles publishers) SPIR drew up, for instance, the Ethical Code of Internet Advertising. At present it is working on the standardization of advertising formats on the Internet.

5.2 Advertising spending and its structure

The advertising spending is estimated to approx. 700 mil. Euro in 2007 (19 billion CZK) according to ARBOmedia. The average annual growth was 4 per cent over last 7 years, whereas it was almost 10 (!) per cent in years 1995 to 1999. (ARBOmedia, 2007).

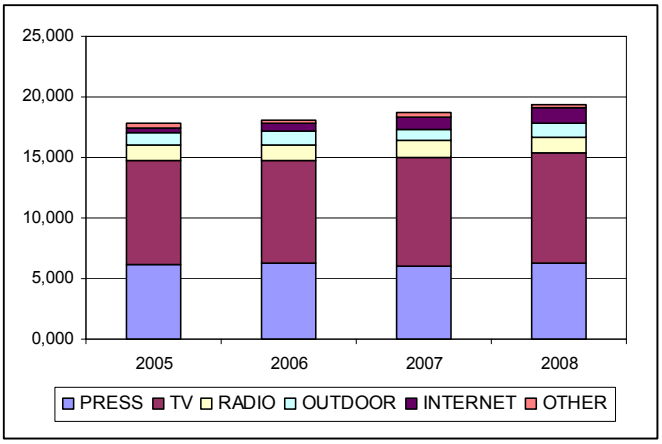
Table No. 15: Descriptive statistics of selected EU countries

	Population[1]	GDP per capita[2]	Advertising spending[3]	Advertising spending as % of GDP[4]	Internet household penetration[5]	Online spending[6]	Internet Advertising spending[7]
Czech Rep.	10,288.9	73.6	769,186	0.65	29	7	22,734
Cyprus	776.0	88.9	89,073	0.54	37	2	n.a.
Estonia	1,339.9	59.8	107,744	0.79	46	n.a.	3,607
Hungary	10,057.9	62.5	1,029,874	0.91	32	7	21,302
Latvia	3,385.7	48.6	129,961	0.81	42	1	7,277
Lithuania	2,280.5	52.1	150,07	0.50	35	2	3,086
Malta	407.7	71.7	n.a.	n.a.	53	n.a.	n.a.
Poland	3,8101.8	49.7	1,862,672	0.55	36	6	32,885
Slovakia	5,391.6	57.1	n.a.	n.a.	27	0	n.a.
Slovenia	2,010.3	81.9	242,656	0.64	54	9	5,484
EU 10	74,040.3	64.6			39		

Note: 1. Data in thousands for the 1st of January 2007. Source: Eurostat (2007)
2. GDP (in PPS per capita) in 2005. EU25=100%. Source: Eurostat (2007).
3. Global advertising expenditure 2006. In $US Thousands. Initiative Innovation (2007).
4. Initiative Innovation (2007) and The World Factbook, Central Intelligence Agency (2007)
5. Percentage of households who have Internet access at home in 2006. Source: Eurostat (2007).
6. The Internet turnover as percentage of the total turnover of enterprises with 10 or more employees in 2006. Source: Eurostat (2007).
7. Global advertising expenditure 2006. In thousands of $. Initiative Innovation (2007).

Television has been the most popular medium for advertising, accounting for 44 per cent of the marketing budgets of predominantly large multinational firms. The second important medium in the Czech Republic is the press (32 per cent). Another form of advertising, which is less popular with advertisers in the Czech Republic, is outdoor advertising (8 per cent of total advertising expenditure) (OMD, 2007).

Graph No. 5 Structure of advertising spending in the Czech Republic



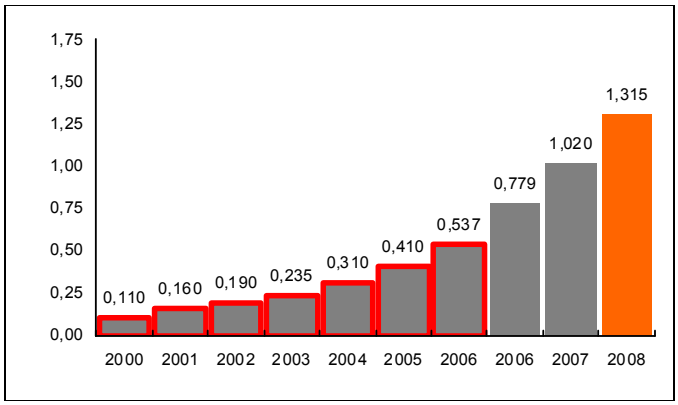
Source: ARBOinteractive, November 2007, in billion of CZK

The share of the Internet ads came to approx. 6 per cent. All companies estimating the spending on the Internet ads agree that this medium grows most quickly due to rapid increase of the Internet penetration among Czech citizens (see the graph below). It is probably connected even with the following fact found out by a research carried out by company Gemius: in the Czech Republic the population still tends to perceive advertising positively

and companies using the Internet advertising are viewed as modern (half the informants think so), technologically advanced and dynamic (approximately a quarter of the respondents) (GEMIUS, 2006). Branches, which use the Internet as a means of advertising most often, are telecommunication as well as financial and automobile companies (Unie vydavatelů, 2005).

In general the biggest submitters of advertisement in the Czech Republic in 2005 are these multinational firms: Procter and Gamble (1,166 mil. CZK), T-Mobile (1,070 mil. CZK), Oskar-Vodafone (918 mil. CZK), Eurotel (862 mil. CZK), Opavia-LU (744 mil CZK), Unilever (695 mil CZK), Volkswagen (651 mil CZK) nad Henkel (625 mil CZK). (TNS- A-Cnect, 2006)

Graph No. 6 Increase of spending on the Internet advertising in the Czech Republic



Source: ARBOinteractive, November 2007, in billion of CZK

Because ad-spending is important cost for companies, there is a question of how effective was such an investment. Companies conduct market research testing the effect of ad-campaigns (acceptability, comprehension, appropriateness). In the Czech environment, this is done by large and multinational companies mainly. Especially domestic firms neglect this issue.

5.3 Marketing spending and market research

The investments into advertisement are only a part of marketing expenditures of companies. According to the survey carried out by Brand Brothers agency in 2002, companies in the Czech Republic spent about 47 billion crowns, roughly 2.1 % of gross national product, on marketing. "Advertising has the highest share of total marketing costs (33.3 %). Direct marketing represents about one fifth of the expenses. Costs of personal selling amounted roughly to 6.9 billion crowns spent on personnel salaries… Out of the total amount of 47.140 billion crowns, promotional activities represent about 43.735 billion crowns, which is 92.8 % of total marketing costs. The remaining 7.3% is spent on salaries of marketing specialists and on market research." (Brand Brothers, 2003). These data is in harmony with calculation made by the head of SIMAR, S.Zahradníček (2006). He compared expenditures on advertising and market research. The proportion is 10:1 in the Czech Republic, which is rather good result in the light of other "post-socialistic" countries like Slovakia (55:1), Croatia (34:1), Rumania 155:1).

Despite quick growth of market research at 10% annual rate, market research in the Czech Republic was and still is behind the western countries. This is indicated by spending in

marketing research per inhabitant: Czech Republic 7,35$ vs. UK 40$, France 36$, Sweden 36$,Germany 27$, Norway 26$, USA 26$. (Zahradníček, 2006)

Majority of clients of market research agencies are (mainly large) domestic companies (80%, the rest are foreign companies). Concerning the subject of research, consumer research dominates with 82% and the rest belong to B2B research. Submitters demand quantitative research primarily (82%), 15% belongs to qualitative research and 3% to desk research (Zahradníček, 2006)

Clients of marketing research – data for the year 2005

Czech Republic		World	
40%	manufacturers	48%	manufacturers
12%	financial institutions and insurance companies	15%	media
		8%	public sector
12%	utilities and telecommunications	5%	utilities and telecommunications
10%	media	5%	retail
6,5%	retail	4%	business to business research
5%	business to business research	4%	financial institutions and insurance companies
3%	public sector		

Source: Zahradníček (2006)

5.4 Marketing in Czech businesses

Marketing "philosophy" has penetrated Czech businesses only gradually. According to Brand Brothers company, most of Czech enterprises (61 %) do not implement marketing concepts or they just leave it up to their sales channels. In 18% of firms, marketing is managed directly by the CEO and in 44% cases marketing is duty of commercial department. 17 % companies are not concerned with marketing at all. (Brand Brothers, 2003)

In 2006, Suchánek (2006) analysed differences between smaller and larger companies. His findings support an idea that smaller companies put less stress on marketing (including market research) than bigger ones. Marketing department or specialized marketing position existed in only minority of smaller firms.

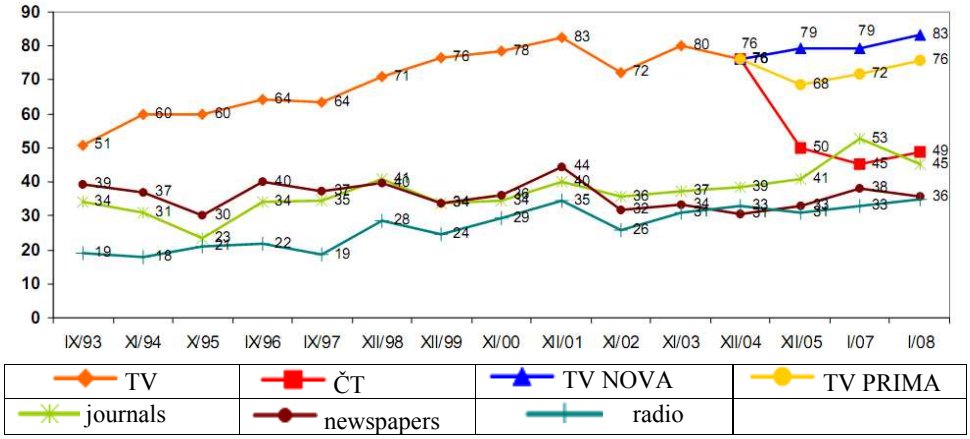
Quite different situation is in large companies – all of them have a marketing department. Most often it is organised as a centralised marketing unit. Confess Research company analysed practise of Top 100 ad submitters and found out the following. Multinational companies operating on Czech market just adopt global ad campaigns to local market. Domestic companies design original campaigns in cooperation with specialised marketing firms. Decision making process concerning marketing activities is done on lover hierarchy position in multinational companies. In Czech companies, marketing is formed or influenced by top-management and by owners. (Šušorová, 2005)

5.5 Consumers' perception of advertising intensity

A different phenomenon is the (over)saturation by ads. This situation has been stable for a longer time, especially in the case of TV: in 2008, approx. 83 per cent of consumers felt to be oversaturated by ads on TV (it was 50 per cent in 1993). The intensity of ads in the radio and in the press was seen to be reasonable by majority of Czech population. Only half of Czech population was able to form an opinion about the intensity of ads on the Internet. However the data shows a clear ascending tendency: in 2008 it was more than 28 per cent of Czech people

who felt to be oversaturated by ads on the Internet. (It was 3 per cent in 1999). Less criticism is monitored in case of ads on point of sales. Actually, 30 per cent of consumers would appreciate more intensive ad-activities there. (Factum Invenio, 2008).

Graph No. 7 Level of over-saturation by ads (in per cents)



Source: Factum Invenio 2008

5.6 Consumers' perception of advertising content

The consolidation of advertising market positively affected attitudes of Czech consumers. Most of them (75-80 per cent in 2004, according to the survey of Factum Invenio company, 2006) see advertising as a natural part of modern lifestyle. However, the relationship of Czech people to advertisements is rather ambivalent. More than 80 per cent of consumers perceive advertisements as a means of manipulation, but only 30 per cent of consumers admit that they were affected by advertising in their shopping decisions. We can assume that advertisement influences people more than they admit. Many of them do not realize this fact and part of the population is not willing to admit it.

The consumers' opinion on the content of ads is also a subject of Factum Invenio surveys. It is not surprising that the expectations toward ads have been stable for several years. The answer to the question what an advertisement should be like is following: truthful (55 per cent of responses), trustworthy (39), witty (34), informative (34), comprehensible (34), not obtrusive (29), attract people's attention toward the product (26), easy to remember (23) and original (20).

According to the survey results, people do not put emphasis on artistic or on linguistic quality of ads. The factor of advertisements' origin (whether it is a national or foreign ad) is not very important either. (Factum Invenio, 2006) Concerning ads for alcoholic drinks, Czech community prefers to limit them instead of a strict ban. Czechs are also traditionally benevolent to ads with erotic incentives.

5.7 Czech consumers and the role of brands

During the period of transformation, utter disintegration of shopping and consumer habits took place. The customers ceased to buy many of their formerly favourite products and they also stopped shopping in their traditional shops. There was a considerable loyalty decrease in

relation to both the shops and many brands. That is why the matter of brands´ meaning is somewhat specific in comparison to other new EU countries.

Table No. 16: Top 10 of trademarks

Position	Czech Top Trademarks according marketing experts [1]	The most successful new Czech trademarks [2]	The most valuable trademarks in world [3]	The most valuable European tm. [4]
1	Škoda Auto	Seznam	Google	Nokia
2	Plzeňský Prazdroj / Pilsner Urquell	PPF	GE	LVMH
3	Budějovický Budvar / Budweiser	Student Agency	Microsoft	Unilever
4	Baťa	Mountfield	Coca-Cola	Telefónica
5	Kofola	AAA Auto	China Mobile	Vodafone
6	Jan Becher	Semtex (energy drink)	IBM	Mercedes-Benz
7	Mattoni	Linet	Apple	Deutsche Telekom
8	Česká pojišťovna	Home Credit	McDonald's	BMW
9	Staropramen	Bernard	Nokia	France Telecom
10	Česká spořitelna	Tescoma	Marlboro	inBEV

1) Source: Top značky v Česku mají hodnotu milliard. HN, 27. 11. 2007.
2) Source: Komunikační skupina Mather. Published in: Nejlépe se ujaly Seznam a PPF. HN, 5. 6. 2008.
3) Source: Millward Brown. Published in: Jedničkou mezi značkami je opět Google. HN, 22. 4. 2008.
4) Source: European Brand Institute. Published in: Nejhodnotnější značka Evropy? Nokia. HN, 19. 9. 2007.

The brand products are preferred by approximately 40 % Czech consumers – most often while buying electronics, beer and wine. Other product categories follow with some distance (perfumery, other alcoholic drinks). The main reason for buying brand products is their higher quality for 85 % of Czechs (Factum Invenio, 2005), despite the fact that approx. 40 % Czech customers have negative experience with brand products.

Generally best-known domestic brands in the Czech Republic are, according to DATAMAR research, Škoda Auto, electrical appliance manufacturer ETA, Pilsner Urquell, Baťa, Tesla, Budweiser Budvar, Tatra, Vitana, OP Prostějov and Orion. From the subjective evaluation point of view (that means the positive relationship to a brand) the following brands have the best positions: Tatranky, Bohemia, Nova, Pilsner Urquell, Tradiční české brambůrky (HN, 26. 3. 2004). The most successful Czech trademarks and their foreign counterparts are presented in a table as follows:

Concerning the trends, we can state that the international brands are strengthening and their popularity grows beyond that of the Czech brands. According to Focus company, the main reason is the lower level of promotion of Czech brands and narrower assortment of Czech producers. Another issue is the success of private labels of retail chains, which is a relatively new phenomenon in the Czech Republic. The attitude of Czechs is rather positive: i.e. more than half of the inhabitants evaluate the quality of these products as comparable to other goods (Moderní obchod, 4/2004). The share of private labels was about 5 % in retail. We can

assume that their importance on the Czech market will grow since the European average is 22 % (HN, 28. 1. 2005).

Graph No. 8: Czech Top Trademarks according marketing experts

Source: Internet presentation of particular firms

If we compare the attitude of Czech customers to brands, lower dependence than in other new EU countries is remarkable. For example company Median confirms this statement with its research in the field of clothing and shoes. About one quarter more Slovaks than Czechs bought brand shoes or clothes (Moderní obchod, 4/2004). The causes need to be searched for in cultural differences among the particular countries.

5.8 Ethics of Advertising

As we mentioned earlier, voluntary professional associations like AČRA M.K or APRA helped to improve the quality of the Czech market environment. A very unique role in this field was played by Rada Pro Reklamu (Czech Advertising Council). It is the Czech advertising self-regulatory organisation founded in 1994, which adjudicates on the ethical complaints from the public regarding advertisements in all media. It is modelled on the UK system of self-regulation. Hence, it has no legal power, but its decisions are accepted by the majority of marketing agencies (Rada pro reklamu, 2004).

Advertising is regulated in the Czech legislation in the same way as any other activity. However, some advertisements are not illegal but break moral or ethics rules. Such incidents endanger the (good) name of advertising and decrease trust of advertising as a service provided to customers. Therefore these incidents are not good for the whole branch. That was the reason for foundation of the self-regulating institution – Czech Advertising Council. This council only says whether the particular ad broke rules of the “Code of Advertising” or not.

The Czech Code of Advertising is practically identical to the Code issued by International Chamber of Commerce. It sets up the rules for professional behaviour and informs about the limits which were voluntarily accepted by the subjects engaged in or using advertising.

The Czech Advertising Council has to solve about 60 – 70 complaints yearly. People in the Czech Republic are mostly bothered by false and misleading advertising, which is a long term trend. From the medium point of view, people complained mostly about TV ads – they accounted for approx. 35 % of the complaints (Rada pro reklamu, 2006). In 2005 the "copy advice and pre-clearing" was introduced by the Czech Advertising Council, which is a consultancy service enabling advertising companies to check their advertisement campaign before it goes public. This prevents many problems.

We can say that the regulation of advertisement, based on self-regulation, works fine according to the results achieved and can be a representative model for other fields of entrepreneurship.

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6 MOBILE COMMERCE IN THE CZECH REPUBLIC

6.1 Introduction

M-commerce has been a frequently discussed issue lately. This expression has arisen with the development of mobile technologies and new payment methods. M-commerce could be defined as a kind of business transaction realized through electronic transmission elements, among which is a mobile terminal (mobile phones, PDAs) often as the first or last component. The following text attempts to describe the situation in m-commerce from the marketing point of view – to point out the research question, which has arisen out this field for marketing.

6.2 Definition of m-commerce

The meaning of m-commerce is inherently connected to the continuous development of mobile networks[5] and e-technologies in general and to the development of electronic payment systems. Mobile network carriers and service providers are part of m-commerce as well; the payments for extra services provided are added to a mobile telephone user's bill, deducted from their calling credit or realized via premium-rate calling numbers or charged SMS.

Another definition (by "Úřad pro veřejné informační systémy"[6]) says that m-commerce is a set of processes connected to realization of business transactions and executed via mobile technologies in real time (on-line). M-commerce is usually treated as a subset of e-commerce.

M-commerce finds use in the area of electronic business B2C (Business to Customer) and B2B (Business to Business). The m-commerce applications:

- Content services (e.g. news, dictionary)
- Messaging – transfer of information (e.g. SMS)
- Remote Access/Mobile Office (access to an intranet of a company)
- Emergency Services (e.g. missing persons)
- Video and audio data – typically via UMTS
- Entertainment – games, lottery, SMS competitions …
- Tailing – shopping, ticketing and reservation services
- Financial Services – banking and broking
- Payments – realization of payment operation via mobile phones
- Navigation – Global positioning system
- Telemetry – automatic data exchange between machines[7]
- Marketing applications - SMS surveys, sending company logos as wallpapers for free, loyalty programs counting points via SMS

Naformátováno: Odrážky a číslování

[5] The idea that highly profitable M-commerce applications would be possible though the broadband mobile telephony provided by 2.5G and 3G cellphone services was one of the main reasons for hundreds of billions of dollars in licensing fees paid by European telecommunications companies for UMTS and other 3G licenses.
[6] http://www.park.cz/article.asp?itm=159
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Apparently the oldest applications of m-commerce were the distribution of logos and ring tones, advertising messages, downloading of games and arranging of prize competitions. Other examples of wide-spread m-commerce applications are information-on-demand systems like news services (sports and entertainment info on the first place) or stock tickers, banking and stock brokerage applications by SMS, WAP or MMS. Shopping and reservation services (e.g. movie tickets, parking tickets, tickets for public transport, etc.) are now more accessible when using mobile devices, as the verification of someone's ID or authorization of reservation is less problematic. The entertainment industry will be able to promote wireless gaming and music. Corporations are also using m-commerce to expand everything from services to marketing and advertisement[8].

Banks and other financial institutions are exploring the use of m-commerce to broaden their business by allowing their customers not only to access account information, e.g. bank balances, stock quotes and financial advice, from anywhere, but also the possibility to make transactions, e.g. purchasing stocks, remitting money, via mobile phones. This service is often referred to as Mobile Banking or M-Banking[9] (Wikipedia). The basic incentive of m-banking is to enable payments for goods and services at anytime and anywhere by means of a mobile. Mobile phones in hands of customers represent an already built-up base of new payment infrastructure, into which it is not needed to invest again. Mobile carriers have roaming deals in most countries worldwide, therefore they can secure payments almost from anywhere in the world.

For the customer the speed of fulfilment of payments is an advantage as well as the comfort of this system, especially in case of micropayments, which mean considerable savings of the transaction costs. Mobile phones are more available than the internet and are movable to any place. In addition, people trust mobile phones more than they trust the internet[10].

As main contributions of m-commerce we can consider customer satisfaction, cost savings, and new business opportunities, particularly when larger screens of mobile devices will stop limiting the complexity of applications.

6.3 Technology bases of mobile commerce

To be able to speak about mobile commerce certain level of technology is needed. M-commerce is currently built on this mobile communications infrastructure: GSM (Global System for Mobile Communications), which represents the 2nd Generation of Mobile communications and its suitability for m-commerce is thwarted by its limited bandwidth of 9.6 Kbps (Kbits/sec). The alternative 2.5th and 3rd generation technologies (HSCSD, UMTS) are also available in many countries nowadays. Particularly the UMTS network supports a wide range of voice, data and multimedia services and thus creates a huge potential for m-commerce applications.

The other condition for successful m-commerce is the high penetration of (relatively) advanced mobile phones…

[8] Although there are currently very few regulations on the use and abuses of mobile commerce, this will change in the next few years. With the increased use of m-commerce comes increased security.
9 The banking license is necessary for realizing of payments, though. Some mobile carriers, that do not want to be only mediators between a customer and a bank, have already applied for a bank license.
10 Cell phone companies are now spending more money to protect their customers and their information from online intrusions and hackers.

6.4 M-commerce in the Czech Republic

6.4.1 Mobile network operators in the Czech Republic

There are three mobile network operators in the Czech Republic. Eurotel Praha, Ltd. was the first operator in the Czech Republic. It is the biggest provider of wireless voice and data services in the Czech Republic. It portrays itself as the technological leader at the Czech market. The company was overtaken by Spanish Telefónica in 2005 and it was rebranded to „Telefónica O2 Czech Republic, Inc."

Paegas – nowadays T-Mobile Czech Republic – was the second GSM provider in the Czech Republic (started in 1996). Oskar was the third operator in the Czech Republic (commercial launch in the year 2000). Majority of its customers came from the consumer market in the beginning. The company is now set to focus on the business segment too. Oskar was overtaken by Vodafone Group Plc. in 2005 and rebranded after its controlling company in the following year.

The offer of Czech mobile operators is built on the base of the following technologies and services: GMS, GPRS, WAP HSCSD, WiFi, MMS, EDGE, UMTS and CDMA 2000.

Table No. 17: Penetration of SIM-cards in the Czech Republic

Provider's name	*GSM*	*3G licence*	*No. of activated SIM cards (2007)*
O2	Yes	Yes	4 890 000
T-Mobile	Yes	Yes	5 140 000
Vodafone	Yes	Yes (not operating yet)	2 530 000

Source: O2, T-Mobile, Vodafone

As for the attitude of the operators to m-commerce, and especially to mobile marketing, Zálešák (2003) schematically divides the mobile network operators in the Czech Republic into two groups. The first group consists of T-Mobile and Vodafone, which take passive-active approach. Both operators use mobile marketing for communication with their own customers and they also facilitate use of these services for third-parties. The second group consists of O2 with its proactive approach, which means that its offer in the area of mobile marketing for its business clientele (including smaller firms) is wider. For example, it is O2 as the only company offering mobile marketing at its internet SMS gate.

U:fon

U:fon is fourth mobile network in the Czech Republic. Its position is a bit special. Its network is full 3G, built on CDMA standard. Therefore is U:fon able to offer only data services, nowadays (5/2008) it provides fast internet connection (the technology allows up to 3,1 Mbps). Of course voice services can be provided in CDMA networks too, but they are limited by the fact, that U:fon cannot offer a mobile handset for this purpose[11] and U:fon's telephony can be done only via devices similar to landline handsets.

The operating on CDMA standard only had for MobilKom (carrier of U:fon) considerable advantage: MobilKom didn't have to apply for UMTS or GSM licence.

[11] Mobile handsets adjusted to U:fon's needs are being tested.

6.4.2 Mobile phones penetration and use of mobile services

A mobile phone is the most popular technology among individuals in the Czech Republic. According to the SIBIS General Population Survey (2003), mobile phone use has been very high in the Czech Republic in comparison to other countries. The number of mobile phone subscriptions per 100 inhabitants was 95 percent[12] in the year 2003. This fact ranked the Czech Republic on the fourth place in the world[13]. In the year 2007 the number of mobile phone subscriptions per 100 inhabitants was 122 per cent. Approximately 11 % of the population does not own a mobile phone (in 2006 it was 14 %)[14]. That means that part of the population uses more than one SIM card – i.e. have more than one telephone number. It should also be noted, that several percent of SIM cards are used for technical purposes (e.g. machinery control) and are not used for telephony.

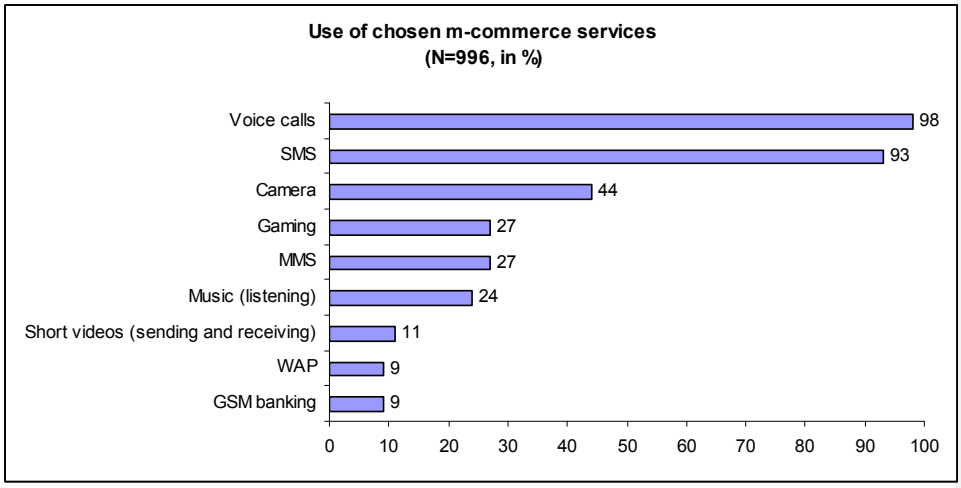
Not surprisingly, mobile phone ownership correlates with age: the younger the age group, the more mobile owners. The youngest group (up to 24 years) uses the mobile phone of all groups the most and it also uses more possibilities it offers. The smallest percentage of mobile users (5 per cent) is in the oldest age group (65 years and more), and the use of advanced mobile phone services is lower[15].

There is also a trend of increasing share of customers on plan. Traditionally, prepaid customers were the larger group. Because customers on plan are usually more profitable, mobile network carriers seek them. For example Vodafone has the largest number of customers on plan and its ARPU[16] is the highest among mobile network carriers.

SMS is a much favoured and frequently used service, directly following phone calls themselves. Number of SMS per one active user in the Czech Republic was the highest in Europe in 2002 – approximately 4.8 to 5 billion of SMS were sent within all three local mobile networks (Zálešák, 2003). Some customers prefer this service because of the price, which is lower than the price of calls. SMS use correlates with age as well. The highest proportion of SMS users is found in the youngest age group. 92% of young mobile owners (aged up to 24) use SMS in contrast to only 30% of the oldest age group[17].

[12] As one person may have more than one subscription, the number of subscriptions can be higher than the population.
[13] Eurostat. *Around 80 mobile subscriptions per 100 inhabitants in the EU25 in 2003*. Eurostat news release, 20/2005, 7 February 2005.
[14] Factum Invenio : ZOČI 5/2008, http://www.factum.cz/tz303.
[15] *SIBIS 2003, Czech Republic, Country Report No.2*. p.20
[16] Average revenue per user. Indicator usually used for comparing mobile network carriers.
[17] *SIBIS 2003, Czech Republic, Country Report No.2*. p.20

Graph No. 9: Use of mobile services



Source: Factum Invenio : ZOČI 5/2008, http://www.factum.cz/tz303.

6.4.3 Mobile commerce

There is only limited information available as to the extent of mobile commerce. According to a survey conducted by the Czech Statistical Office (2005) mobile commerce is used by less then 10 % of mobile phones owners. The survey also shows that GSM banking is the most widely used mobile commerce service.

People using the Internet can be seen as a particular group – pioneers of m-commerce. Mediaresearch agency's research reveals much more frequent use of GSM banking (23.2 %), downloading of logos, melodies, ring tones, etc. (22.4 %) in this group. Frequency of playing games, which reaches 34.1 %, is interesting too. Teenagers are another interesting group from the viewpoint of mobile operators. Approximately 14 % of teenagers who are using mobile phones download games, 25 % download pictures and 37 % download ring tones (Rakowski, Mertin, 2005). Data about this structure is confirmed by the Czech mobile operators as well (e.g. mobile Java games were downloaded about 3 times more in 2005 than in the previous year) (Marketing&Media, 2006). These pieces of information can be generalized to the statement that mobile commerce in the Czech Republic is currently concentrated on less sophisticated activities.

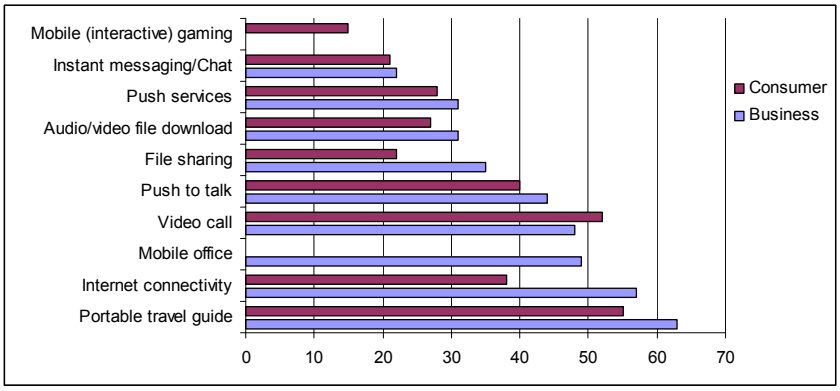
M-commerce revenues of mobile network operators in the Czech Republic will amount to 17 million Euros[18] (according to estimates of experts). As far as mobile marketing as a subset of m-commerce is concerned, Zálešák (2003) estimates its volume based on his computations at around 200 million CZK in 2003. Mobile marketing in the Czech Republic is mainly used by well-established companies such as Unilever, Kenvelo, Vogel Burda Communications, Škoda-Auto or Pirelli (Zálešák, 2003).

Concerning the expectations in the field of m-commerce, they are mainly connected with the development of 3G networks and technologies. Roland Berger Market Research (End-User Survey Czech Republic, 2005) indicated that Czech users put the biggest expectations in the

 Computerworld.cz. Mobilní obsah: Dobrá příležitost si vydělat 26.07.2005

service of the Portable travel guide, which will be improved fundamentally due to 3G networks. Another service – video calls – seems to have high potential as well, because it brings new emotional factor into the electronic communication. The research also shows that Czech users expect rather low prices for these services, which is a very optimistic expectation...

Graph No. 10: Which services do Czech people expect from mobile phones? (Answers in per cents)



Source: Roland Berger Market Research (End-User Survey Czech Republic, 2005)

6.4.4 Mobile gaming

Users in the Czech Republic downloaded approximately 50 000 copies of games per month, and paid about 1.4 million Euro for them [19]. Number of mobile games players is increasing as the penetration of suitable devices is rising too. As stated before, mobile games are being downloaded most frequently by users 13 through 19 years of age. This very age group – young mobile phones users – is then actually playing the (installed and downloaded) games. Zdražil (2006) shows that, according to the March Vodafone company survey, mobile games were played by about one half of Czech customers between 15 and 24 years of age. 65 % of regular "daily players" are women. But men are still more interesting from the meriting point of view as they download the games (download of one copy of a game is worth of 1 – 3 Euros), where as women are often satisfied with games that are distributed with their mobile phones. The most popular games are downloaded by up to 15 000 Czechs per month. "We are witnessing a trend of our customers rather purchasing more costly games of higher quality," spokeswoman for O2 company has said (Marketing and Media, 26.4.2005).

Mobile banking

All the three operators offer GSM Banking. Apart from that, T-Mobile has come with "m-payment" service, which is so far the only working system of payment through mobile phones, still limited, however, compared to the possibilities. Prepaid and postpaid customers can use this service when purchasing goods at only a handful of Internet shops. The advantage of this service lies mainly in the area of security, so needed in the Internet environment. There is not much public information about these activities available now.

[19] Computerworld.cz. *Mobilní obsah: Dobrá příležitost si vydělat* 26.07.2005

The three Czech operators together with the five biggest banks founded the Association for mobile payments. Its goal is to stimulate the use of mobile technologies for financial services at the Czech market. Creating standards for mobile payments should be the mean of reaching this goal. However, activity and effort of this association is rather low so far.

6.4.5 Mobile marketing

Mobile marketing are marketing activities, which are realized via mobile technologies, usually using services like SMS, MMS, and WAP or of 3G networks. Considerable volume of m-marketing is still done via SMS. This form can be divided into four categories:

1. Sponsored SMS – user is allowed to send SMS for free (usually from a web page) but has to accept adding of advertising text. Recipient is not able to avoid such an advertisement.
2. Common SMS – whole SMS carries advertisement text. Usually is used by network carriers, but more and more businesses build databases of mobile phones numbers for these purposes.
3. Paid reception of advertising SMS – not common, but growing instrument. User signs up to receive ad SMS and is paid for every received SMS. Businesses can gather data about their customers this way. In the Czech Republic Vodafone carries this service.
4. Premium rate SMS – used by SMS contests, voting etc., can be used for example for sales support.

Other forms of mobile marketing are WAP and Java games (to familiarize customer with brand, ...), WAP or web pages, wallpapers, ringtones or videos (with corporate themes, ...). Some of these can of course use MMS not only as the mean of transition to target group, but as marketing message itself.

Specific and advanced forms of m-marketing are also:

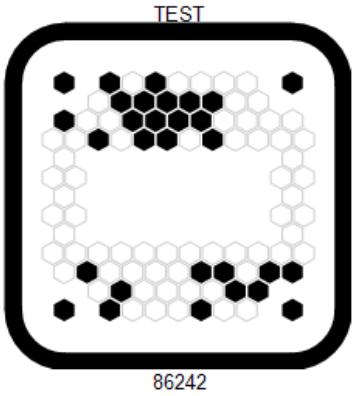
Bluecasting or cell casting

Both of these are based on messages sent to a mobile device depending upon its position. That means that in case a mobile phone has enabled the option to receive such messages and gets into range of broadcasting device, the message is delivered. Typically it is used by businesses in proximity of their premises (delivery of vouchers, information about sales) or by marketing agencies in proximity of banners, posters, billboards or similar displays (delivery of mobile games etc., displays usually carry, next to main theme, a call to switch on Bluetooth). Bluecasting uses Bluetooth connection and cell casting usually push SMS messages.

Mobile tagging

Mobile tagging affords the possibility to immediately access information about specific product. Such a product has to bear a tagg, which can be scanned by a mobile phone. Scanning is done via phone's camera and software provided by operator of the system. This software should recognise the tagg, decipher information about web (or wap) site with information about desired product and connect the phone to this site.

Graph No. 11: Example of 2D tagg (BeeTagg System)



Source: BeeTagg System, http://www.beetagg.com/en/default.aspx

The variety of possible applications is wide. These are for example on business cards, in newspapers, manuals, on leaflets, products etc.

6.5 Internet and e-commerce

Because m-commerce belongs to the group of e-business, let us have a look, how the things are in this field in the Czech Republic.

Nearly 30% of Czech households were equipped with a personal computer in 2005 (Czech Statistical Office, 2005). The Internet penetration grows steadily in the Czech Republic. Nowadays (2007), the Internet is used by 36 % of adult population in the Czech Republic. That is almost twice the number of Internet users in 2000. The Czech Republic thus clearly outmatched other countries of central European region, e.g. Bulgaria (16 %), Hungary (22 %) or Poland (32 %). But it still does not reach the levels of penetration in Estonia (51 %) or Slovenia (56 %). Most dynamic advancement can be seen with older people (GfK, 2005), despite the fact that Internet use still remains the domain of younger people. Only 29 % of Czech citizens have Internet connection at home (25 % in 2005)[20].

Eurostat's survey points out that Czechs use electronic mail, download music and play computer games less frequently in comparison with a hypothetical average European. The share of people who use Internet banking is also very low.

According to the Data Support research carried out by company GfK Praha at the end of 2006, most day-to-day users use the Internet to send e-mails (66% use it daily or almost daily), as well as to watch news (38%), look for personal information (30%), information about jobs (28%), information about goods and services (20%), and to chat (19%) (GfK, 2007).

In comparison with households, the level of Internet access with enterprises is significantly better and in principle it does not differ from the average of the other EU countries. The 2006 data show that 95% of enterprises in the Czech Republic have Internet access while the average figure in EU15 reaches 94%. As far as the number of enterprises that sell or purchase on-line is concerned, there are fewer by half of them in Poland and the Czech Republic than

[20] *Čtvrtina obyvatel ČR má doma připojení k internetu*. Factum Invenio. Published on 18.1.2005. URL: www.factum.cz/

in EU15 (where 16% of enterprises received orders on-line in 2005 and 6% sold their goods or services through the Internet – in both cases it concerns enterprises with more than 10 employees).

In 2005 Eurostat was watching the number of enterprises with their own web pages. It is one of the few indicators within the IT field where the Czech Republic is above the average of the old EU member states. It is indirect evidence that the sphere of web presentations is relatively developed here and enterprises understand them as an important marketing tool. A third of enterprises present their web pages in some of the world languages, which is related to the openness and freedom of the Czech economy as well as to the export orientation of many Czech companies.

There are several institutions in the Czech Republic that try to develop and cultivate Internet marketing in the Czech Republic. A professional association of significant subjects working in the field of Internet advertising – SPIR – is very active. It focuses on an Internet advertising research (projects called NetMonitor and AdMonitoring) and the cultivation of Internet advertising. Together with the Czech Publishers Association (Section of Internet titles publishers) SPIR drew up, for instance, the Ethical Code of Internet Advertising. At present it is working on the standardization of advertising formats on the Internet.

Another interesting activity comprises a contest of web-pages quality called WebTop100 which already has a 6-year history. Its director Jakub Ditrich states on the grounds of his observations that the quality of web presentations has risen significantly from the perspective of technological processing as well as because enterprises offer to send newsletters more often and they expand their media sections. On the other hand, the weak point seems to be in smaller creativity of web pages, the use of components from the sphere of press publicity, or long texts. Moreover, it is not often obvious from the contents of presentations what marketing strategy has been chosen – what the objectives or target groups are (Amborz, 2006). It should be noted that representative researches on this topic have not been carried out in the Czech Republic, and therefore the information comes only from experts' opinions.

E-commerce involves only a part of the population of Internet users. The current stage of e-commerce development in the Czech Republic is based on historically low level of the mail order market during the past 40 years, in comparison to the rest of Europe. This market, which is similar to the B2C commerce, has no tradition in the Czech Republic[21].

Almost 3 million Czech customers made a purchase over the Internet in 2005. Overall numbers show that about 85 % of Czech Internet population have already experienced purchasing goods and services through the Internet. Online shopping is attractive to younger age groups up to 29 years (in comparison to older age groups). Most online purchases in 2005 involved books, magazines, computers, electronics and toys. The most favoured online service was "photo-services" and online purchase of tickets for cinemas, theatres and also booking of trips, travels and accommodation (GfK, 2007). Due to the permanent pressure of banks, most banking operations and current account payment orders have been transferred to online banking[22].

[21] *SIBIS 2003, Czech Republic, Country Report No.2*. p.34.
[22] SIBIS 2003, Czech Republic, Country Report No.2. p.45.

Online spending and its growth over previous year in the Czech Republic

	2000	2001		2002		2003		2004		2005		2006	
Czech Republic (in mil. of CZK)1)	125	240	*92,0%*	320	*33,3%*	425	*32,8%*	760	*78,8%*	1010	*32,9%*	2028	*100,8%*

1) Data for 2000 to 2005 cover banner ads only. Data for 2006 takes all kinds of inline ads into account.

Source: SVIT

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7 ENVIRONMENTAL MANAGEMENT

Environmental management is the systematic approach to the environment protection in all aspects of a business. The environmental management is the intentional activity that influences the processes and the products that can or could have the impact on the environment. It is good to realize that the business activities have the significant ecological impacts because the materials, water and energy are consumed in a production process. The another result of the production is a large quantity of the waste. The transport is another example of a harmfull activity. The environmental management targets these aspects of a business with a goal to reduce the negative environmental impacts.

Before the velvet revolution, in the Czech Republic, there weren´t any tendency of the environmental protection. After 1989, the majority of the companies only observed the laws concerning the environment but they did not anything in addition to that. The company motivation to do something for the nature was missing. The situation has changed in the middle of the 90´s. The consciousness of the firms became higher and they have begun to implement the ecological activities to their strategies.

Globally, the concern about the ecological topics is still growing and the people (the consumers) want more informations about the possibilities how to help to protect the environment. The consumers became more conscious of the environmental problems. Their demands for the products are ever higher in many areas, among others in the ecological area. The companies had to conform to this trend.

The ecological consciousness of the companies belongs to the concept of **Corporate Social Responsibility (CSR)**.

Earlier the firms were focused just on the profit and they did not take account another aspects of a business. But over time, they found out that it is necessary to respect another matters of their activity. At this time, the products are very similar in a quality and the another parameters so the companies have to search for a new ways how to diversify their own production from the competitor´s products. It causes that the companies always focus especially on a profit, but they begin to respect the social, ecological and the other aspects of a business.

The researches show that the consumers perceive the activities that are done by the companies for the commonwealth. The consumers react on that, e.g. they are able to freeze out the companies which use the child labour, are not friendly to the environment etc.

Corporate Social Responsibility is a voluntary undertaking of the firm to act in terms of their enterprise responsibly to the environment and the society.

The common feature of CSR activities is that the company does more than it is its legal obligation. These firms improve the corporate environment, it improves their image in the eye of all stakeholders, the firms are perceived more positively.

The concept CSR includes **three aspects:**

Profit – economical responsibility.

In the concept of CSR, the profit is intended as an endeavour of a long-term prosperity. It can influence positively an impact on the development of an unemployment and other aspects in the region.

Planet – environmental responsibility.

The companies take into account the protection and sustainability of the environment quality. This endeavour can be expressed by variety of the instruments. Some instruments relate to specific product (Environmentally Friendly Product, Self-declared environmental claim). Another instruments make for the environmental recovery of the whole company (ISO 14000 or EMAS, Best Available Techniques, Cleaner Production etc.)

People – social responsibility.

CSR presents so-called Tripple bottom line business, it expresses that today´s companies should take into account not only profit but also the social and environmental aspects.

How much does Environmental management cost?

It stands to reason that the introduction of some environmental instrument into the company requires the resources. The amount of these resources varies depending up the company size, form and extent of the environmental remedy etc.

Financial means. Primarily the company has to take into account the spending on the introduction and on the operation of environmental management activity. The amount of money depends on company size, kind of activity and on the investment amount that is necessary to do in a given enterprise. Further, it depends on the rate of support from the external specialized companies too. The firms can use a state assistance (programmes supporting some company environmental activity).

Human resources. Some employees have to be devoted to take for the operation of the environmental system.

The introduction and the operation of environmental management takes a time too.

7.1 Arguments for implementation of Environmental management

Why do the firms implement the environmental aspects to their strategy? Why do they want to protect the environment? Is it caused by their real consciousness, do they really worry about the nature and its protection? Or is it just the occasion how to gain some more resources and the interest of the new customers?

It is an evident fact that the companies do only the activities that are profitable for them. The environmental activities are not the exception. The firms are obliged to observe the laws and limits concerning environment. Managers of the Czech firms suppose that the Czech legislature is very severe in this area compared the European Union countries. Moreover, the companies can implement some form of the voluntary environmental instrument and there is an increasing number of the companies in the Czech Republic that do it. They do it because it brings them some advantages.

1. There are some **financial benefits** resulted from the implementation of some environmental instrument. The most significant benefits are the cost economies as a result of the energy, water and raw materials conservation. If the firm implies some environmental proceeding, it can cause the reduction of materials, energy and water consumption. Further, the firms that have implemented an environmental measure can gain the tax allowances. Moreover, the process of gaining the bank credit is a little bit easier for the firms that included Environmental management system.

2. The implementation of Environmental management is **a marketing opportunity**. The declaration of some environmental activity can have a positive impact on a relationship with the customers (e.g.a number of consumers searching for ecologically friendlier product alternatives are rising).
3. The company can **improve the relations** with the corporates that are their business partners. The companies prefer to deal with the enterprises whose production is regardful of the environment.

Generally, the implementation of the Environmental management instrument became an occasion how to push up the competitive advantage of a firm. It can give rise to the entrance on the new markets, new regions etc. It leads to the improvement of the image, improvement in the relations with a public, state institutions and the ecological groups. All these relations are very important for the enterprise in this time.

7.2 The chosen forms of Environmental management

7.2.1 ECOLABELLING

Eco-labelling is a term used for products and services, which are friendlier to the environment and the health of the consumers during their entire life cycle. These products are not totally harmless to the environment but their impact on it is lower than the impact of the competitive products. The quality of labelled products has to remain comparable with the competitor´s production.

Ecolabelling is a voluntary method of environmental performance certification and it is practised all around the world.

The idea of labelling the products that are friendlier to the environment appeared in the seventies. It was induced by the raising consumer´s concern about the environmental protection. The very first ecolabelling programme - Blue Angel - was developed in Germany in 1978. The programme was succesful and it led to the expansion of this system to another countries – Canada, Japan, USA, Scandinavian countries, New Zealand and the others.

Ecological products and services are always marked with a logo, which serves as an realiable and understandable information for the customers. The marked products or services were subjected to completed environmental evaluation by an independent third party. The label is a state guarantee of the fact that the negative environmental impacts and the impacts on a consumer´s health were minimised. The impacts of labelled product are less harmfull in comparison with the competitor´s unlabelled production.

The product that should be labelled has to conform to the requirements for awarding that are laid down in Directives for individual, precisely defined product categories. The product has to meet basic and specific requirements. The basic demands verify the functional product properties so the product should be comparable with the competitive production. Specific requirements relate to the environmental evaluation, that differentiates the product from the ordinary production. It relates to the savings in raw materials, water and energy, limitations of emissions or waste etc. The specific requirements are set so that about 30 % of the production in a given category could conform to these demands.

In a world, there exist The National Programmes and The International Programmes of Ecolabelling. In The Czech Republic, there are two following trademarks concerning the ecological impact of a product.

1. „**Environmentally Friendly Product**“ that refers to the variety of the product categories.

2. **„Bio“** that refers just to the food-stuff which is ecologically cultivated.

The Czech National Programme for Labelling Environmentally Friendly Products was declared in 1994. The system was initiated by the Minister of the Environment that is also the guarantee of this programme.

The label informs the consumers that the product minimizes the ecological impact and the impact on a consumer´s health. This fact is guaranteed by the state. The labelled product satisfies the stricter standards about the environment and the health impacts, than the law requires.

The labelling of Environmentally Friendly Products is one of the indirect instruments of environmental protection policy. The Minister of the Environment approves Directives with lists of requirements according to which individual products are evaluated in the given categories. The enterprise that would like to use the trademark Environmentally Friendly Product, has to meet the requirements that are defined for the particular product categories. The range of categories is very broad – in practice, it can be any products except the food-stuff. The most often labelled products are wash powders, boilers, paints, cleansing articles, paper products etc. What can be lesser-known information, the services can be awarded by the ecolabels too – it applies most often to the accomodation services.

The company that wants to gain this ecolabel, has to pay a single registration fee of 20 000 CZK. In these days, in the Czech Republic, there is about 80 enterprises that use the ecolabel EFP on hundreds of products. The number of the labelled products is still growing.

7.2.1.1 The EU Eco-labelling Programme – The Flower

The Czech producers and service providers are in a position to gain also the ecolabel of European Union – **„The Flower“.** The message of the ecolabel is similar to the Czech National ecolabel – it indicates the product is environmentally friendlier than the products in a same product category.

The reason, why the companies want to gain the European ecolabel is, above all, the raising demand on the part of the consumers. On the other hand the reasons why the producers do not apply for this label are relatively high cost of investments. The entry fee is 9000 CZK and the annual fee depends on the annual sales, it can be from 15000 CZK to 750 000 CZK. The company can get a reduction of these fees, it is possible e.g. for the small and medium

enterprises, for the companies that already have ISO 14000 or EMAS. The another problem of this label is still the lack of the informations.

“The Flower” is often awarded to services, especially to tourist accomodation services and camp site accomodation services. In the Czech Republic, there are just a few companies that gained The Flower till this time. It is good to mention that the majority of these companies provides the services, exactly the tourist and accomodation services. It is possible to see that the Czech companies prefer the National ecolabel for the time being.

In the Czech Republic, there are just two guaranteed ecolabels but it is possible to find many another green symbols on the products. The important difference between ecolabels and the another green symbols is that the ecolabels are awarded by an independent third party, meanwhile the another green symbols are developed and awarded by the manufacturer.

The another aspect of the ecolabelling is that it is good to realize that the national ecolabel is valid especially in a home country. If a labelled product is exported to abroad, it means it has to cover a long distance. This transport causes that the product is not already as ecological as in the domestic country. If there is a possibility to choose among domestic and foreign ecolabelled product, it is always better to take the domestic one.

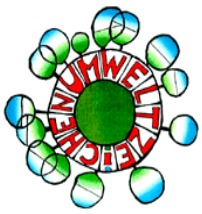
7.2.1.2 The National ecolables in another countries

Blue Angel – the very first eco-label, developed in Germany in 1978.

Slovakia

France

Austria



Spain

Poland

Croatia

European Union – Bio Food-Stuff

USA **Japan** **Australia**

New Zealand **Canada** **Brazilia**

7.2.1.3 Perception of the ecological production

What is the perception of the ecological products in a Czech population?

It is possible definitely say that the run for the ecological products is growing in Europe as well as in the Czech Republic. It is possible to see this tendency especially in the case of Bio food-stuff.

There were done some researches that explored the perception of the ecological products by the consumers in the world. The basic conclusions are following.

The environmental aspect of the product is generally perceived positively, as a contribution of given product. Nevertheless, the consumers evaluate primarily the another product properties, especially price, quality and functionality. The product has to be qualitatively comparable with the competitor´s – non ecological - product. It means the environmental aspect is not the most important attribute for the consumers.

The particular group of consumers evaluates primarily the ecological impact of the product. These people decide for the purchase according as the product or service is environmentally friendly.

The consumers make provision for the environmental contribution rather in the case of the cheaper products. Concerning more expensive goods, the consumer evaluates rather the another product properties and does not consider the ecological impact of that.

Globally, the consumers are willing to pay for the ecological product between 5 % and 20 % more than for non ecological product or service. But it depends a lot on a product category and price.

The consumers most often buy the ecological products only occasionally. One of the reasons for the purchase is that it brings them a good feeling that they do something for a nature.

The problem areas of the ecological purchasing can be following:

The ecological production is often perceived as more expensive than ordinary production. It needs not be true. It depends on a product category and other aspects. There is a lot of ecological products whose price is comparable to non ecological variation. Beyond, it is necessary to admit, there are the categories of ecological products that are really more expensive compared to ordinary variation (in the Czech republic e.g. the Bio food-stuff).

Worse availability (special outlets) and narrow assortment.

The ecological product are often perceived as inferior in some aspects e.g. qualitatively. The consumers are willing to accept the lower level of design or packing. They are not able to accept the lower quality.

7.2.2 ISO 14000

ISO 14000 is an international certificate that codifies the Environmental management system in a company. The standard is one of the most significant international initiatives for sustainable development. It is a voluntary instrument. The organization with implemented ISO 14000 endeavours to minimize all the troublesome effects on the environment. The certificate is focusing on how the companies work, not on the results of the production. In other words, it targets the processes, not the products.

The ISO 14000 is the universal system, it can be applied in the companies of different size and different activity. It does not specify the environmental performance level. ISO 14000 gives only the general requirements for an Environmental management system. The principal philosophy is whatever the organization's activity, whatever their current level of environmental maturity, the requirements of an effective environmental management system are the same.

The ISO 14000 specifies the requirements on environmental management system, that can be objectively audited. The standard refers to such aspects that can be influenced and controlled by a given company.

The ISO 14000 was emited in 1996 by the International Organization for Standardization. The basic idea of the standard is the continual improvement and the observance of the laws. In 2004, the ISO 14000 passed through the revision. In that time, the standard document was created that is significant till this time.

Implementation of the Environmental management system will help the companies to fixate the environmental issues and bring them into the main stream of company decision-making.

The system of ISO 14000 provides a development of the environmental profile of a given company. It improves the attitude towards the environment protection and also the image of a firm.

In 2005, there were about 110 thousands certifications ISO 14000 in a world. It was represented in 138 countries. The biggest percentage share had Europe (43%) and The Far East (42%). The countries with the most certificates were Japan, China, Spain, Italy, Great Britain and USA[23].

In the Czech Republic, it is possible to note the continual growth of ISO 14000 too. Presently, about 44% Czech companies own the standard. Lot of companies thinks of the implementation of this certificate in the near future. The certificate is generally implemented by the companies that already dispose of ISO 9000 (the certificate of quality).

7.2.3 EMAS (Eco-Management and Audit Scheme)

Meanwhile ISO 14000 is the international standard, EMAS is an European standard of the Environmental management system. It is a voluntary instrument that involves the ISO 14000 requirements but yet another demand. In the Czech Republic, the guarantee of EMAS Programme is the Ministry of the Environment.

The basic goals of EMAS are:

- The understanding between the management system in a given company and the requirements of ISO 14000.
- Improvement of the environmental performance and reducing the ecological burden.
- The understanding between EMAS and the environmental legislation
- Regular publication of the environmental declaration

The last item points out that EMAS is an instrument of the external control. The company that implemented EMAS ought to publish regularly the declaration about the environmental performance in a given company. The standard represents a company's active approach to the monitoring, management and gradual decrease of its environmental impact.

In the Czech Republic, the Environmental Management Systems are frequently implemented in accordance with the international ISO 14000 standard. EMAS is represented much less. There is only about thirty companies that gained EMAS in the Czech republic till this time. The standard is owned especially by the big companies in the processing or building industry[24]. The basic difference between ISO 14000 and EMAS is that the company with EMAS ought to notify the declaration of the environmental performance. The ISO 14000 is rather the internal control instrument.

7.2.4 Cleaner Production

Cleaner production is a preventive strategy, it is focused on avoiding the rise of the negative ecological impacts. The concept of Cleaner production does not inquire e.g.: **What to do with the existing waste?** This concept solves the following problem: **How to avoid the origination of the waste?**

Certainly, the principle can be applied to the different areas of the environment protection, not only the waste.

Cleaner production is the application to processes, products, and services to increase overall efficiency, and reduce risks to humans and the environment. The main objective of this

[23] The ISO Survey – 2005, 2006.
[24] CENIA : EMAS Register, 2008.

preventive strategy is to eliminate the causes of environmental impacts from production processes or provided services. The Cleaner production is a concept that came from the part of practice (the industry enterprises), not from the ecological protectionists.

The examples of practical remedies of Cleaner production in a company can be following:

- A change of technology that are more regardful of the environment
- Utilization of the natural materials
- Organisation of work

Cleaner production can be applied universally to processing, business or administrative organisations.

Cleaner production is a "win-win" strategy - it protects the environment, the consumer and the worker and it improves the efficiency, profitability, and competitiveness in a given company. Why is the implementation of Cleaner production profitable for a company? The principle is following (the example):

- The company puts the technology that economizes the energy, water or materials. It results in the lower production energy consumption.
- The energy saving brings the increased production efficiency and the financial savings.
- The competitiveness increased.

Certainly, the implementation of the new technology requires some investments, the firm should do a project of the investment estimation that indicates whether the project is profitable.

The process of implementation of Cleaner production into the company consists of following phases:

- **Monitoring –** datas are collected, e.g. the consumption of energy, materials and water is ascertained. These gained datas are used in a next stage.
- **Targeting** - includes the data analysis. After, the company has to set the targets and preferences. Then the remedies are designed.
- **Implementation** of the approved remedies.

The environmental impacts can be decreased by either investment measures (e.g. change of technology) or non-investment, organisational measures (e.g. organisation of work). The non-investment measure can be very efficient. The most effective is a combination of investment and non-investment innovations.

Cleaner production is universally applicable, preventive strategy which does not solve environmental problems by transferring them from one environmental component to another. The Cleaner production strategy is in full compliance with the concept of sustainable development.

The International Declaration on Cleaner Production is a public document published by the United Nations Environmental Programme (UNEP) in 1997[25]. In the Czech Republic, there is currently above two hundreds companies that have implemented the Cleaner production. It

[25] Cenia : About Cleaner Production, 2007.

was implemented mainly in the concerns of a light and hard industry. The aggregate savings of the implementations are millions CZK.

Interesting facts concerning Cleaner production:

- The companies are still concerned especially on reducing the energy consumption, it is their preference. The reason is that the energy is incresingly expensive and it does relatively big part of the costs in a company.
- The reserves exist in every company. The experts talk about 20 %, it means that each company can reduce the consumption by 20%, even the companies with a modern equipment.

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8 THE CZECH ACCOUNTING SYSTEM AND ITS RELATIONSHIP WITH IAS (IFRS)

Accounting plays an important role in economic and social system of the Czech Republic as well as in the economic system of enterprises. Accounting is often called the "language of business." This language can be viewed as an information system that provides essential information about the financial activities of an entity to various individuals or groups for their use in making informed judgments and decisions. As such, accounting information is composed principally of financial data about business transactions, expressed in terms of money. Accounting provides the techniques for gathering economic data and the language for communicating these data to different individuals and institutions.

Accounting can be divided into two basic systems:

1. Financial accounting,
2. Managerial accounting.

Financial accounting is concerned with the measuring and recording of transactions for a business enterprise or other economic unit and the periodic preparation of various reports from such records. The reports, which may be for general purposes or for a special purpose, provide useful information for managers, owners, creditors, governmental agencies, and the general public[26].

Managerial accounting employs both historical and estimated data, which management uses in conducting daily operations and in planning future operations. For example, in directing day-to-day operations, management relies upon accounting to provide information concerning the amount owed to each creditor, the amount owed by each customer, and the date each amount is due. The treasurer uses these data and other data in the management of cash. Accounting data may be used by top management in determining the selling price of a new product. Production managers, by comparing past performances with planned objectives, can take steps to accelerate favorable trends and reduce those trends that are unfavorable.

8.1 The Czech accounting system

The Czech accounting system is regulated by several juridical laws.

The basic law is a law no. 563/1991 – LAW OF ACCOUNTING that constitutes the obligation to keep accounting files for the Czech enterprises. In the first place the law of accounting defines basic conditions and procedures for keeping of accounting evidence. Some paragraphs of this law are relatively brief and for their practical usage it is necessary to specify them more precisely. This is the reason why the law of accounting is next developed by edict of Ministry of finance no. 500/2002 that constitutes the methods and principles of accounting as well as valuation rules. The edict no. 500/2002 is next developed by so-called Czech accounting standards valid since the beginning of the year 2004, that describe in detail concrete accounting principles for concrete economic transactions. Nowadays the Czech accounting system knows 23 Czech accounting standards regulating the different parts of the object of financial accounting.

These three basic laws regulate directly accounting procedures. But there are a lot of other laws and regulations in the Czech Republic that are connected with accounting indirectly – for example law of income taxes, law of health and social insurance, etc.

[26] WARREN, C.S., FESS, P.E.: *Financial accounting,* p. 15.

8.2 Accounting systems in the Czech Republic

There are two basic "accounting" systems in the Czech Republic:

1. Tax evidence of incomes and expenditures
2. Double-entry accounting

Tax evidence of incomes and expenditures can be used only by natural persons who are not in the trade register and whose turnover does not exceed the amount of 15 mil. CZK per year (turnover means amount of total revenues in accordance with the value-added tax act). The tax evidence is regulated primarily by income taxes act. This is the reason why the tax evidence of incomes and expenditures is not considered as a real accounting system. Accounting in the real form is regulated by the accounting regulation.

Business units defined by the accounting act must obligatorily keep accounting files in accordance with the "double-entry accounting system". Double-entry accounting system means that all economic transactions are charged on two different accounts. The accounting act is applied on the "accounting units" defined by § 1 of the accounting act. In accordance with this regulation, particularly the following units are defined as accounting units in the Czech Republic:

1. Corporations (domestic corporations with the residence in the Czech Republic as well as foreign corporations doing business in the Czech Republic),
2. Natural persons doing business and registered in the trade register[27],
3. Natural persons doing business with turnover exceeding amount 15 million CZK per year (turnover means amount of total revenues (or incomes) per year (with several exceptions) in accordance with the Law no. 235/2004 on Value-Added Tax).
4. Natural persons doing business who keep the accounting voluntarily,
5. Natural persons doing business and associated in an "association without legal subjectivity" under condition that any person associated in the association is an accounting unit[28].
6. Other natural persons doing business whose obligation to keep accounting results from a special legal regulation.

8.3 Financial statements in the Czech Republic

All accounting units keeping double-entry accounting must obligatorily compile three basic financial statements providing basic information about economic and financial situation of the enterprise. These statements are:

1. Balance sheet
2. Profit and loss statement (income statement),
3. Appendix.

[27] The trade register is a list of business units kept by trade courts in the Czech Republic. Obligatorily registered units are corporations and those natural persons who have entered it voluntarily or because of a special legal regulation.

[28] This regulation means that if one member of the association becomes an accounting unit, other persons become accounting units too.

The balance sheet is the most important financial statement compiled in the system of double – entry accounting. It provides information about the structure of assets and equities. The structure of the balance sheet valid in the Czech Republic is as follows:

Assets	**Equities**
1. Fixed assets – intangible assets – tangible assets – long-term financial assets **2. Current assets** – inventories – long – term receivables – short – term receivables – short – term financial assets	**1. Owner's equity** – common stocks – capital funds – funds created from net profit – economic results **2. Liabilities** – reserves – long – term debts (liabilities) – short – term debts (liabilities) – bank credits (loans)
Σ Assets	**Σ Equities**

Assets, liabilities and owner's equity are the basic accounting terms. The properties owned by a business enterprise are referred to as assets and the rights or claims to the properties are referred to as equities. If the assets owned by a business amount to 100 000 CZK, the equities in the assets must also amount to 100 000 CZK. The relationship between the two may be stated in the form of an equation, as follows:

Assets = Equities

Equities may be subdivided into two principal types: the rights of creditors and the rights of owners. The rights of creditors represent debts of the business and are called liabilities. The rights of the owner or owners are called owner's equity. Expansion of the equation to give recognition to the two basic types of equities yields the following, which is known as the accounting equation:

Assets = Liabilities + Owner's Equity

It is customary to place "Liabilities" before "Owner's Equity" in the accounting equation because creditors have preferential rights to the assets. The residual claim of the owner or owners is sometimes given greater emphasis by transposing liabilities to the other side of the equation, yielding:

Assets - Liabilities = Owner's Equity

All business transactions, from the simplest to the most complex, can be stated in terms of the resulting change in the three basic elements of the accounting equation. In all cases, the recording of the effects of transactions on the elements of the accounting equation must be such that the equality of the equation is maintained. For example, if a business organizes as a corporation by selling shares of ownership interests, generally referred to as capital stock, for 50,000 CZK, the asset cash will increase by 50,000 CZK and the owner's equity will increase by 50,000 CZK. The effect of this transaction on the accounting equation is as follows:

Assets	=	Liabilities	+	Owner's Equity
Cash				**Capital Stock**
+ 50 000 CZK				+ 50 000 CZK

The balance sheet does not provide information about other basic accounting categories – costs (expenses) and revenues. These items are included in the profit and loss statement (income statement). Revenues and costs are important, because they directly influence the economic result of the enterprise:

Economic result = Revenues – Costs (Expenses)

The excess of the revenue over the costs incurred in earning the revenue is called **net profit (earnings after taxes)**. If the costs of the enterprise exceed the revenue, the excess is a **net loss**.

The revenue is defined as the result (output) of the economic activity of the enterprise achieved by spending of costs. Revenues give the sense to economic existence of the enterprise. The revenue can influence assets (increasing of assets) or equities (decreasing of equities).

The cost is defined as the input into the economic activity of the enterprise with the aim to achieve revenues (outputs). The cost can influence assets (decreasing of assets) or equities (increasing of equities).

Costs and revenues are charged on special accounts in the system of double-entry accounting system. Systematically they are recorded in the profit and loss statement (income statement) (P/L Statement).

The structure of P/L statement is a little bit more complicated than the structure of the balance sheet. The P/L statement is composed gradually with the aim to calculate several partial indicators which represent single parts of economic activity of the enterprise.

The concrete structure of the P/L statement is as follows:

1. Commercial margin (is calculated as the difference between revenues from sale of merchandise (goods) and costs on this sale),
2. Value added (is calculated as commercial margin + production revenues (revenues from sale of products, changes in the amount of own inventories and so called activation) – production costs (consumption of material and energy and consumption of services),
3. Operating result (is calculated as value added + other operating revenues (for example revenues from sale of long-term property, revenues from sale of material, etc.) – other operating costs (especially wages, depreciation costs and creation of operating reserves),
4. Financial result (is calculated as the difference between financial revenues (revenue interests, revenues from securities sale, dividends, etc.) – financial costs (cost interests, costs on securities sold, financial payments, etc.),
5. Result from common activity (is calculated as operating result + financial result – income tax from common activity),
6. Extraordinary result (is calculated as the difference between extraordinary revenues (for example payments from insurance companies) – extraordinary costs (for example deficits, damages, etc.) – income tax from extraordinary activity),

7. Net result (earnings after taxes) (is calculated as a sum of result from common activity + extraordinary result),
8. Result before taxes (earnings before taxes) (is calculated as net result + income taxes from common and extraordinary activity).

The Appendix (notes) is the third obligatory compiled statement as a part of an accounting shutter in the Czech Republic. It provides complementing information about financial situation of the enterprise including additional information about items in the balance sheet and profit and loss statement. The appendix also provides additional information about the accounting unit (name, seat, management, etc.).

8.4 Basic accounting concepts and principles

The double-entry accounting is based on several basic accounting concepts and principles. The most important principles and concepts are:

1. **Matching concept** – concerns the determination of the economic result (net profit or net loss). The determination of the periodic economic result is a two-step process in double-entry accounting. First, revenues are recognized during the accounting period. Second, the costs of assets consumed in generating the revenues must be matched against the revenues in order to determine the net profit or the net loss. Revenues are recognized and recorded on the accounts according to various criteria. The same situation is in case of expired costs.
2. **Adequate disclosure** – financial statements and their accompanying footnotes or other explanatory materials should contain all of the pertinent data believed essential to the reader's understanding of the enterprise's financial status. Criteria for standards of disclosure often must be based on value judgments rather than on objective facts.
3. **Consistency** – interested persons should be able to assume that successive financial statements of an enterprise are based consistently on the same generally accepted accounting principles (so-called US GAAP) (in the United States), on the same IAS (International accounting standards) (in the European Union) or on the same Czech accounting standards (in the Czech Republic). If the principles are not applied consistently, the trends indicated could be the result of changes in the principles used rather than the result of changes in business conditions or managerial effectiveness. The concept of consistency does not completely prohibit changes in the accounting principles and methods used. Changes are permissible when it is believed that the use of a different principle or method will more fairly state the economic result and financial position. In such cases, the reason for the change and its effects on profit should be disclosed in the financial statements of the period in which the change in principle is made (in the Czech Republic this information should be disclosed in the **appendix**).
4. **Materiality** – the accountant must consider the relative importance of any event, accounting procedure, or change in procedure that affects items on the financial statements. Absolute accuracy in accounting and full disclosure in reporting are not ends in themselves. The determination of what is significant and what is not requires the exercise of judgment. Precise criteria cannot be formulated. To determine materiality, the size of an item and its nature must be considered in relationship to the size and the nature of other items.

5. **Going concern** – generally, a business is not organized with the expectation of operating for only a certain period of time. In most cases, it is not possible to determine in advance the length of life of an enterprise, and so an assumption must be made. The nature of an assumption will affect the manner of recording some of the business transactions, which in turn will affect the data reported in the financial statements. It is customary to assume that a business entity has a reasonable expectation of continuing in business at a profit for an indefinite period of time. When there is conclusive evidence that a business entity has a limited life, the accounting procedures should be appropriate to the expected terminal date of the entity. Changes in the application of normal accounting procedures may be needed for business organizations in receivership or bankruptcy. In such cases, the financial statements should clearly disclose the limited life of the enterprise and should be prepared from so-called "quitting concern" or liquidation point of view, rather than from "going concern" point of view.

8.5 The European accounting system

The European accounting system is a little different than the Czech accounting system. The European accounting system is based on the following:

1. Directives of the European Union,
2. International Accounting Standards (IAS). The newer term for IAS is International Financial Reporting Standards (IFRS).

The Czech accounting legislation has already accepted a lot of concepts embedded in IAS and Directives with the aim to synchronize the Czech and European juridical rules. The need for European accounting harmonization arose from the formation of the EU in 1957 and it is anchored in its foundation treaty (the Treaty of Rome). The harmonization itself has worked as an acceptance and transformation of European directives that were adopted by the European Council of Ministers. European directives do not have a character of international acts but they are required to be accepted as a part of national legislations of the EU members.

Since the formation of the EU in 1957 13 Directives have been issued. The most important Directives from the accounting point of view are:

1. Fourth Directive – was adopted in 1978. This Directive focuses on the unification of financial statements in member countries of the EU.
2. Seventh Directive – was adopted in 1983. This Directive concerns compilation of consolidated financial statements that must be compiled by groups of enterprises (holdings, concerns, etc.)
3. Eighth Directive – was adopted in 1984 and determines the minimal requirements for auditors' qualification.

8.6 The International Accounting Standards (IAS), the International Financial Reporting Standards (IFRS)

The International Accounting Standards (or International Financial Reporting Standards) represent the other basis pillar of the European accounting system. The IAS are issued by The International Accounting Standards Committee (IASC). The IASC came into existence on 29 June 1973 as a result of an agreement by accountancy bodies in Australia, Canada, France,

Germany, Japan, Mexico, the Netherlands, the UK and Ireland and the USA. The objectives of IASC are set out in its Constitution. These objectives are:

1. To formulate and publish, in the public interest, accounting standards to be observed in the presentation of financial statements and to promote their worldwide acceptance and observance, and
2. To work generally for the improvement and harmonization of regulations, accounting standards and procedures relating to the presentation of financial statements.

Since the most important accounting information is always provided in the financial statements, the IAS give them special attention and define their basic objectives. The main objective of the financial statements in accordance with IAS (IFRS) is:

To provide information about the financial position, performance and changes in financial position of an enterprise that is useful to a wide range of users in making economic decisions. Financial statements prepared for this purpose must meet the common needs of most users. Financial statements also show the results of the stewardship of management, or the accountability for the resources entrusted to it.

To date 41 International Accounting Standards and 5 International Financial Reporting Standards have been accepted[29]. Particularly International Accounting Standard no. 1 is significant for the purpose of this chapter. **International Accounting Standard no. 1 – Presentation of financial statements** focuses on the financial statements obligatorily compiled by accounting units that are using IAS. The objective of this Standard is to prescribe the basis for presentation of financial statements, in order to ensure comparability both with the enterprise's own financial statements of previous periods and with the financial statements of other enterprises. To achieve this objective, IAS 1 sets out the overall considerations for the presentation of financial statements, guidelines for their structure and minimum requirements for the content of financial statements. IAS 1 further defines the purpose of financial statements. This purpose is defined as follows: „Financial statements are a structured financial representation of the financial position and of the transactions undertaken by an enterprise". In accordance with IAS 1 the financial statements should provide information about:

- Assets,
- Liabilities,
- Equity,
- Income and expenses, including gains and losses,
- Cash flows.

A complete set of financial statements includes the following components (according to IAS 1):

- Balance sheet,
- Income statement (P/L statement),
- A statement showing either:
    - All changes in equity, or

[29] IFRS and IAS summary can be found at www.iasb.org/standards/summaries.asp.

    - Changes in equity other than those arising from capital transactions with owners and distributions to owners,
- Cash flow statement,
- Accounting policies and explanatory notes.

As a minimum the balance sheet should include these items:

- Property, plant and equipment,
- Intangible assets,
- Financial assets,
- Investments accounted for using the equity method,
- Inventories,
- Trade and other receivables,
- Cash and cash equivalents,
- Trade and other payables,
- Tax liabilities,
- Provisions,
- Non-current interest-bearing liabilities,
- Minority interest,
- Issued capital and reserves.

As a minimum the income statement should include these items:

- Revenue,
- The results of operating activities,
- Finance costs,
- Shares of profits and losses of associates and joint ventures,
- Tax expense,
- Profit or loss from ordinary activities,
- Extraordinary items,
- Minority interest,
- Net profit or loss for the period.

Furthermore, IAS and IFRS regulate other areas of financial accounting (for example inventories, cash-flow statements, revenues, etc.). Some enterprises in the Czech Republic (companies whose securities are traded on public financial markets) must obligatorily keep two kinds of accounting (accounting based on the Czech accounting legislation and accounting based on IAS/IFRS).

8.7 IAS and their relationship with Czech national accounting standards

Some significant tendencies and trends can be identified in the relationship between IAS (IFRS) and the Czech accounting legislation. The most significant trends are:

- The Czech national standards accept IAS (IFRS) more and more,
- It is expected that IAS (IFRS) will be completely integrated into the Czech legislation in the very near future,
- IAS and US GAAP (US General Accepted Accounting Principles[30]) will probably become the base for a united accounting system acceptable for all countries in the future.

From the worldwide perspective it is expected that only one system of accounting will remain in the future. This system will probably be created as a combination of IAS (IFRS) and US GAAP.

8.8 Tax system in the Czech Republic

Accounting is very closely connected with taxes. The tax system of the Czech Republic can be divided into 2 groups:

1. Direct taxes
2. Indirect taxes

The difference between direct taxes and indirect taxes results from the fact whose incomes (revenues) are influenced by the tax. Direct taxes influence directly incomes (revenues) of the payer (corporation, employer, employee, consumer, etc.) that pays the tax simultaneously to financial agency. Indirect taxes influence incomes of the different person than the subject sending the tax to financial agency is. In practice it works on the system that the indirect tax is collected by seller from customer (buyer) in the price of goods, products, etc., and the amount of tax is sent to financial agency by seller (enterprise).

As direct taxes in the Czech accounting system are used:

1. Income tax – corporation income tax
   - natural persons income tax
2. Road tax
3. Real estate tax
4. Real estate grant tax
5. Inheritance tax
6. Gift tax

Income tax is paid from all taxable incomes (revenues) of the subjects. The income tax is divided into 2 groups – as corporation income tax – the rate of tax has been 21 % since the beginning of year 2008, and natural persons income tax (rate 15 % since year 2008).

Road tax is paid from all vehicles used for business activities of corporations and businessmen.

[30] US GAAP constitute the basic accounting principles used in the U.S.

Real estate tax is paid from real estates (especially buildings and lands).

Real estate grant tax is paid in the moment of sale of the real estate, when new owner accepts owner's right to purchased real estate.

Inheritance tax is paid in situation when someone inherits taxable property after dead physical person. The inheritance tax is not paid in situation when the heritor is a relative of the decedent in direct line or his husband and wife (children, grandchildren, parents, etc.).

Gift tax is paid in situation when someone donates taxable property to corporation or physical person. The height of the tax depends on value of donated property).

Charging about direct taxes in corporations usually leads to creation of cost influencing the economic result of company.

As indirect taxes in the Czech Republic are used:

1. Value-added tax (VAT)
2. Consumption tax (tax from alcohol, tobacco, petrol, oil, beer and wine)
3. "Ecological" taxes (new taxes in the Czech tax systems since the beginning of year 2008, these taxes are used in case of consumption of electricity, gas and coal, their nature is very similar to consumption tax).

The value-added tax is paid in the moment of sale from major part of goods and services (under condition that the seller is VAT payer). The value-added tax is regulated by law of value-added tax no. 235/2004. Term VAT payer is defined by § 6 of the law of VAT. As VAT payers the subjects doing business (physical persons, corporations, etc.) whose annual turnover (sum of incomes or revenues (with several exceptions)) exceeds limit 1 000 000 CZK are defined. The value-added tax is paid by buyer in the value (price) of goods or service, but to financial agency it is paid from seller's bank account. There are 2 rates of value-added tax in the Czech Republic:

- basic rate 19 %
- lower rate 9 %

For the most kinds of goods and services the basic rate is used. The lower rate is used especially for food, drinks (but not alcohol), medicaments, construction of flats for living, medical care, cultural activities, etc. (so called socially controversial items).

In contrast to direct taxes the charging about indirect taxes usually does not mean the creation of cost for corporation. VAT and consumption tax are charged on special balance sheet accounts (as liabilities or receivables).

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9 STRATEGIC PARTNERSHIPS

9.1 Introduction

More and more we encounter company goals defined as reaching the competitiveness, increasing innovativeness or creating value for the customers. Both practitioners and academics try to find the best way to reach these goals with respect to sharpening the competition on the market.

99. 8 % of all Czech enterprises are represented by the small and medium enterprises (SME's), which employ over 60 % of all the employees in the national economy. Considering the disadvantages, SME's can join the strategic partnerships and increase the competitiveness not only on the national but also on the foreign market (strategic partnerships with foreign partners). And conversely, foreign enterprises can expand their activities to the national (Czech) market with the help of their national (Czech) partners. Ability to compete in the EU can be acquired by cooperation with other companies around even if they are competitors.

Strategic partnerships are not suitable for SME's only. There is a tendency toward outsourcing of the internal processes, which contributes to the flexibility of otherwise inflexible corporations. Thus strategic partnerships serve as a remedy for the problems concerning both SME's and corporations.

The following text focuses especially on the forms of strategic partnerships.

9.2 Classification of the enterprises according to their size

9.2.1 Size of an enterprise

Indicators like a number of employees, a turnover of the company, amount of the capital, a profit and so on are instrumental to a classification of the enterprises according to their quantitative aspects. The easiest and the most frequent indicators for the enterprise classification are: the number of employees and the turnover of the enterprise.

There are many classification of the companies based on the number of employees. EUROSTAT tries to create common standard for classification and distinguishes the following categories:

- Micro enterprises up to 9 employees
- Small enterprises with less than 99 employees
- Medium enterprises employing less than 499 employees
- Large enterprises with more than 500 employees.

Another categorization of the enterprises based on the number of employees is used by the Czech Statistical Office. A small enterprise employs less than 20 employees and an enterprise with more than 100 employees is considered to be a large enterprise.

The definition of the small and medium enterprises stipulated by the EU in its recommendation in 2003 is as follows:

1. Small enterprises – organizational units with less then 50 employees and with annual turnover or annual balance sheet total less than 10 million Euros. The company has to

be independent; it means that there is no other subject (company) holding more than 25% of the capital.

2. Medium enterprises – 50-250 employees, annual turnover does not exceed 50 million Euros or annual balance sheet total does not exceed 43 million Euros. As far as independence is concerned, there is the same criterion for the medium enterprises as the one given for the small enterprises.

9.2.2 Disadvantages of SME's

A major disadvantage of SME's is a limited possibility of financing the activities of the enterprise. The most important source of financing is self-financing. It stems from the fact that the resources of SME's are limited. The other disadvantages are as follows:

- Low level of capital assets causes insufficient book depreciation and the company can not afford fluent reinvestment.
- Statistics confirm that small companies are provided with higher interest rates at the bank. It means that the SME's do not invest so much as the large companies do and the ratio "investments/ turnover" in the SME's is also lower. Monetary changes and any financial restriction cause increase of the interest rate and so increase risk.
- Other disadvantages are connected with a manufacturing problem concerning underutilization of production capacities of the machines.
- Insufficient resources to develop new products and to start the technological development.
- The employees in a larger company have higher earnings and more benefits than in SME (training, insurance, food and so on).
- Product quality is the key factor of success of the SME's. Quality is connected with highly qualified employees, who can be replaced only with difficulty.
- Advertising is limited because of financial resources. Prices are very often dictated by the large companies. Marketing is underestimated in SME's.
- Number of top managers is limited, which can cause work overload of other employees. Improvisation and intuition are prevailing.
- The owner of the company is very often a top manager or the director of the company. This fact can be a nuisance, when managing the company.
- SME's must pay attention to avoiding the risks because they can become fatal for SME's.

9.2.3 Disadvantages of large companies

Large companies suffer from difficulties connected with managing of a large organization. The effort to standardize the management practice can lead to the growth of bureaucracy, thus causing inflexibility.

There are problems of the large and SME enterprises given in Table No. 18. They can be solved by forming a strategic partnership, or to be more precise, a strategic alliance.

Table No. 18: Which of the problems mentioned below can be solved by strategic alliances?

	Large company	Medium company	Small company
Management difficulty (level of bureaucracy, problem of intra-organizational control)	3	2	1
Provision of knowledge resources	2	1	**2**
Organizational flexibility	3	2	1
Professionalism and negotiation power	1	2	2
Innovative behaviour of an organization and its managers	3	2	1
Capital power, disposability of needed resources	1	2	**3**
Company risks and possibility of their reduction	2	2	**3**
Efficiency of economic processes	1	2	**3**
Possibility of quality control in the whole process of the economic activity	1	2	**3**

1 – it is not a problem, 2- it is already a bit of a problem, 3 – it is a big problem

Source: author

9.3 Strategic partnerships

Strategic partnership is a broad notion covering all forms of integration[31] (that is cooperation and concentration) but also other informal agreements. Strategic partnership is a partnership or agreement with another organization for mutual benefit. Partnering organizations are building mutual long-term goals and commitments.

Within this chapter we will mention the following forms of partnerships:

9.3.1 Forms of strategic partnerships

1. **„Open“ form of co-operation**

- occasional co-operation

Occasional forms of communication and business collaboration involves exchange of the information concerning business condition, opinions about the public sector and other information which is not regarded as being important, meaning that it is not of a tactic or strategic importance.

- „salient“ informal agreements

[31] Forms of integration based on the form of enclosed contract are the partnership deed (silent partnership, consortiums); cooperation (corporation, strategic alliance, price cartel, sales cartel, production cartel, condition cartel, syndicate); concentration (mergers, acquisitions, concern, holding, trust, conglomerate).

These agreements represent the salient agreements concerning prices, manufacturing processes, limitation of mutual competition, exchange of information and so on. They are very often enjoined by national governments and economic competition authorities.

2. **Strategic alliances**

A relationship formed by ***two or more organizations*** that share (proprietarily), participate in joint investments, and develop linked and common processes to ***increase the performance of both*** companies. Many organizations form strategic alliances to increase the performance of their common supply chain.[32]

Another common definition of a strategic alliance: Strategic Alliance is a partnership between two or more companies to pursue a set of ***agreed upon goals*** while ***remaining independent*** organizations. Strategic alliances come in all shapes and sizes, and include a wide range of cooperation, from contractual to equity forms. [33]

Definition according to ASAP (Association of Strategic Alliance Professionals):

- Agreements with „open“ end

- Between separate companies

- Partners are sharing common interests or goals.

- Informal collaboration with information sharing

This form of cooperation is about experience and information sharing. The partners can share their own market experience, experience concerning other partners and other data resources, experience on market conditions, but also experience about computer programs and so on. This form of cooperation is not legally binding and it is very often based on handshake agreements. The information shared must be interesting for both sides (supplier and subscriber) to preserve mutual cooperation. The **question of trust** can be very problematic, particularly in the Czech Republic.

- Preferred suppliers and buyers

These agreements are very often legally binding and they are connected with the sole position of the partners. This form of cooperation is sometimes called sole agency and is a kind of a long-term cooperation. Example of this form of partnership: long-term obligation to buy or to sell materials and raw materials. This obligation is confirmed by the legal contract or the exclusive position of one of the partner. This partnership form is sometimes based on the **license** with the partner.

Example of the company making use of this form of partnership in the Czech Republic is the company Auto Škoda Mladá Boleslav employing over 300 of preferred suppliers.

Example of the sole agency partnership represents the company **Starlift s.r.o**., which is the exclusive agent of the American company Caterpillar Lift Truck (manufacturer of material handling equipment for a wide range of industrial and commercial applications). Starlift is a distributor of the lift trucks and it provides the customers of Caterpillar Company with maintenance services as well. The cooperation started 10 years ago. Starlift Company is also the sole distributor for the Slovak market (sole agency).

- Production, assembly, buy back agreement

[32] Source: http://www.apics.org/
[33] Source: Encyclopedia, Wikipedia, http://en.wikipedia.org/wiki/Strategic_alliance

The partnering companies are trying to exploit the advantages stemming from the economies of scale. Cooperation is connected with continuous recovery of the capital equipment and later with a buy back by the equipment supplier. The cooperation can involve delivery of more complex machines, starting the operation of the machines, common provision of their maintenance and reparation. This kind of cooperation is focused on the improvement of internal processes – it should improve the quality, the quantity and the efficiency of internal processes. It can be the cooperation between a supplier of assembly lines or a service company.

- Management, marketing, service agreement

These agreements concern the collective solution and implementation of external processes. The partners provide common solution and realization of the external processes and they can share distribution networks as well. The external processes can be generally presented by mutually coordinated marketing, assembly and servicing of complicated equipments, common distribution. An example is the company Technicoat cooperating with DuPont (cooperation in the strategic planning of marketing activities).

- Cooperation in R&D

Joint R&D is a strategic alliance whereby two or more organizations agree to combine their technological knowledge to create new innovative products.

- Franchising

It is a method of doing business wherein a franchisor licenses trademarks. Franchising is further understood as tried and proven method of doing business to a franchisee in exchange for a recurring payment, and usually a percentage piece of gross sales or gross profits as well as the annual fees. Various tangibles and intangibles such as national or international advertising, training, and other support services are commonly made available by the entity licensing the 'chain store' or franchise outlet (commonly shortened to one word: franchise), and may indeed be required by the franchisor, which generally requires audited books, and may subject the franchisee or the outlet to periodic and surprise spot checks. Failure of such tests typically involves non-renewal or cancellation of franchise rights.

- Licensing

License agreement enables the buyer to produce and to sell the products and services of the partner. The buyer pays fees for the provided technical production and patent documentation.

Example of a cooperation based on a license is the Czech company **Technicoat s.r.o.**, which operates in the surface coating business specializing in the application of industrial coatings (Teflon, Xylan, Dykor, Halar, Rilsan) and the company Du Pont. Technicoat was awarded DuPont license to apply Teflon® Fluoropolymer coatings „DuPont Licensed Industrial Applicators“. DuPont has not been equipped with the knowledge of the Czech market, so they have chosen the partner, which would be able to serve these markets with DuPont products. Technicoat is also able to supply Slovak and Polish markets. Success of the cooperation is based on the trouble free communication, sharing of know-how, and knowledge of Czech and Slovak markets.

Forms of strategic partnerships like franchising and preferred buyers and suppliers can be safeguarded by a license.

- Outsourcing

The company decides to give other companies some activities which are not core activities of the company. There are many pros and cons of this form of cooperation. The company

outsourcing some peripheral activities can for example save financial resources for provision of core activities. On the other hand, there is a risk of no delivery of the activity**.**

- **Joint ventures**

JV has its own legal form with its own organizational structure. It can be considered as the broader notion for strategic alliance. It is an agreement between two or more firms that they are going to undertake the same business strategy and plan of action. Two companies want to co-operate (share knowledge, **markets**, and profits) and they decide to create another company together – joint Venture Company. In the Czech Republic this form of partnership is typical for the enterprises with foreign capital. Barum (tyres producer) and the German company Continental created the JV Company Barum Continental together, which has become a part of Continental Group. Both sides of the contract were satisfied. Barum received capital resources to invest in new technologies and equipments and Continental group expanded to the Czech and Slovak markets.

- „**close“ form of co-operation**

The key principle behind buying a company (close form of cooperation) is to create shareholder value, which is higher than the sum of the two companies (the buying one, the one being sold). Two companies together are more valuable than two separate companies – or at least, that is the reasoning behind merger and acquisition.

- **Merger**

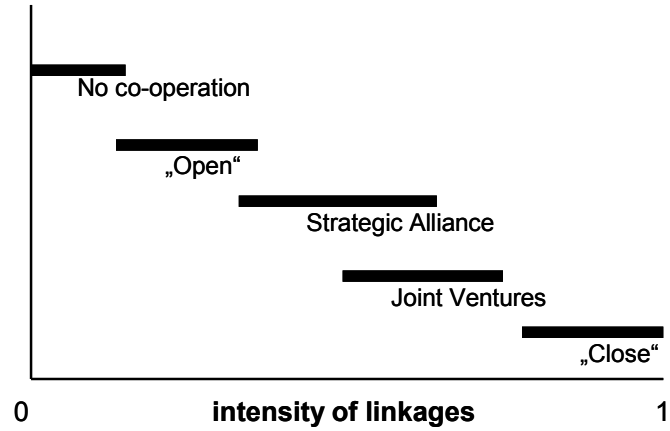
Merger happens when two firms, often about the same size, agree to go forward as a single new company rather than remain separately owned and operated. Both companies' stocks are surrendered and new company stock is issued in its place. For example, both Daimler-Benz and Chrysler ceased to exist when the two firms merged, and a new company, DaimlerChrysler, was created. In practice, one company will usually buy another and, as part of the deal's terms, simply allow the acquired firm to proclaim that the action is a merger of equals, even if it is technically an acquisition. Being bought out often carries negative connotations, therefore, by describing the deal as a merger, deal makers and top managers try to make the takeover more palatable.

- **Acquisition**

When one company takes over another and clearly establishes itself as the new owner, the purchase is called an acquisition. From a legal point of view, the target company ceases to exist, the buyer "swallows" the business and the buyer's stock continues to be traded. Acquisition is considered to be more adversarial in comparison with a merger.

The distinction of the forms of partnership is based on the intensity of linkages.

Picture No. 1: Intensity of linkages between the companies



Source: author

9.4 Risks of strategic alliances

The company intending to enter the strategic alliance should consider carefully the risks and the motives of entering the partnership. The motives are sharing costs and market risks, combining complementary skills, formulating technical standard and dominant design, accessing new markets and technologies, pre-empting new competitors, reserving learning opportunities.

The problems can arise from the different corporate cultures of the partnering companies. The worst impact of disharmonic corporate cultures will be apparent within companies established by the merger or acquisition.

The partners should undertake the following steps to avoid any complication:

- The partners should discover everything about other alliances, which have been enclosed by the potential partner. Already enclosed alliances of our potential partner could somehow limit the effectiveness of the proposed contract. For example if the potential partner approached a contract which hinders the potential partner to provide any technical or other information.
- The partners should learn about the financial situation of the potential partners.
- If the object of the cooperation is a supply of some product, technology and so on, the company should ascertain everything about the rights of the ownership. Partners should evaluate, if the brand names, trademarks and patents or copyrights will be needed to expand to the international market and eventually launch necessary agreements before entering the partnership.
- The partners should exercise the control over the observance of the agreement regularly to avoid any problems and to reveal any inadequacies.
- Employees are key assets for the companies, because they constitute the knowledge and experience offered to a partner. This is the reason for adding a clause about the prohibition of employing the partner employees to the contract.

Dissatisfactions with alliances followed by their end are as follows:

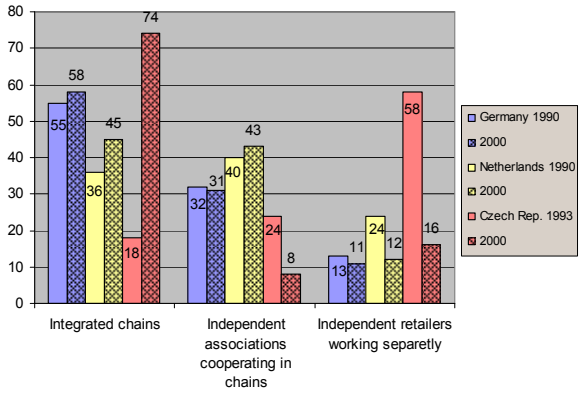
- Low rate of strategies conformity
- Unrealistic expectations concerning the difficulty of establishment and running the alliance
- Key workers do not want to work
- Key workers do not manage to fulfil qualification requirements
- Enemy effort to become independent of the founder

9.5 Cooperation in retail and wholesale

Growing number of hypermarkets in the Czech Republic is considered as a threat to small sellers and retailers. Hypermarkets have better purchasing conditions because of the large amount of goods they can purchase and later sell for lower prices. Subsequently they gain customers, which were served by smaller sellers or businessmen. Cooperation in retail and wholesale should provide better purchasing condition for these smaller organizations which are getting bigger thanks to the cooperation.

Tendency toward cooperation is visible in the graph below. We can see rapid decrease in the number of retailers working separately in the Czech Republic between the years 1993 – 2000 (Right side of the graph, decrease from 53% to 16%).

Graph No. 12: Cooperation in retail and wholesale



Source: author

There are four stages of cooperation in retail and wholesale (the level of integration is growing from the first to the last one, the independency is preserved).

1. **Purchasing and payment alliance**

There are 2 types of purchasing alliances: a) purchasing alliance based on central negotiations and b) purchasing alliance based on central negotiations and also central payment. The members of the alliance are direct invoiced by the supplier in the first type of the purchasing alliance. This type is connected with bad payment morality. Thus, the second type of purchasing alliance is better for alliance suppliers, where the central office of the alliance is

invoiced directly and each member of the strategic alliance has its own clearing account by the central office.

2. Purchasing and selling alliance

The alliance members are offering the same assortment, the same design of the outlets, the same business strategy and use of the same retail brands.

3. Marketing alliance

This kind of cooperation involves implementation of the loyalty systems within the member companies. This kind of cooperation demands implementation of joint information systems, which is very often a problem in the Czech Republic.

4. Service organization

This form of cooperation represents the highest level of integration of independent retailers. It is concerned with the services in the sphere of information systems, consultancy, financing, training of employees and so on.

9.6 Conclusion

In this chapter you have read about the forms of strategic partnerships. There are some final remarks stemming from my own experience with the cooperation in the Czech Republic.

- Problem with trust between the Czech companies which are competitors, if they are going to cooperate (the Moravia Silesia Cluster) – it is a problem especially when the cooperation is supported by a public authority
- Foreign partners are mainly trying to produce at low cost in the Czech Republic
- Foreign partners want to expand and do not know the Czech market. That is the reason to cooperate with a Czech partnering company.
- Cooperation between Czech firms in the field of research and development (24 innovative research parks in the CR)
- Expansion of outsourcing

Final questions

1. Try to think of advantages and disadvantages of particular partnership forms and risks connected with them.
2. Which of these cooperation forms are typical for your country?

10 INNOVATION MANAGEMENT

10.1 Introduction

Innovation is a key word in competitiveness literature and all the competitiveness problems. This is supported also by EU innovation policy.

Innovations of all types are considered to be the response to the increase in competition, globalization of competition, growth in the expenditures connected with exploitation of natural resources, life cycle shortening, and growing demandingness of consumers to consume quality services and to consume ecologically oriented products. Generally it is supposed that innovation has possible impacts on efficiency, productivity, and quality and market share.

10.2 Definition of innovation

Alois Schumpeter is treated as a founder of modern innovation concept, or innovation theory. Innovation is something completely new, not imitative. He was distinguishing innovation from imitation. His innovation theory is based on the notion “creative destruction” and is connected more with national economics than with partial firm. But the theory brings also some ideas for the entrepreneurs. Entrepreneur and the imbalance in healthy economics is a starting point of innovation. Entrepreneur is the source of innovation. Innovation causes innovation cycles or better to say causes another innovation. It means that innovation cycle is cluster of innovations. Fundamental innovations breed other strong incentives for further innovations. Innovation cycles are the engine for investments and investments or intensity of them is connected with business cycle. Wave of innovations causes wave of investments. Innovators are obtaining the greatest deal of innovation profit. Innovated product or process is imitated by others, who are also investing and expecting some profit. The profits are becoming lower and lower as the others are coming with the same product or process to the market. Investments are turned to disinvestment strategy and economic expansion is replaced by depression. This whole cycle is called “creative destruction”. Why creative? Even if the growth stops even decrease, the other wave or cycle will start on higher level of productivity. Innovation is the source of economical growth for Schumpeter. Innovation is a change outside the business cycle, but when the change rises, it influences the business cycle.

Schumpeterian innovation is:

1. The introduction of a new good —that is one with which consumers are not yet familiar—or of a new quality of a good.
2. The introduction of a new method of production, which need by no means be founded upon a discovery scientifically new, and can also exist in a new way of handling a commodity commercially.
3. The opening of a new market that is a market into which the particular branch of manufacture of the country in question has not previously entered, whether or not this market has existed before.
4. The conquest of a new source of supply of raw materials or half-manufactured goods, again irrespective of whether this source already exists or whether it has first to be created.

5. The carrying out of the new organization of any industry, like the creation of a monopoly position (for example through trustification) or the breaking up of a monopoly position[34].

The other author developing the concept of innovation was the Czech academician Valenta. He was influenced by Schumpeter. Innovation is whatever change in the internal structure of the production organism. There are three basic levels of innovation:

- Rationalization, it means new combination of existing production factors. Thanks to the rationalization innovation, production outputs are produced produce in given quality with lower costs.
- Qualitative innovation are represented by new products
- Technological revolution

Picture No. 2**:** Level of innovation according Valenta

Innovation level	Nomenclature	What remains?	What changes?	Example
minus n	degeneration	nothing	Decrease of features	depreciation
0	regeneration	object	Recovery of features	Servicing, repairs
RATIONALIZATION				
1	quantity	all features	Quantity of factors	Additional manpower
2	intensity	qualities and interconnections	Speed of operation	Faster conveyer
3	reorganization	Qualitative features	Distribution of operations	Operation swapping
4	qualitative adaptation	Quality for customers	Ties to other factors	Technological construction
QUALITATIVE INNOVATION				
5	variant	Design resolution	Partial quality	Faster machine
6	generation	Design conception	Design resolution	Machine with electronics
7	kind	Technology principle	Design conception	Jet loom
8	family	Appropriate tribe	Technology principle	Non-woven textiles
TECHNOLOGICAL REVOLUTION				
9	tribe	nothing	Approach to nature	Gene manipulation

Source: Valenta (1969)

[34] http://en.wikipedia.org/wiki/Innovation

These levels can be understood as sources of innovation or the way how to innovate. It is necessary to support innovation of all levels. The companies should approach the innovation in complex but differently with regard to the level of innovation. Innovations of lower level are more internal business (matter) of the companies, but they should be supported by the suitable infrastructure – it means for example to start with a systematic education of the specialists within for example plastic industry (big problem with shortage of qualified workers) or to create apparent clear business environment (make clear proprietary and legal relations). Higher innovation level should be supported by the incubators of regional financial support. These activities would help to finalize the invention phase it means to sell the innovation. If the company needs financial support to finalize innovation, it is needed to quote in the entrance form quantified results. It is impossible in the case of the highest level innovation. These three levels were further elaborated by Valenta.

We distinguished between innovation and imitation. We have to distinguish also innovation from invention. Invention is the first idea. Innovation is realized invention; it means that innovation is successfully implemented invention. From 50 to 90 % of innovations have no impact on the organization goals, only one out of 3 000 product innovations are successful. It means there are a lot of inventions, but they are very rarely implemented. The implementation rate can be increased by the systemic innovation management.

10.3 Innovation and EU

The interest of European Union was supported by the results of the study carried out in 70ties. The innovation performance of three subjects - EU, USA and Japan – was compared. The results were not satisfactory. The results showed that EU is behind USA and Japan in technological and economical performance and in the sphere of high tech. By virtue of these findings, EU proclaimed First European Innovation Action plan. Later, in March 2000, there was set out the Lisbon strategy by the European Council in Lisbon. The Lisbon Strategy deals with the low productivity and stagnation of economic growth in the EU, through the formulation of various policy initiatives which has to be taken by all EU members. The broader objectives set out by the Lisbon strategy is to be attained by 2010. It broadly aims to "make Europe, by 2010, the most competitive and the most dynamic knowledge-based economy in the world". Enhancing innovation is a cornerstone of the strategy to meet this target agreed**.** The main fields of Lisbon Strategy are economic, social, and environmental renewal and sustainability. The Lisbon Strategy is heavily based on the economic concepts of:

- Innovation which is the motor for economic change (based on the writings of Joseph Schumpeter)
- "Learning economy"
- Social and environmental renewal

European innovation policy was declared within Lisbon strategy. Innovation processes were included in the framework programmes. The Framework Programmes for Research and Technological Development are the European Union's (EU) main instruments for supporting collaborative research, development and innovations in science, engineering and technology.

Framework programmes (FPs) are the main financial tools through which the European Union supports research and development covering almost all scientific disciplines. FPs are proposed by the European Commission and adopted by Council and the European Parliament following a co-decision procedure.

European Commission defined innovation as:

- the renewal and enlargement of the range of products and services and the associated markets;
- the establishment of new methods of production, supply and distribution;
- the introduction of changes in management, work organization, and the working conditions and skills of the workforce.

It is apparent that the innovation concept of European Commission is established on the Schumpeterian concept of innovation.

10.4 Tools of innovation support and measurement

Innovation in EU is supported by some tools:

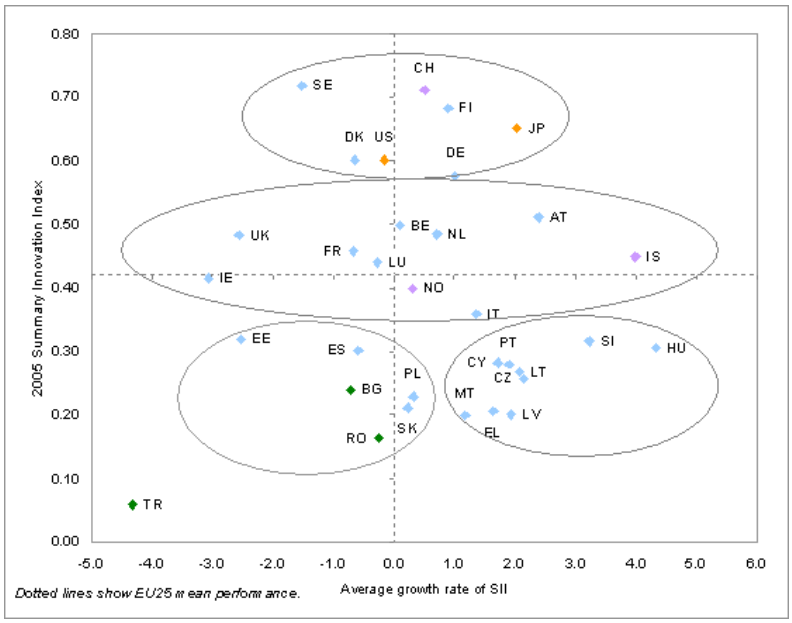
- Trendchart
- EIS
- Innobarometr
- CIS

10.4.1 Trendchart and European Innovation Scoreboard

It can be understood as a database (or workshops) of information concerning various aspects of innovation policies of various EU countries (for example support of innovative enterprises, approach to financing of innovation, transfer of knowledge and technology between research and industry). It offers the opportunity to compare and analyse in depth innovation policies and support schemes of the Member States. There are three main sources of information – Annual country reports, European Innovation Scoreboard, reviews of innovation policies and so on.

European Innovation Scoreboard (EIS) is an annual assessment of innovation performance in the individual Member States of the European Union. It was an explicit request of the European Council meeting in Lisbon in March 2000.The EIS measures innovation performances across the European Union. Its and instrument serving to compare EU countries. The result of the measurement is a **Summary Innovation Index. Summary innovation index is measured by input and output innovation indicators. See the Picture No.** 2: Level of innovation according Valenta**.**

Picture No. 3: Summary Innovation Index for EU countries



Source: *http://www.trendchart.org/scoreboards/scoreboard2005/summary_innovation_index.cfm*

According SII the countries are divided into groups according their innovation performance. There are "innovation leaders" countries (countries with SII scores above that of 25 EU countries), "innovation followers" (countries with SII under innovation leaders but above EU average), "catching-up countries" (countries with SII below EU countries, but with faster than average innovation performance improvement), "trailing countries" (countries with SII below average of EU and with low innovation performance grow).

Picture No. 4: EIS Indicators

	INPUT - Innovation drivers	
1.1	S&E graduates per 1000 population aged 20-29	Eurostat
1.2	Population with tertiary education per 100 population aged 25-64	Eurostat , OECD
1.3 new	Broadband penetration rate (number of broadband lines per 100 population)	Eurostat
1.4	Participation in life-long learning per 100 population aged 25-64	Eurostat
1.5 new	Youth education attainment level (% of population aged 20-24 having completed at least upper secondary education)	Eurostat
	INPUT – Knowledge creation	
2.1	Public R&D expenditures (% of GDP)	Eurostat , OECD
2.2	Business R&D expenditures (% of GDP)	Eurostat , OECD
2.3 new	Share of medium-high-tech and high-tech R&D (% of manufacturing R&D expenditures)	Eurostat , OECD
2.4 new	Share of enterprises receiving public funding for innovation	Eurostat (CIS)
2.5 new	Share of university R&D expenditures financed by business sector	Eurostat , OECD
	INPUT - Innovation & entrepreneurship	
3.1	SMEs innovating in-house (% of all SMEs)	Eurostat (CIS)
3.2	Innovative SMEs co-operating with others (% of all SMEs)	Eurostat (CIS)
3.3	Innovation expenditures (% of total turnover)	Eurostat (CIS)
3.4	Early-stage venture capital (% of GDP)	Eurostat
3.5	ICT expenditures (% of GDP)	Eurostat
3.6	SMEs using non-technological change (% of all SMEs)	Eurostat (CIS)
	OUTPUT – Application	
4.1	Employment in high-tech services (% of total workforce)	Eurostat
4.2 new	Exports of high technology products as a share of total exports	Eurostat
4.3	Sales of new-to-market products (% of total turnover)	Eurostat (CIS)
4.4	Sales of new-to-firm not new-to-market products (% of total turnover)	Eurostat (CIS)
4.5	Employment in medium-high and high-tech manufacturing (% of total workforce)	Eurostat
	OUTPUT - Intellectual property	
5.1	EPO patents per million population	Eurostat
5.2	USPTO patents per million population	Eurostat
5.3 new	Triadic patent families per million population	Eurostat, OECD
5.4 new	New community trademarks per million population	OHIM
5.5 new	New community designs per million population	OHIM

Source: *http://www.trendchart.org/scoreboards/scoreboard2005/methodology.cfm*

10.4.2 Innobarometer

Innobarometer is an opinion poll carried out by the European Commission in 2001, 2002, 2003 and 2004 in the European Union under the EUROBAROMETER opinion poll system. The main objective of the survey is to sound out the opinions of European managers on their companies' needs in innovation, their investments in innovation and the output achieved. In addition, the latest Innobarometer survey (2003) looked at the driving forces for innovation, the impact of the market on innovation as well as the development of new managerial approaches to innovation.

10.4.3 Community Innovation Survey (CIS)

The innovation policies of the Member States and the Union depend on the existence of a sound statistical basis. The Community Innovation Survey (CIS) provides this basis. It is the

main statistical instrument of the Union that allows the monitoring of Europe's progress in the area of innovation. The CIS creates a better understanding of the innovation process and analyzes the effects of innovation on the economy (on competitiveness, employment, economic growth, trade patterns, etc.).

The CIS has been carried out for the first time in 1992. CIS2 took place in 1996 and CIS3 in 2001. Data gathering and analysis has been supported under the various Community RTD Framework Programmes. Since 2000, the CIS has become a major data source of the "European Innovation Scoreboard". To ensure the timely updating of the scoreboard, the Commission has asked the Member States to carry out the CIS more frequently. The CIS is intended to follow the guidance, in line with a Eurostat regulation but there are always issues of implementation in practice.

The present Communication on innovation policy, together with the Communication on industrial policy in an enlarged Europe and the Green Paper on entrepreneurship, form a coherent framework for the development of an enterprise policy that fosters competitiveness of companies and contributes to the growth of Europe's economy. The methodological basis of the CIS is provided by the "Oslo manual", a joint publication of Eurostat and the OECD.

Oslo Manual, the measurement of Innovation in EU

Data collection is done by the statistical offices or competent research institutes in the Member States. The results of the surveys are treated at national level using a common methodology and further processed by Eurostat to increase cross country comparability. To preserve strict secrecy of firm-level information the micro-level database remains confidential and is only accessible to Eurostat staff.The Oslo manual is currently under revision in order to account for new orientations of European innovation policy. Among other aspects, the next CIS should contribute to a better understanding of the "non-technical" aspects of innovation, such as management techniques, organisational change, design and marketing issues.

The "Oslo Manual" is a generic guide to innovation measurement and it is based on Schumpeterian innovation. Innovation is defined in "Oslo Manual" as:

An innovation is the implementation of a new or significantly improved product (good or service), or process, a new marketing method, or a new organisational method in business practices, workplace organisation or external relations.

Types of Innovation defined by Oslo Manual:

- Product innovation

A product innovation is the introduction of a good or service that is new or significantly improved with respect to its characteristics or intended uses. This includes significant improvements in technical specifications, components and materials, incorporated software, user friendliness or other functional characteristics.

- Process innovation

A process innovation is the implementation of a new or significantly improved production or delivery method. This includes significant changes in techniques, equipment and/or software.

Product innovation tends to develop customer support and on the other hand product innovation is connected with risk of costly research and development. This can be perceived by the shareholders negatively because of the lower returns caused by investment. Product innovation has to be supported by process innovation. Process innovation tends to develop shareholder satisfaction.

- Marketing innovation

A marketing innovation is the implementation of a new marketing method involving significant changes in product design or packaging, product placement, product promotion or pricing.

- Organizational innovation

An **organisational innovation** is the implementation of a new organisational method in the firm's business practices, workplace organisation or external relations.

There is a problem with interpretation of the expression "significantly new". The question is what is the degree of novelty?

- Radical innovation

Radical innovation, involves larger leaps of understanding, perhaps demanding a new way of seeing the whole problem, probably taking a much larger risk than many people involved are happy about. There is often considerable uncertainty about future outcomes. There may be considerable opposition to the proposal and questions about the ethics, practicality or cost of the proposal may be raised. People may question if this is, or is not, an advancement of a technology or process. Radical innovation involves considerable change in basic technologies and methods, created by those working outside mainstream industry and outside existing paradigms.

- Incremental innovation

Incremental innovation is a step forward along a technology trajectory, or from the known to the unknown, with little uncertainty about outcomes and success and is generally minor improvements made by those working day to day with existing methods and technology (both process and product), responding to short term goals. These innovations are serving as a competitive tool; the company has to do something new so that the customers don't forget the company.

10.5 Innovation in academic research

Pianta has stressed the impact of innovation or better to say of radicality of innovation on country employment. Radical process innovation is decreasing the employment. Radical innovation of the product is increasing employment. We could deduce that the countries with high level of radical process innovation are the countries with high level of unemployment. This was not in practice confirmed.

Programmes of organizational innovation are typically tightly linked to organizational goals and objectives, to the business plan, and to market competitive position. For example, one driver for innovation programs in corporations is to achieve growth objectives. As Davila et al (2006) note, "Companies cannot grow through cost reduction and reengineering alone. Innovation is the key element in providing aggressive top-line growth, and in increasing bottom-line results" (p.6) It is not surprising, therefore, that companies such as General Electric and Procter & Gamble have embraced the management of innovation enthusiastically, with the primary goal of driving growth and, consequently, improving shareholder value.

In general, business organisations spend a significant amount of their turnover on innovation i.e. making changes to their established products, processes and services. The amount of investment can vary from as low as a half a percent of turnover in organisations with a low rate of change to anything over twenty percent of turnover in organisations with a high rate of

change. The average investment across all types of organizations is around 4 %. For an organisation with a turnover of say one billion currency units, this represents an investment of forty million units. This budget will typically be spread across various functions including marketing, product design, information systems, manufacturing systems and quality assurance.

The investment may vary by industry and by market positioning. One survey across a large number of manufacturing and services organisations found, ranked in decreasing order of popularity that systematic programs of organizational innovation are most frequently driven by:

1. Improved quality
2. Creation of new markets
3. Extension of the product range Reduced labour costs
4. Improved production processes
5. Reduced materials
6. Reduced environmental damage
7. Replacement of products/services
8. Reduced energy consumption
9. Conformance to regulations.

These goals vary between improvements to products, processes and services and dispel a popular myth that innovation deals mainly with new product development. Most of the goals could apply to any organisation be it a manufacturing facility, marketing firm, hospital or local government.

Research of Aranda, Rate, Duarte (2001) confirmed that higher rate of standardization within service sector means lower level of innovation (lower number of innovations). Innovation is positively correlated with the size of the company (measured by the turnover within service sector).

Ebadi and Utterback (1984) stressed the importance of communication within innovation process. Their research was focused on technological innovation within research institutions. Frequency of communication, centrality and diversity are the factors influencing positively innovation activity. Formalization of the communication has opposite impact on innovation.

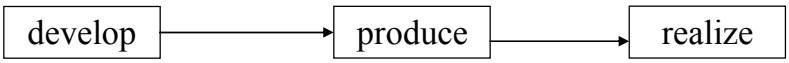
Traditional companies which have survived are those employing qualified personnel, being less bureaucratic, investing more in flexible production

Russel (1990) researched relationship between innovation and organizational structure. Decentralized companies within uncertain environment were more innovative than centralized one (Russel 1990).

10.6 Innovation process

There are three basic steps of innovation process: develop, produce and realize. At the beginning is the invention we already talked about and at the end is the innovation.

Picture No. 5: General innovation process



Source: author

Development (the first step of innovation process) is influenced especially by Universities, Research and Science Parks, Excellence centres and Business and Innovation Incubators. Universities are the members of Association of innovative entrepreneurship ČR – AIP CR, which is implementing the goal of non-governmental organization in the field of innovative entrepreneurship.

Research and science parks provide good condition for innovative companies; they are very often based on the cooperation of the universities and public entities

Primary and applied researches are supported by Academy of Sciences of the CR, and excellence centres. They should put together primary theoretical and applied research; they are serving for education of young scientific workers. In the CR there were chosen 3 canters to financial public support – MIRACLE, ARCCHIP and MEDIPRA.

Business or innovation incubators are offering help to innovative companies or companies with suitable business plan. Incubators are offering favoured condition – cheaper rent, professional help by consultants in the sphere of law and business. Entering firm has to fulfil entry criteria.

Production of innovation is provided by the innovative firms. They can be found in the Technological Profile of the Czech Republic database (operated by the AIP CR)

Czech Trade, National Trade Promotion Agency of the Ministry of Industry and Trade of the Czech Republic are the institution supporting realization of innovation.. The other bodies supporting innovation process within the CR are Czech Export Bank, Export Guarantee (joint-stock company, fully owned by the state) and Insurance Corporation and Czech Confederation of Commerce and Tourism

10.6.1 Steps of Innovation process within the company

This chapter is focused on systemic innovation, it means that innovation and its management is a special matter within the company.

1. At the beginning innovation management has to be **corporate strategy.** It is a presumption of successful finalization of innovation. There is expressed attitude of the company to innovation and how much the company is going to invest in innovation.
2. **Innovative incentives** can be very shallow (trivial) for example decrease price to 15 crowns, change the colour of the product.
3. Management should decide which incentives will the company follow and choose the **innovation topics.**
4. The incentives are used as a starting point for generation of **innovation specification**.
5. Specification is followed by **discussion**. Discussion is critical assessment of the specification.
6. **Feasibility study** is worked out to judge the feasibility of the innovations from the financial point of view, technical feasibility and market opportunities

7. When the feasibility study is finalized, the management has to decide, it means to choose the innovation which fits the best the strategy of the company.
8. Than processing of the project, realization of innovation and innovation work evaluation are provided.

10.6.2 Some rules of Innovation management

The income of innovation implementation has to be higher than the costs. In the most innovative companies, there is established one person to take care of these ideas. The problem is when the innovation manager is not able to communicate creative ideas with others and this communication is not supported by the company. The innovation ideas have to be filed.

The innovation to become successful has to satisfy further conditions:

- They have to meet need of society – there must be strong feeling to need something new – alternative resources in automobile industry
- Existence of social resources – there is free capital, workers, materials and so on.
- Ethics of the society must be positive to such a new innovation.

Innovation cycle is shorter than life cycle of the innovation. Even if the innovation is still produced there can be already place other innovation on the market.

10.7 Sources of innovation

The company has to know its customers. It is necessary to pick up all the ideas of the customers. Before starting with innovation it is possible to submit to customers the proposal of new product – picture or model and to ask them if they would like it, if they would prefer it in comparison with other competitive products – Customer test of new product concept.

Internal sources of Innovation

- Own research and development
- Technical departments – projection, technology, construction
- production
- Marketing and selling
- Logistics (purchasing and supply)
- Servicing
- Owners

External sources of Innovation

- Customers
- Suppliers
- Competition
- Consultants
- Universities and other research institution
- Expert publication

- Internet
- Exhibitions
- Investors

10.8 Innovation Environment in the CR

Weaknesses

- Low number of students studying technical studies and science
- Lower support of innovation by national institutions
- Low number of innovative companies
- low support of spin-off firms
- Low emphasis on patents
- Bad experience with realization of research results in practice
- Low volume of risky capital
- Absence of the innovation law
- insufficient innovation infrastructure

Strengths

- Tradition of industrial production and traditional innovative potential of workers
- Growing interest of Universities to cooperate with industrial companies
- Development of science and technology parks
- Programmes supported by government
- Interest of the public in innovation issue

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11 MULTISTAGE DECISION-MAKING

11.1 What is decision making?

Decision making is the cognitive process leading to the selection of a course of action among variations. Every decision making process produces a final choice. It can be an action or an opinion. It begins when we need to do something but know not what. Therefore, decision making is a reasoning process which can be rational or irrational, can be based on explicit assumptions or tacit assumptions.

Why we need decision analysis?

The usage of decision-making methods increase the probability of a right decision in a managerial environment , which is full of uncertainty, where all element that influence the result are given only as numbers of probability or are not given at all.

Decision making in business and management:

Several decision making models or practices for business include:

- SWOT Analysis - Evaluation by the decision making individual or organization of Strengths, Weaknesses, Opportunities and Threats with respect to desired end state or objective.
- Buyer decision processes - transaction before, during, and after a purchase
- Corporate finance:
- The investment decision
- The financing decision
- Cost-benefit analysis - process of weighing the total expected costs vs. the total expected benefits
- Decision trees
- Grid Analysis - analysis done by comparing the weighted averages of ranked criteria to options. A way of comparing both objective and subjective data.
- Linear programming - optimization problems in which the objective function and the constraints are all linear
- Min-max criterion
- Model (economics)- theoretical construct of economic processes of variables and their relationships
- Monte Carlo method - class of computational algorithms for simulating systems
- Paired Comparison Analysis - paired choice analysis
- Pareto Analysis - selection of a limited of number of tasks that produce significant overall effect
- Strategic planning process - applying the objectives, SWOTs, strategies, programs process

Decision Tree

The most decision-making problems have following feature: the decision made now strongly influences all decisions that will be made in future. This means that when we are deciding about recent problem we need to consider all future decisions that we will have to make. These complex decision-making is called multistage decision-making and it occurres mainly in environment of risk or uncertainty. Decision trees can illustrate these multistage decision-making problems.

Let's have a look on a practical example of the usage of multistage decision making. The Xanadu Traders Example and theory intermissions were assumed from Craig. W. Kirkwood's *Decision Tree Primer* (2002).

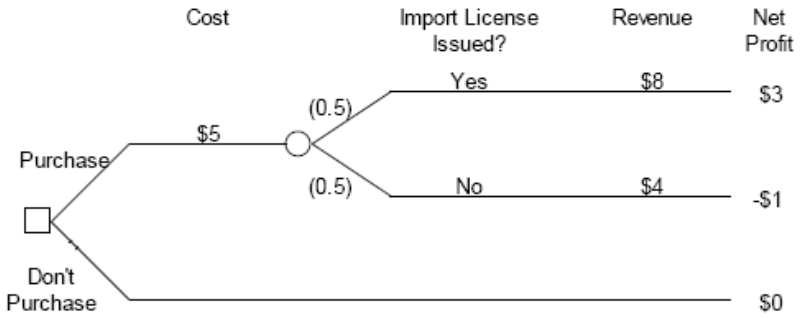
Xanadu Traders

Xanadu Traders, a privately held U.S. metals broker, has acquired an option to purchase one million kilograms of partially refined molyzirconium ore from the Zeldavian government for $5.00 per kilogram. Molyzirconium can be processed into several different products which are used in semiconductor manufacturing, and George Xanadu, the owner of Xanadu Traders, estimates that he would be able to sell the ore for $8.00 per kilogram after importing it. However, the U.S. government is currently negotiating with Zeldavia over alleged "dumping" of certain manufactured goods which that country exports to the United States. As part of these negotiations, the U.S. government has threatened to ban the import from Zeldavia of a class of materials that includes molyzirconium. If the U.S. government refuses to issue an import license for the molyzirconium after Xanadu has purchased it, then Xanadu will have to pay a penalty of $1.00 per kilogram to the Zeldavian government to annul the purchase of the molyzirconium.

Xanadu has used the services of Daniel A. Analyst, a decision analyst, to help in making decisions of this type in the past, and George Xanadu calls on him to assist with this analysis. From prior analyses, George Xanadu is well-versed in decision analysis terminology, and he is able to use decision analysis terms in his discussion with Analyst.

Analyst: *As I understand it, you can buy the one million kilograms of molyzirconium ore for $5.00 a kilogram and sell it for $8.00, which gives a profit of ($8.00 - $5.00) x 1.000.000 = $3.000.000. However, there is some chance that you cannot obtain an import license, in which case you will have to pay $1.00 per kilogram to annul the purchase contract. In that case, you will not have to actually take the molyzirconium and pay Zeldavia for it, but you will lose $1.00 x 1.000.000 = $1.000.000 due to the cost of annulling the contract.*

Figure 2 Decision tree - basic



Xanadu: *Actually, "some chance" may be an understatement. The internal politics of Zeldavia make it hard for their government to agree to stop selling their manufactured goods at very low prices here in the United States. The chances are only fifty-fifity that I will be able to obtain the import license. As you know, Xanadu Traders is not a very large company. The $1.000.000 loss would be serious, although certainly not fatal. On the other hand, making $3.000.000 would help the balance sheet....*

11.2 Theory intermission n.1

A diagram of a decision, as illustrated in Figure 1 is called a **decision tree**. This diagram is read from left to right. The leftmost node in a decision tree is called the **root node**. In Figure 2, this is a small square called a **decision node**. The branches emanating to the right from a decision node represent the set of **decision alternatives** that are available. One, and only one, of these alternatives can be selected. The small circles in the tree are called **chance nodes**. The number shown in parentheses on each branch of a chance node is the **probability** that the outcome shown on that branch will occur at the chance node. The right end of each path through the tree is called an **endpoint**, and each endpoint represents the final outcome of following a path from the root node of the decision tree to that endpoint.

In order to decide which alternative to select in a decision problem, we need a decision criterion; that is, a rule for making a decision. **Expected value (EV)** is a criterion for making a decision that takes into account both the possible outcomes for each decision alternative and the probability that each outcome will occur. In mathematics EV is also known as Bayes rule.

Mathematical notation:

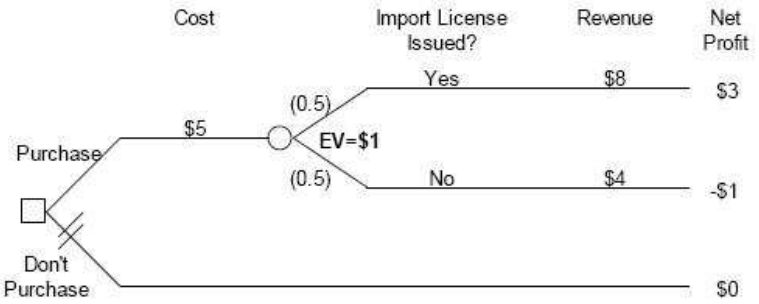
$$\overline{C}_i = \sum_{j=1}^{n} C_{ij} \cdot S_j$$

The expected value for an uncertain alternative is calculated by multiplying each possible outcome (C*ij*) of the uncertain alternative by its probability (*Sj*), and summing the results. The expected value decision criterion selects the alternative that has the best expected value. In situations involving profits where „more is better," the alternative with the highest expected value is best, and in situations involving costs, where „less is better" the alternative with the lowest expected value is best.

Xanadu traders

Let's add Expected value to Figure 2.

Figure 3 Decision tree – Expected value



There are two possible alternatives, purchase the molyzirconium or don't purchase it. If the molyzirconium is purchased, then there is uncertainty about whether the import license will be issued or not. The decision tree is shown in Figure 3. Starting from the root node for this tree, it costs $5 million to purchase the molyzirconium, and if the import license is issued, then the molyzirconium will be sold for $8 million, yielding a net profit of $3 million. On the other hand, if the import license is not issued then Xanadu will recover $4 million of the $5 million that it invested, but will lose the other $1 million due to the cost of annulling the contract. The endpoint net profits are shown in millions of dollars, and the expected value for the "purchase" alternative is 0.5 x $3 + 0.5 x(- $1) = $1, in millions of dollars. Therefore, if expected value is used as the decision criterion, then the preferred alternative is to purchase the molyzirconium.

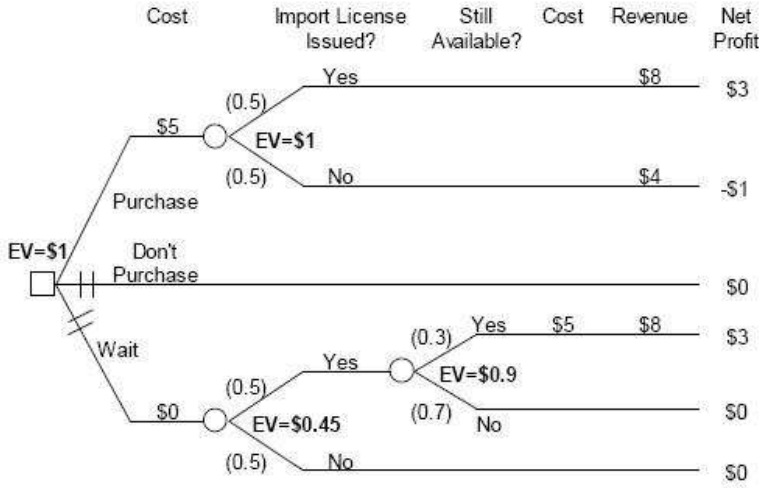
11.3 Dependent uncertainties

We continue to follow the discussion between Daniel Analyst and George Xanadu.

Analyst: *Maybe there is a way to reduce the risk. As I understand it, the reason you need to make a quick decision is that Zeldavia has also offered this deal to other brokers, and one of them may take it before you do. Is that really very likely? Perhaps you can apply for the import license and wait until you know whether it is approved before closing the deal with Zeldavia.*

Xanadu: *That's not very likely. Some of those brokers are pretty big operators, and dropping $1,000,000 wouldn't make them lose any sleep. I'd say there is a 0.70 probability that someone else will take Zeldavia's offer if I wait until the import license comes through. Of course, it doesn't cost anything to apply for an import license, so maybe it is worth waiting to see what happens...*

Figure 4 Decision tree - Dependent uncertainties



The process of determining the expected value for this alternative involves two stages of calculation. In particular, it is necessary to start at the right side of the decision tree, and carry out successive calculations working toward the root node of the tree. Specifically, first determine the expected value for the alternative assuming that the import license is issued,

and then use this result to calculate the expected value for the „wait" alternative prior to learning whether the import license is issued.

Examine Figure 4 to see how this calculation process works. As this figure shows, if the import license is issued, then there is a 0.3 probability that the molyzirconium will still be available. In this case, Xanadu will pay $5 million for the molyzirconium, and sell it for $8 million realizing $3 million in net profit. If the molyzirconium is not still available, then Xanadu will not have to pay anything and will realize no net profit. Thus, the expected value for the situation after the uncertainty about the import license has been resolved is 0.3 x $3+0.7x $0 = $0.9. This expected value is shown next to the lower right chance node on the decision tree in Figure 3. This $0.9 million is the value of the alternative once the result of the import license application is known. Hence, this value should be used in the further expected value calculation needed to determine the overall value of the "wait" alternative. Thus, the expected value for the "wait" alternative is given by 0.5 x $0.9 + 0.5 x $0 = $0.45. This expected value is shown next to the lower left chance node on the decision tree in Figure 4. Since the expected value for the "wait" alternative is less than the $1 million expected value for purchasing the molyzirconium right now, this alternative is less preferred than purchasing the molyzirconium right now. Xanadu should not wait, assuming that expected value is used as the decision criterion.

11.4 Theory intermission n.2 - Risk attitude

An attitude of decider to risk is very important when deciding in the terms of uncertainty or risky environment. The decider could be risk averse, risk seeking or risk neutral.

Definitions:

Risk averse decider: always prefers not risky alternative to a risky alternative

Risk seeking decider: always prefers risky alternative to not risky alternative

Risk neutral decider: doesn't give priority neither to risky nor to not risky alternative – they are indifferent for him.

Risk attitude is affected by many factors, for example by personal experience, by history or by the environment in which the decision is taken.

Certainty equivalent

The value of a risky alternative to the decision maker may be different than the expected value of the alternative because of the risk that the alternative poses of serious losses.

An equivalent term for certainty equivalent is selling price.

Suppose that through a previous business deal you have come into possession of an uncertain alternative that has equal chances of yielding a profit of $10,000 or a loss of $5,000. The expected value for this alternative is 0.5 x $10.000 + 0.5 x (-$5.000) = $2.500. However, suppose that you decide that you would be willing to sell this alternative for $500 or more. Then, your certainty equivalent for the alternative is $500.

If your certainty equivalent for alternatives specified in terms of profits is less than the expected profit for an alternative, you are said to be **risk averse** with respect to this alternative. If your certainty equivalent is equal to the expected profit for the alternative, then you are said to be **risk neutral**. Finally, if your certainty equivalent is greater than the expected profit for the alternative, you are said to be **risk seeking**. These definitions are reversed for an uncertain alternative specified in terms of losses. That is, you are risk averse if

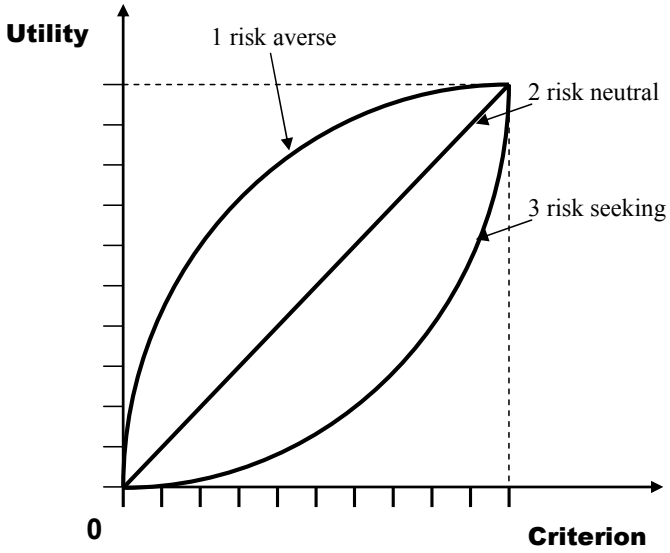
your certainty equivalent is greater than the expected loss and risk seeking if your certainty equivalent is less than the expected loss.

If you are risk seeking with respect to the various decisions that you make, then over the long run you will probably go broke because on average you will not recover as much from the alternatives as you are willing to pay for them. This is not typical behavior in business, and therefore **we will not consider risk seeking behavior further**. (Note that there are situations where a risk seeking attitude may make sense in business. For example, suppose your business is in such serious trouble that it is going to go broke anyway unless you get lucky. You might as well "pray for rain" in such a situation and go against the odds. However, this is not a typical business situation.)

Utility functions

Certainty equivalents can be determined using a modification of the procedure that we use to determine expected values. This modification involves introducing a new function, called the **utility function.**

A utility function translates outcomes into numbers such that the expected value of the utility numbers can be used to calculate certainty equivalents for alternatives in a manner that is consistent with a decision maker's attitude toward risk taking.



Both theory and practical experience have shown that it is often appropriate to use a particular form of utility function called the **exponential**. For risk averse decision makers, in decisions involving profits (more of the evaluation measure is better), this function has the form:

$u(x) = 1 - e^{-x/R}$, $R>0$,

where u(x) represents the **utility function**, x is the evaluation measure, R is a constant called the **risk tolerance**, and e represents the **exponential function**. (The exponential function is often designated by "exp" on a financial calculator or in a spreadsheet program.)

In situations involving costs where less of the evaluation measure is preferred, the exponential utility function has the form:

$u(x) = 1 - e^{x/R}$, $R>0$.

and in this case larger values of x have lower utilities.

R represents the degree of **risk aversion**. As R becomes larger, the utility function displays less risk aversion.

The following procedure can be used to determine the approximate value of R for a particular decision maker: Ask the decision maker to consider a hypothetical alternative that has equal chances of yielding a profit of r_o or a loss of $r_o/2$. Then ask the decision maker to specify the value of r_o for which he or she would be indifferent between receiving or not receiving the alternative. When the decision maker has adjusted r_o in this way, then R is approximately equal to r_o.

Xanadu Traders

Analyst: *I understand from my previous work with you that financial risks of the size involved in this deal would be uncomfortable but would not sink Xanadu Traders. If you could, you would buy some insurance against the potential loss, but you are not going to avoid the deal just because of the possible loss.*

Xanadu: *That's correct*.

Analyst: *I recall that you told me in the past that you would be just willing to accept a deal with a fifty-fifty chance of making $2,000,000 or losing $1,000,000. However, if the upside were $2,100,000 and the downside were $1,050,000, you would not take the deal.*

Xanadu: *That's correct*.

First it is necessary to determine Xanadu's utility function. This can be done using the information in the dialog. Using the concept of the risk tolerance, r_o = $2 million when an uncertain alternative with equal chances of yielding a profit of r_o or a loss of $r_o/2$ has a certainty equivalent of 0. Hence, R is approximately equal to $2 million. Therefore, Xanadu's utility function is

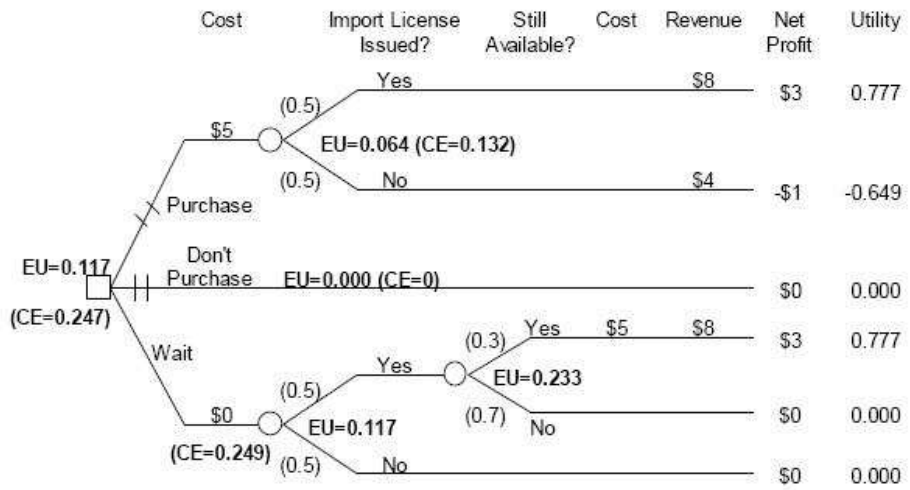
$u(x) = 1 - e^{-x/2}$,

where x is in millions of dollars.

Using a spreadsheet or calculator, it is easy to find the utilities for each of the endpoint values in the Figure 4, and these are shown in Figure 4. In this figure, the utility numbers shown at the right side of the tree have been calculated using an exponential utility function with R = $2 million. For example, the topmost utility number is given by $u(3) = 1 - e^{-3/2} = 0{,}777$.

Expected utility numbers are calculated in the same manner as expected values. For example, the expected utility for the topmost chance node is given by:
EU = 0,5 x (0,777) + 0,5 x (-0,649) = 0,064. This is the expected utility for the “purchase” alternative, and in a similar manner the expected utilities can be found for the “don't purchase” alternative (EU = - 1,000) and the “wait" alternative (EU = 0.117).

Figure 5 Decision tree



11.5 Theory intermission n.3 - Certainty equivalent for an Exponential Utility Function

For an exponential utility function involving profits, it can be shown that the certainty equivalent is equal to:

CE = - R x ln(1 - EU),

where **CE** is the **certainty equivalent**, EU is the expected utility, R is the risk tolerance, and **ln** is the natural logarithm. Thus, the certainty equivalent for the “purchase" alternative in Figure 4 is given by CE = -2 x ln[1 – 0.064] = $0.132 million. The certainty equivalents are shown for all three alternatives in Figure 5, and larger certainty equivalents are more preferred.

In situations involving costs, where less of an evaluation measure is preferred to more, then the certainty equivalent is equal to

CE = R x ln(1 - EU),

and alternatives with smaller certainty equivalents are more preferred in this case.

Since a certainty equivalent is the certain amount that is equally preferred to an alternative, the alternative with the greatest certainty equivalent is most preferred for situations where more of an evaluation measure is preferred to less. Therefore, taking Xanadu's risk attitude into account, the “purchase” alternative is no longer the preferred alternative, as it was with the expected value analysis.

The “wait” alternative is now most preferred since it has a certainty equivalent of $0.249 million, and the “purchase” alternative is now the second most preferred alternative with a certainty equivalent of $0.132 million. The “don't purchase” alternative continues to be least preferred with a certainty equivalent of $0

The following table shows EU and CE comparison:

Alternative	EV	CE	Difference
Purchase	1,000	0,132	0,868
Don’t purchase	0,000	0,000	0,000
Wait	0,450	0,249	0,201

This demonstrates that the three alternatives have differing risks. There is no difference between the expected value and the certainty equivalent for the “don't purchase” alternative since there is no uncertainty with this alternative. The difference between the expected value and certainty equivalent is greatest for the “purchase” alternative indicating that it has the largest risk. This risk reduces the value of this alternative enough for Xanadu that it is no longer the most preferred alternative. The “wait” alternative also has a lower certainty equivalent than its expected value since this alternative has some risk. However, this risk is substantially lower than the risk for the “purchase" alternative, and hence this becomes the preferred alternative when Xanadu's risk attitude is taken into account.

11.6 Theory intermission n.4 - The value of information

Perfect information removes all uncertainty about the outcomes for the decision alternatives. While there is rarely an option in real-world business decisions that would actually remove all uncertainty, the value of perfect information provides an easily calculated benchmark about the worth of collecting additional information. If all the available options for collecting information cost more than the value of perfect information, then these options do not need to be analyzed in further detail. This is because imperfect information cannot be worth more than perfect information.

No source of information can be worth more than the value of perfect information.

Xanadu traders

Suppose a source of perfect information existed that would let Xanadu know if the import license would be issued.

How much money would it be worth to obtain perfect information about issuance of the import license?

Figure 6 Decision tree with perfect information

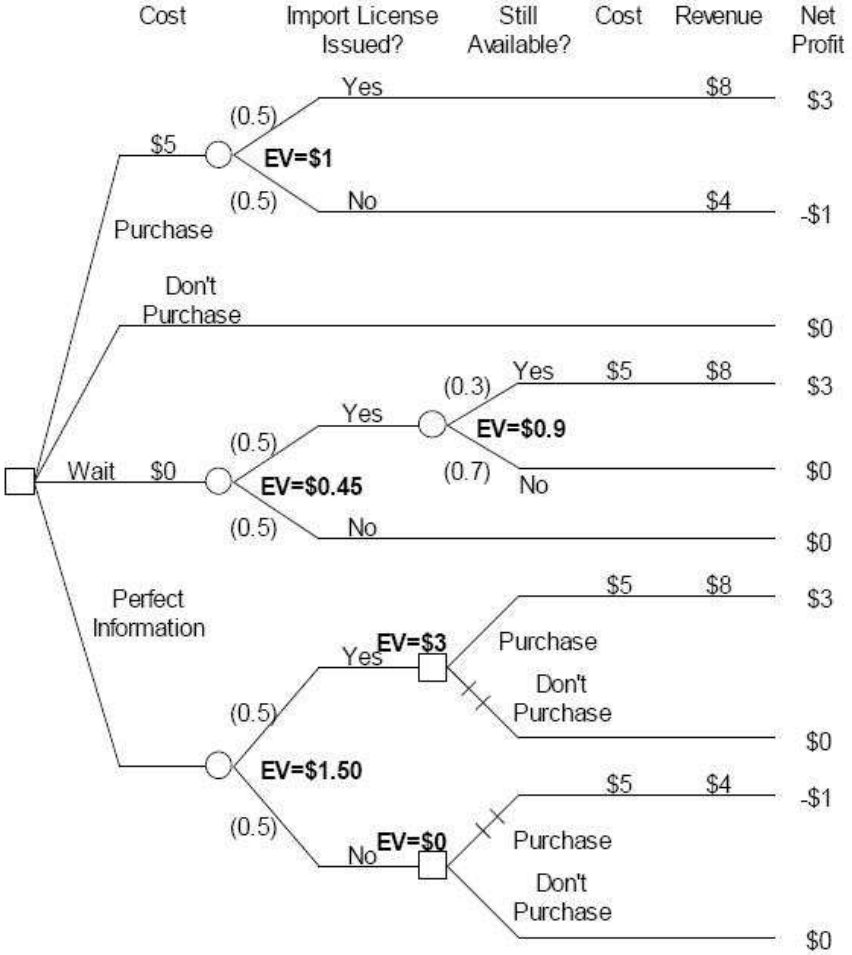


Figure 6 shows a decision tree with this (hypothetical) source of perfect information. The topmost three branches of the root node for this decision tree are the same as the corresponding branches in Figure 4. The lowest branch of the root node is the perfect information alternative. At a quick glance, the perfect information may appear to be similar to the "wait" alternative, since for both of these alternatives George Xanadu learns whether the license will be issued before he purchases the molyzirconium. However, with the perfect information alternative, information is available immediately about whether the license will be issued. Therefore, with the perfect information alternative, Xanadu does not run the risk that a competitor will purchase the molyzirconium before he learns whether the license will be issued.

Since the probability is 0.5 that the license will be issued, this is the probability that the perfect information source will report that the license will be issued. After learning this perfect information, Xanadu then can decide whether or not to purchase the molyzirconium.

Of course, if Xanadu learns that the license will be issued, then he purchases the molyzirconium, and if Xanadu learns that the license will not be issued, then he does not purchase the molyzirconium. By the standard calculation procedure, it is determined that the perfect information alternative has an expected value of $1.5 million, and this is shown on the Figure 6 decision tree. Since the best alternative without perfect information ("purchase") has an expected value of $1 million, the value of perfect information is $1.5 - $1.0 = $0.5 million. Therefore, this places an upper limit on how much it is worth paying for any information about whether the license will be issued. It cannot be worth paying more than $0.5 million for such information, since $0.5 million if the value of perfect information.

The value of imperfect information

The calculation procedure is more complicated for determining the value of **imperfect information.** This procedure is illustrated by the following example.

Xanadu Traders.

Now consider a potential source of imperfect information in the Xanadu Traders case last. We continue with the discussion between Daniel Analyst and George Xanadu.

Analyst: *Is there any way of obtaining additional information about the chances of obtaining a license other than waiting and seeing what happens? Perhaps there is something that doesn't take as long as waiting for the import approval.*

Xanadu: *Well, there's always John S. Lofton. He is a Washington-based business consultant with good connections in the import licensing bureaucracy. For a fee, he will consult his contacts and see if they think the license will be granted. Of course, his assessment that the license will come through is no guarantee. If somebody in Congress starts screaming, they might shut down imports from Zeldavia. They are really upset about this in the Industrial Belt, and Congress is starting to take some heat. On the other hand, even if Lofton thinks the license won't come through, he might be wrong. He has a pretty good record on calling these things, but not perfect. And he charges a lot for making a few telephone calls.*

Analyst: *How good has he been?*

Xanadu: *He's done some assessments for me, as well as other people I know. I'd say in cases where the import license was ultimately granted, he called it right 90% of the time. However, he hasn't been so good on the license requests that were turned down. In those cases, he only called it right 60% of the time.*

Analyst: *You commented earlier that he was expensive. How much would he charge?*

Xanadu: *This is a pretty standard job for him. His fee for this type of service is $10,000.*

Should Xanadu hire Lofton, and if so, what is the maximum amount that he should pay Lofton for his services?

We know from our earlier analysis of the value of perfect information that the maximum amount that it could possibly be worth to purchases Lofton's services is $0.5 million. Since he would only charge $10,000 it is possible that it would be worth purchasing his services. However, it is clear from the discussion above that Lofton often makes mistakes, and perhaps Xanadu would not learn enough to warrant paying Lofton the $10,000.

In order to complete the analysis, we need the probabilities for the two branches labeled "predict import license issued?". Additionally, we need the probabilities for the two sets of branches under the label "import license issued?" Unfortunately, as often happens in real problems, the information presented about Lofton's accuracy in his predictions is not in a form that directly provides the required probabilities.

Figure 7 Decision tree - Accuracy of consultant

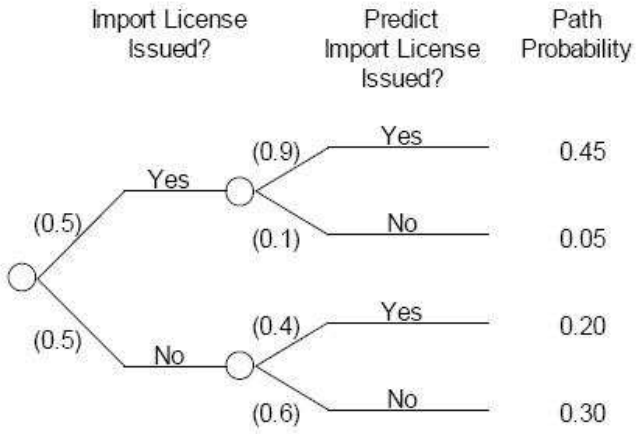
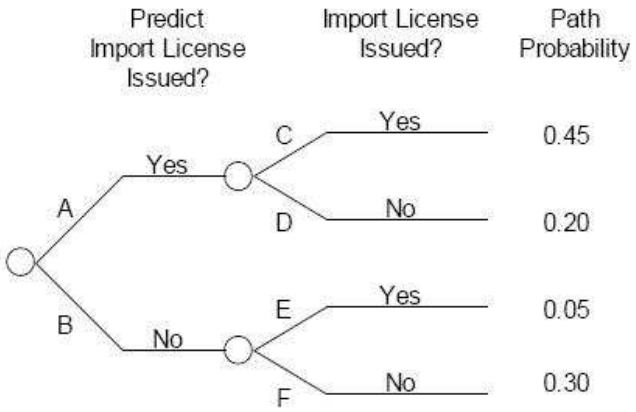


Figure 7 shows in probability tree form the information that is given above about the accuracy of Lofton. The root node on the left side of the tree shows the probabilities for "import license issued?" specified in earlier discussions of this decision problem. The two chance nodes on the right side of the tree show the probabilities that Lofton will call the licensing decision right, based on the conversation between Daniel Analyst and George Xanadu.

Comparing Figure 6 with Figure 8 shows that the probabilities in Figure 7 are "backwards" from what is needed to assign probabilities to the branches of the chance nodes. That is, the probability of license approval is known, as well as the probability of Lofton's different predictions, given the actual situation regarding license approval. However, the decision tree requires the probability of Lofton's different predictions and the probability of license approval given Lofton's predictions. This is shown in Figure 8, where the probabilities marked A, B, C, D, E, and F are required. If these probabilities were known, the expected value could be determined for the alternative of hiring Lofton.

Figure 8 - Decision tree – Probabilities needed



To proceed with the analysis of the alternative of hiring Lofton, we need to **„flip“** the probabilities from the tree in Figure 6 to determine the probabilities needed in Figure 8.

Tree flipping is the process of calculating the probabilities for a probability tree with the order of the chance nodes reversed.

The key to doing this is to recognize that the paths from the root node to the endpoints are the same in the Figure 6 and Figure 7 trees, but they are arranged in a different order. The probabilities for these paths can be determined in Figure 4 by following the multiplication rule for probabilities. Namely, the probabilities on the branches along a path are multiplied to determine the probability of following that path. For example, the probability of following the topmost path in Figure 6 is determined as 0.5 x 0.9 = 0.45.

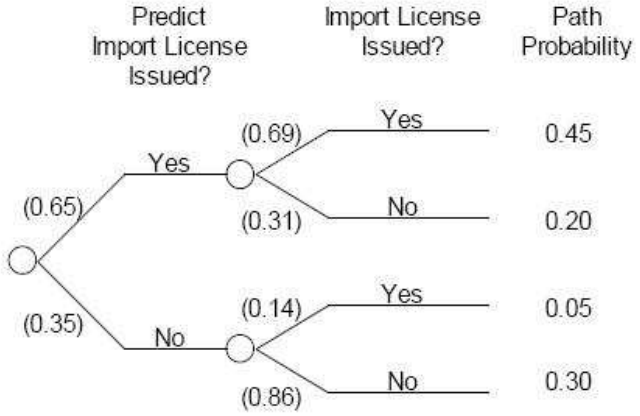
A **path probability** is the probability of a particular sequence of branches from the root node to a specified endpoint in a probability tree. A path probability is determined by multiplying the probabilities on the branches included in the path.

Once the probabilities are determined for each path in Figure 8, they can be transferred to Figure 5, as shown at the right side of Figure 8. (The topmost and bottommost probabilities are transferred directly from the Figure 6 tree to the Figure 8 tree, and the other two path probabilities need to be reversed when they are transferred.)

Once the path probabilities are known, probabilities A and B can be determined. Probability A is the probability of a „yes“ prediction regarding license approval and this occurs only on the two topmost paths in the Figure 8 tree. Therefore, probability A is equal to the sum of the probabilities for the two topmost paths. That is, A = 0.45 + 0.20 = 0.65. Similarly, probability B is equal to the sum of the probabilities for the two bottommost paths. That is, B = 0.05 + 0.30 = 0.35.

Once A and B are known, then C, D, E, and F can be determined using the multiplication rule. Thus, A x C = 0.45, or C = 0.45/A = 0.45/0.65 = 0.69 (rounded). Similarly, D = 0.20/A = 0.20/0.65 = 0.31 (rounded), E = 0:05/B =0.05/0.35 = 0.14 (rounded), and F = 0.30/B = 0.30/0.35 = 0.86 (rounded).

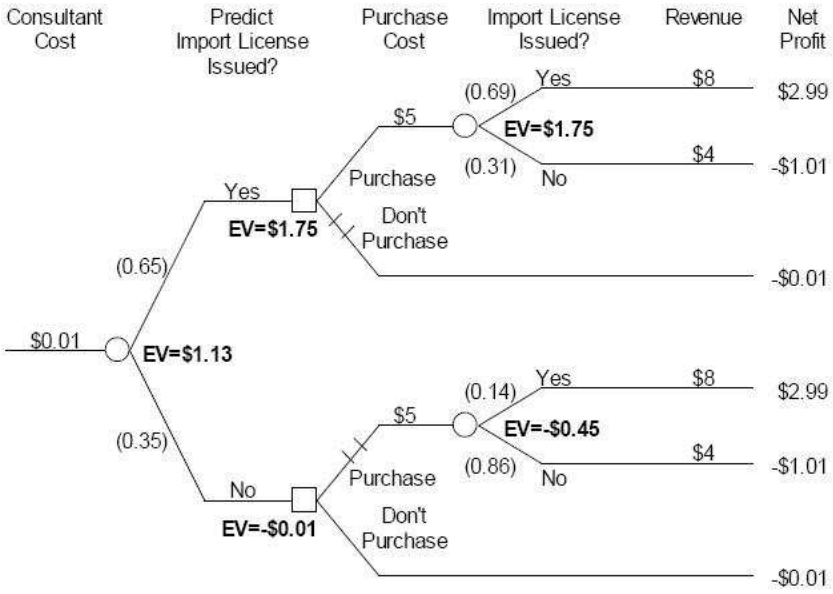
Figure 9 Decision tree probabilities



The probabilities can now be transferred to the final tree diagram and the expected value can be calculated for the alternative of hiring Lofton by using the same process as in earlier decision trees. The result is shown in Figure 9, where the expected value for this alternative is

$1.13 million. Figure 10 shows that the best alternative without hiring Lofton only has an expected value of $1 million, and so it is worth hiring Lofton. In fact, it is worth considerably more than $10,000 to hire Lofton, since the alternative with hiring him for $10 000 is worth $1.13 million. In fact, it is worth it to hire Lofton as long as he costs less than $130 000 + $10 000 = $140 000.

Figure 10 Hire consultant alternative with Expected Values



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12 THE DEVELOPMENT OF FDI IN THE CZECH REPUBLIC

The attitude towards inward foreign direct investment (FDI) has changed considerably over the last couple of decades, as most countries have liberalised their policies to attract all kinds of investment. This paper aims to give a short overview of the development of foreign direct investment in the Czech Republic since 1993. The article is organised as follows. Short theoretical introduction is followed by the analysis of trends in the 90´s and explanation of the steps taken by the government towards FDI. Activities of the promotion agency "CzechInvest" are mentioned as well. Final part gives the list details of the incentive scheme.

12.1 Foreign direct investment

To understand the focus of the paper, several definitions should be given at the very beginning.

Foreign direct investment (FDI) is defined as a long term investment by a *foreign direct investor* in an enterprise resident in an economy other than that in which the foreign direct investor is based. The FDI relationship, consists of a parent enterprise and a foreign affiliate which together form a multinational corporation (see below). In order to qualify as FDI the investment must afford the parent enterprise control over its foreign affiliate. The UN defines control in this case as owning 10% or more of the ordinary shares or voting power of an incorporated firm or its equivalent for an unincorporated firm.

A *multinational corporation (MNC)* is a corporation or enterprise that manages production establishments or delivers services in at least two countries. Multinationals have played an important role in globalization. Given their international reach and mobility, prospective countries, and sometimes regions within countries, must compete with each other to have MNCs locate their facilities within. To compete, countries and regional political districts usually offer incentives to MNCs such as tax breaks, pledges of governmental assistance or improved infrastructure.

12.2 Types of FDI

Further, the readers should familiarise themselves with the most usual types of FDI that occur in modern economies.

Greenfield investment - direct investment in new facilities or the expansion of existing facilities. Greenfield investments are the primary target of a host nation's promotional efforts because they create new production capacity and jobs, transfer technology and know-how, and can lead to linkages to the global marketplace. However, it often does this by crowding out local industry; multinationals are able to produce goods more cheaply (because of advanced technology and efficient processes) and uses up resources (labour, intermediate goods, etc). Another downside of greenfield investment is that profits from production do not feed back into the local economy, but instead to the multinational's home economy. This is in contrast to local industries whose profits flow back into the domestic economy to promote growth.

Mergers and acquisitions occur when a transfer of existing assets from local firms to foreign firms takes place, this is the primary type of FDI. Cross-border mergers occur when the assets and operation of firms from different countries are combined to establish a new legal entity. Cross-border acquisitions occur when the control of assets and operations is transferred from

a local to a foreign company, with the local company becoming an affiliate of the foreign company. Unlike greenfield investment, acquisitions provide no long term benefits to the local economy - in most deals the owners of the local firm are paid in stock from the acquiring firm, meaning that the money from the sale could never reach the local economy.

Horizontal Foreign Direct Investment: is an investment in the same industry abroad as a firm operates in at home.

Vertical Foreign Direct Investment: takes either the "backward" form (i.e. an industry abroad provides inputs for a firm's domestic production process) or "forward" form where an industry abroad sells the outputs of a firm's domestic production processes.

12.3 Involvement in international production

After the definition of the FDI and key players in the capital flows, we should explain, why business entities involve international production. It is the outcome of a process in which ownership, internalisation and localisation advantages work together. The ownership advantages are firm specific in the sense that the firm has control over them. They embrace patents, know-how, labour skills and other forms of superior production technology, control over markets and trade monopolies, scale advantages, managerial capabilities, etc. These factors determine the firm's competitive position in relation to other firms. The internalisation advantages arise from the existence of market imperfections, nature of markets, their weaknesses and limitations and organisation of firms. Location advantages are those associated to the availability of inputs for all firms established in a certain country. They comprise natural resources, location, cultural and political environment, factor prices, transport costs, but also government policies such as trade barriers (e.g. quotas, tariffs).

In order to compete successfully in a foreign market a firm must possess some assets in knowledge, technology, organisation as well as managerial and marketing skills. A firm blessed with such assets enjoys several possible ways to claim the rents that they will yield in foreign markets, including FDI, subsidiary production or joint ventures, licensing, franchising, management contracts, marketing contracts, and turnkey contracts.

12.4 Why do firms invest abroad?

Although no single theory could explain the existence of foreign direct investment, there is a strong consensus in the literature, why multinationals invest in specific locations.

MNCs are mainly attracted by strong economic fundamentals in the host economies. The most important ones are market size and real income levels, skill levels in the host economy, the availability of infrastructure and other resource that facilitates efficient specialisation of production, trade policies, and political and macroeconomic stability. The relative importance of the different fundamentals varies depending on the type of investment. For instance, foreigners investing in the United States have mainly been attracted by the large market size, while multinationals investing in Singapore focus on the availability of skilled labour, good infrastructure and political and macroeconomic stability.

The location of FDI may also be influenced by various incentives offered by governments to attract multinationals. These incentives take a variety of forms. They include fiscal incentives such as lower taxes for foreign investors, financial incentives such as grants and subsidies to MNCs. This drive to lure investment often extends to the sub-national level, with different regional authorities pursuing their own strategies and assembling their own baskets of incentives to attract new investments.

12.5 Policies to Attract Foreign Direct Investment

There is keen competition among countries to attract foreign direct investment. There are many methods used by policymakers to attract FDI and their effectiveness. These approaches include:

Achieving political and economical stability - only a minority of businessmen is willing to put money at stake. Hence, established democratic principles and sustainable political development as well as government's macroeconomic framework designed to maintain long term economic stability helps to increase confidence. Large fluctuations of output, inflation and employment add to uncertainty of firms and should be avoided.

Improving the *regulatory environment* - regulation is understood as a set of legal restrictions imposed by government administrative agencies through rulemaking supported by a threat of a sanction or a fine. Common examples of regulation include attempts to control market entries, prices, wages, pollution effects, employment for certain people (usually for disadvantaged groups), standards of production for certain goods and services.

Decreasing red tape - red tape is a derisive term for excessive regulations that are considered redundant or bureaucratic and hinder or prevent business-making. Red tape generally includes the filling out of unnecessary paperwork, obtaining of unnecessary licenses, having multiple people or committees approve a decision, and various low-level rules that make conducting business slower and/or more difficult.

Providing targeted *fiscal incentives,* such as tax concessions, grants and specific subsidies - see below for the situation in the Czech Republic.

Enhancing domestic *infrastructure* - this term refers broadly to facilities and related operations providing basic services to individuals and businesses, such as transportation, water supply, energy supply, and waste removal. The level of infrastructure significantly influences the investors´ decisions to involve in the local economy. Non-existence or poor quality of transportation facilities (roads, highways, railroads, airports, shipping lines) prevents reliable supply of either raw material on input or finished goods on output. Equally, electricity, natural gas supply, coal delivery, water supply, sewers are essential for production. Other items can be taken into consideration, such as telephone service, radio and television broadcasts or postal systems. As managers of FDI enterprises often move in with their families, they are interested in things such as health care provision (including quality of hospitals) or school and education system.

Promoting *skills development* to meet investor needs and expectations - this encompasses any program that helps individuals to obtain skills necessary for employment. Investors are interested in the structure of the educational system (secondary education, vocational training, universities and colleges), continuing education schemes and retraining courses as well as the ability of educational institutions to stay in close touch with latest development of industry and develop skills and knowledge that are currently needed.

Establishing broad-reaching FDI *promotion agencies* - see the chapter focused on CzechInvest.

Engaging in *international governing arrangements* - this encompasses namely bilateral investment agreements. The Czech Republic is a member of the Multilateral Investment Guarantee Agency (MIGA), an international organization for protection of investment belonging to the World Bank-IMF group. To date, 70 countries have signed and ratified agreements with the Czech Republic. They include major investors: Australia, Austria, Belgium-Luxembourg, Bulgaria, Canada, China, Denmark, Finland, France, Germany,

Greece, Hungary, Israel, Indonesia, Italy, Jordan, Kazakhstan, Lebanon, North and South Korea, Mongolia, Norway, Paraguay, Poland, Russia, Slovakia, South Africa, Spain, Sweden, Switzerland, Thailand and the United Kingdom.

12.6 Investment climate in the Czech Republic

Maintaining an open investment climate has been a key element of the Czech Republic's transition from a Communist, centrally planned economy, to a functioning market economy. The Czech Republic's stable political and economic environment, its location on the doorstep of the European Union, its low cost structure and its well-qualified labour force make it an attractive destination for foreign investment. Prior to its accession to the European Union on May 1, 2004, the Czech government harmonized its laws and regulations with those of the European Union. The Czech economy has experienced moderate growth in the past few years. A rising government budget deficit could put continued growth at risk in the medium to long term, particularly if the current strong direct foreign investment flows slow down and European demand remains weak. The Czech government offers attractive incentives for foreign direct investment.

For several years, the Czech Republic has received more foreign direct investment per capita than any other country of the former Soviet bloc. Gross Domestic Product (GDP) has been growing recently (6.0% in 2005, and an estimated 5.6% in 2006), based largely on significant inflows of foreign investment and growing consumer demand supported in part by rising wages influenced by that investment. Foreign investment is boosting productivity, creating new jobs and raising wages and domestic consumption. It is also contributing to a trend of appreciation in the value of the local currency - the Czech crown (CZK). This phenomenon is helping to keep inflation low (1.9% in 2005, about 2.6% in 2006). Some unfinished elements in the transition, such as slow and uneven enforcement of contracts by the Czech courts, have affected investment, competitiveness, and company restructuring.

The government has harmonized most relevant laws with EU legislation and the so-called "acquis communautaire". This effort has involved positive reforms of the judicial system, civil administration, financial markets regulation, intellectual property rights protection, and many other areas important to investors. While there have been many success stories, a handful of investors have experienced problems, mainly in heavily regulated sectors of the economy such as the media and in enterprises where the state is a partner. Investors also complain about difficulties in enforcing contractual rights, including security interests. The slow pace of the court system is often compounded by judges' lack of familiarity with commercial cases. Needed reforms of the system for registering companies and the bankruptcy laws have been slow in coming. Concerns about corruption have been voiced by foreign and domestic businesses alike.

Equal Treatment is another component of the investment strategy. Legally, foreign and domestic investors are treated identically. Both are subject to the same tax codes and laws. The government does not differentiate between foreign investors from different countries, and does not screen foreign investment projects other than in the banking, insurance and defence sectors. Upon accession to the OECD, the Czech government agreed to meet (with a small number of exceptions) the OECD standards for equal treatment of foreign and domestic investors and limitations on special investment incentives.

All sectors of the Czech economy *are open* to foreign investment. Investors in banking, financial services, insurance and broadcast media sectors must meet certain licensing requirements. Some professions, such as architects, physicians, lawyers and tax advisors,

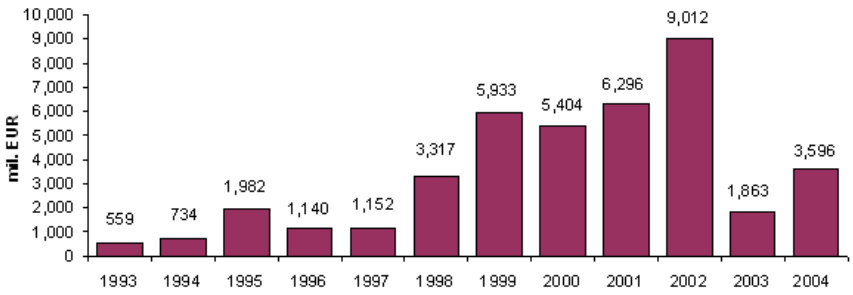
require memberships in the appropriate professional chamber. These licensing and membership requirements apply equally to foreign and domestic investors.

12.7 Inflow of FDI

The Czech Republic is one of the most successful transition economies in attracting foreign direct investment in the Central and East Europe. The introduction of investment incentives in 1998 has stimulated a massive inflow of FDI into both greenfield and brownfield projects and since 1993 more than EUR 46 billion in FDI has been recorded.

The privatisation of remaining government stakes in state-owned enterprises is expected to attract significant amounts of FDI and the major inflow of greenfield projects is expected to continue. The upswing in investment since 1998 is generally attributed to the introduction of investment incentives, as well as the Czech Republic's natural advantages.

Graph No. 13: Inflow of foreign direct investment to the Czech Republic (mil. Euro)



It is no surprise that major investors are coming from countries which are also the key trading partners and where there are traditional links. Hence the inflow is dominated by EU countries. However, oversees investors make a significant contribution too, i.e. Japan’s investments are raising since its successful entry in 1995 (Matshusita TV company in Plzeň - Bory). See below for FDI inflow to the Czech Republic by country.

Table No. 19

Country	1993 – 2005	
	mil. EUR	%
Germany	12.678	27
Netherlands	7.038	15
Austria	4.532	10
France	3.641	8
Spain	2.979	6
United States	2.855	6
Belgium	2.082	4
Switzerland	2.053	4
United Kingdom	1.832	4
Japan	847	2
Sweden	607	1
Denmark	471	1
Italy	453	1
Canada	283	1
Other	4.299	9
Total	46.649	100

Source: author

In addition to the overview of investors, brief information on sectors is provided. Traditionally, manufacturing and engineering has a long history in Bohemia and Moravia, hence the investors have been using the capacity and skills that already existed.

Table No. 20

	1993 - 2005	
	mil. EUR	%
Manufacturing		
Machinery and equipment	6.235	41
Basic metals and metal products	2.246	15
Refined petroleum and chemicals	2.088	14
Food and tobacco	1.663	11
Non-metallic products	1.395	9
Other	1.521	10
Total	15.147	100

Source: author

Table No. 21

	1993 - 2005	
Non-manufacturing		
Financial intermediation	8.466	27
Transport, storage, communications	7.854	25
Trade, hotels and restaurants	5.548	18
Real estate, business activities	4.750	15
Electricity, gas, and water supply	2.514	8
Other	2.370	8
Total	31.502	100

Source: author

12.8 CzechInvest

The main objective of CzechInvest is to advise and support new and existing entrepreneurs and foreign investors in the Czech Republic.

CzechInvest, the Investment and Business Development Agency, is an agency of the Ministry of Industry and Trade. Established in 1992, the agency contributes to attracting foreign investment and developing domestic companies through its services and development programmes. CzechInvest also promotes the Czech Republic abroad and acts as an intermediary between the EU and small and medium-sized enterprises in implementing structural funds in the Czech Republic.

The headquarters of CzechInvest is located in Prague and Czech worldwide representations are situated in Europe, USA, Southeast Asia and Japan.

CzechInvest is authorized to file applications for investment incentives at the competent governing bodies and prepares draft offers to grant investment incentives. Its task is also to provide potential investors with current data and information on business climate, investment environment and investment opportunities in the Czech Republic.

CzechInvest´s services (all CzechInvest´s services are free of charge):

- comprehensive services for investors
  - full information assistance
  - handling of investment incentives
  - business properties identification
  - supplier identification
  - aftercare services
- business infrastructure development
- access to structural funds

Throughout its existence CzechInvest has already taken part in 605 investment projects worth over 15 billion dollars in total. Owing to these investments, almost 125 thousand direct jobs are to be gradually created. For more information about CzechInvest, see its web page: http://www.czechinvest.org

12.9 Investment incentives

In 1998 the Czech government approved a package of incentives to attract investment. The incentives are offered to foreign and domestic firms that make a 100/200[35] mil. CZK manufacturing investment through a newly registered company. The package includes relief from corporate taxes for up to ten years, job-creation grants, re-training grants and opportunities to obtain low-cost land. A tax incentive is also available for expansion of an existing manufacturing investment.

Additional incentive package has been approved for operations with high-added value. Subsidies are offered for services centres for software development, customer service and repairs. More recently, subsidies to attract high technology and research and development centres have been added. Tax deductions for new machinery, real estate tax relief, job creation grants, re-training grants, simplified customs procedures and duty-free import of machinery are also available under certain conditions to qualified companies. The incentives were developed with the assistance of the EU in order to ensure their compatibility with EU rules on industrial subsidies. Therefore, there has been no change to the incentive program as a result of the Czech Republic's accession to the European Union.

12.10 Manufacturing

The investment incentives *Act No. 72/2000 Coll*., as amended, is valid as of 1st May 2004 and offers both Czech and foreign investors who are introducing new production or expanding existing production the following incentives. Here is the list of offered incentives.

Corporate tax relief:

- *Full tax* relief for 10 years (newly established companies)
- *Partial tax* relief for 10 years (expanding companies)

Job-creation grants:

- 200,000 CZK per employee in the district "I"[36]
- 100,000 CZK per employee in the district "II"

Training and re-training grants:

- 35% of the costs of the training in the regions where the unemployment rate is higher than the country's average (I, II, III) The total amount of the aforementioned investment incentives (with the exception of training and re-training) must *not exceed 50%* (65% in the case of SMEs) of the investment made into long-term tangible and intangible assets.

Zone I includes regions with the highest unemployment in the Czech Republic, i.e. namely the North Bohemia (e.g. Most) and North Moravia regions (Ostrava). It is followed by zone II (e.g. Svitavy or Sokolov) and zone III (Karlovy Vary, Břeclav).

12.11 Technology Centres and Business Support Services

The *Framework Programme* for support of Technology centres and Business Support Services has been valid since 17th February 2004. The government understands that it is

[35] based on the average unemployment rate
[36] see the map of districts which is available at CzechInvest webpage and examples below

important to bring not only simple manufacturing companies but also operators delivering high added value and utilising the skilled labour force available. The support is divided between the TCs and BSS.

Technology centres are innovation activities especially involved with periodic changes of products and technologies and are closely linked to production. *Business support services* are services with high added value and support employment of qualified experts in software development centres, expert solution centres, high-tech repair centres, shared services centres, centres of customer support (e.g. call – centres) and regional headquarters).

Forms of support

- *subsidy to business activity*
  - up to 50% of the eligible costs, which are:
    - investment into tangible and intangible fixed assets purchased within the first 5 years **or**
    - two-year salaries of employees employed within the first 3 years
- *subsidy for training and re-training*
  - subsidy up to 35% of the specific training costs and 60% of the general training costs; maximum subsidy of 100,000 CZK or 150,000 CZK for one job position depending on the number of job positions created.

Table No. 22

Eligibility criteria		
Type of project	technology centres software development centres expert solution centres headquarters	call centres high-tech repair centres shared services centres (except headquarters)
Minimum investment	15 mil. CZK	30 mil. CZK
Minimum number of newly created jobs	15	50
Amount recipient must finance with own resources	7.5 mil. CZK	15 mil. CZK
Linkage with production (relevant for TC only)	The results of the Technology Centre should be materialized in production	

Source: author

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Váš investiční portál

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