

## **MARKET STATEMENT OF THE CZECH REPUBLIC**

### **1. Growth of Czech economy in 2007 and position of the forestry sector in the economy of the Czech Republic**

The year of 2007 was the third successful year as to the growth of economy in the Czech Republic. The year demonstrated stability of economic development in the Czech Republic at a relatively high level. In 2007, the Czech Republic achieved an interannual increase of Gross Domestic Product (hereinafter GDP) in constant prices of 2000 by 6.5% (6.8% and 6.3% in 2006 and 2005, resp.). In 2007, total GDP of the Czech Republic in current prices surmounted once again the boundary of 3 milliard CZK reaching 3,557.7 milliard CZK. As compared with the average GDP achieved in this year by the countries of EU-27, the GDP growth in the Czech Republic was by 3.6 percentage points higher and as compared with the average GDP in the countries of EU-15, it was higher even by 3.9 percentage points. Compared with the Eurozone, resp. with the European Union with the GDP growth by 2.9%, the higher dynamics of economic growth in the Czech Republic resulted in the strengthening of the country's international economic position characterized by GDP per capita. Preliminary calculations of the Czech Statistical Office indicate that in terms of GDP indicator the Czech Republic reached as to purchasing power parity according to OECD in year 2007 already 82% of the EU-27 average. In 2006, it was 79.3% according to Eurostat. On the part of resources, the GDP growth in the Czech Republic was most contributed to by the manufacturing industry whose share in its formation was 27.5% (total industry 32%) but up to 56.5% in its growth. The share of agriculture incl. forestry and services was 2.8% and 58.8%, respectively. On the part of use, it was namely household expenditure for final consumption. GDP per worker increased by 4.6% and employment increased by 1.8%.

Relatively low and stable inflation kept up only at the beginning of the year. From the end of the 1<sup>st</sup> quarter of the year, consumer prices gradually grew with some mild oscillations. The growth became progressive from September and reached up to 5.4% of interannual increase. On the other hand, the strong Czech crown had a counter-inflation effect. Nevertheless, domestic inflation rose above the level of EU countries.

In 2007, the exchange rate of Czech crown (CZK) continued in its revaluation by 2% and 10.2% towards EUR and USD, respectively. In spite of these trends, exports of goods and services (14.5%) grew faster than imports (13.7%) the fact bearing evidence of a good export condition of the Czech economy but also of its considerably high import requirements. Balance of trade achieved a record surplus of 85 milliard CZK in current prices, the surplus being more than double as compared with year 2006. Building operations recorded an interannual increase by 6.7%. Main factors of development were construction of industrial and administrative centres and intensive house building that brought the highest growth of dwellings completed since 1991. Similarly as in the industry, building operations continued to experience the lack of required professions, which may become barrier to further growth.

As to the position of forestry in the economy of the Czech Republic, it cannot be expressed in numbers according to current statistical surveys. Neither can be expressed in numbers the share of manufacturing industry based on timber processing or wood-based products, i.e. timber, paper and pulp, printing and furniture-making industries in the formation of GDP. In the Czech Republic, it is possible to express in numbers the share in GDP formation only of the whole sector of agriculture in which forestry and other associated operations are included, or of the manufacturing industry in total. The reason is that current statistical surveys do not put together forestry and industries based on wood processing or wood products, as the European Union understands the term (Forest Based Industry – FBI). In the Czech Republic, forestry denotes only forest-related operations from logging and timber sales up to a range of other activities, and the issue of forest management falls under the Ministry of Agriculture of the Czech Republic – Section of Forestry. The issue of industries based on timber processing and wood products, i.e. timber industry, paper and pulp industry, printing industry and furniture-making industry falls under the Ministry of Industry and Trade.

In spite of this statistical drawback, the share of the whole forestry together with the industrial production based on timber processing and wood products (let us denote it as a wood-based production sector) in the development of the whole Czech economy (resp. on the GDP indicator) is not negligible. Not only is production of this sector necessary for individual industrial branches such as building industry, mining, transport and even for the population, but the sector as the only one manufactures a range of materials and products of environmental character. Thus, its produce does not threaten environment and life. The concerned products are made from renewable resources including energies. The products are recyclable and repeatedly usable for new, biologically degradable products. It is only this sector that has been entrusted these multidisciplinary competences at such an extent. Moreover, the raw material is renewable from domestic resources whose abundance is perspective for the country. Compared with other e.g. industrial branches, the sector employs the highest number of workers even in regions with not so extensive industrial production. It is also worth mentioning that from the end of privatization to the boom of automotive industry, the sector was the only branch of industry in the country's economy with positive annual balance of international trade.

In spite of the fact that the range of above mentioned, namely environmental advantages of the production of this sector is obvious, the sector's influence on the Czech economy is far from being satisfactory, and far from reaching the influence that it has on the economy of neighbouring countries, for instance in Germany and Austria. Although we fell less timber than Switzerland but more than Austria, Germany or France, these ecological wood and wood products are not fully used in the Czech Republic, their use in the country's economy being nearly three-times lower than e.g. in Austria. Of all products used in construction, the share of timber and wood products is estimated up to 70% in Finland, Sweden and Norway, some 60% in Canada and USA, and up to about 20% in Germany or Austria. In the Czech Republic, the estimate is only ca. 2%, perhaps somewhat more. Admittedly, there is an objective to enforce higher inputs of timber and wood-based products in the Czech economy, but the assignment seems hard to carry through. A similar situation we can see in the building industry where all efforts fail to enforce essentially higher production of wooden houses or houses with a higher share of timber in the construction of both all family houses and multi-storeyed houses, but also in the construction of industrial buildings. The construction of family houses or wooden houses in general allows for no comparison either with Austria or with Germany. The European Union should consider –namely for some new member countries- elaboration of

economic incentives in this sector that would increase pressure on enhanced competitiveness in the manufacture of environment friendly wood products and thus encourage the substitution of non-ecological and energy-demanding operations with ecological produce.

## **2. Measures adopted in the Czech Republic in the past 18 months, and/or measures linking up with the measures already in force :**

**a) energy produced from wood in forestry.** Within the framework of National Forestry Programme and by means of respective provisions and decrees issued by the Ministry of Agriculture, Ministry of Industry and Trade, and Ministry for the Environment the government of the Czech Republic resolves a key problem of how to contribute by low-quality timber supplies to the increased production of energy from wood. In forestry itself, this involves in fact the effective and purposeful economic utilization of logging residues in the forest, a so-called biomass. Determination of biomass types, methods of use and parameters in supporting e.g. electric energy from biomass is stipulated by the Decree of the Ministry for the Environment no. 428/2005 Coll. and by its amendment no. 5/2007 Coll. The utilization of forest biomass for energy is to contribute significantly in the Czech Republic to increase the share of renewable energy resources in total energy production. The procedure is in agreement with the principle of considerate forest ecosystem management. This is why the issue of dendromass used for energy was included in two policy documents in 2007, viz the National Forestry Programme II and the Action Plan for Biomass. Both documents anticipate an expeditious development of biomass use for energy in the form of logging residues, sawmill waste but also special tree species grown for the purpose, namely fast-growing species. It is exactly the development of the fast-growing tree species that is relatively much prospectful in the Czech Republic because in certain regions after coal mining, extensive areas are gradually being recultivated which can be used to grow the fast-growing crops. However, due to the impact of windthrows and natural disasters on forest production, the year of 2007 brought some changes in legislation, which resulted in reduced subsidies for the establishment of the plantations of fast-growing tree species. The production of energy from wood is still low in the Czech Republic although the Ministry of Industry and Trade takes measures to increase it. The share of energy produced from wood in total energy production in the Czech Republic is only about 1.5%. The situation reflects a failure in the introduction of 1<sup>st</sup> generation biofuels for energy generation from renewable resources. Annual wood consumption for industrial production of electricity and heat in the Czech Republic is on average ca. 2.4 mil. tons. The annual consumption of fuel wood in households is over 3 mil. tons ( the consumption of fuel wood in this and coming years is expected to grow due to increasing prices for energies), and exports amount to about 500 thous.tons. Total consumption of wood residues, chips, sawdust, fuel wood, plant material, wood pulp extracts, briquettes and pellets for energy in the Czech Republic amounts to about 6 mil. tons;

**b) climatic changes and their impact on forest stands.** Czech Republic is one of countries that pay continual attention to the issues of contemporary global environmental policy, adopt measures and resolve problems. Strategy for Earth System Climate Conservation in the Czech Republic was adopted as definitive policy in the field of climate change by government decree no. 480/1999 already in 1999. In 2004, the government of the Czech Republic passed a National Programme for the abatement of climate change impact in the Czech Republic. The programme defines both draft concrete measures to reduce emissions of greenhouse gases, and measures to facilitate the accommodation of individual ecosystems to the climate change.

The National Programme was subject to assessment in 2007. The assessment is in progress and measures will be adopted for its update in dependence on obtained results. The last studies revealed for example that the limit for the mean annual concentration of sulphur dioxide established to protect vegetation stipulated by the government decree no. 350/2002 Coll. was not exceeded in winter 2006/2007. The concentration of nitrogen oxides was exceeded only in industrial agglomerations (Prague, Brno, Ostrava region) and along freeways and highways of Class 1. Nevertheless, the limit ozone level was exceeded on a greater part of the Czech territory, especially in April and May, partly in August. However, there are no records on the health condition of forests being disturbed by ozone;

**c) responsibility for operations in forestry (conservation and health condition of the forest).** Czech Republic adopted a number of measures to protect forest and its health condition already in previous years, which were either complemented or updated, and above all implemented in the course of year 2007. As to conditions affecting conservation and health condition of the forest, the year of 2007 was considerably unfavourable with numerous weather extremes. The winter was unusually warm, the country was affected by hurricane "Kyril" in January, the beginning of spring was short of precipitation, etc. Forests suffered a considerable damage by windthrows, and the warm and dry weather contributed to the overpopulation of underbark insect pests, namely on spruce. Problems with the overpopulated hoofed game continued. Protection against insect pests was in 2007 resolved within the due amendment of the decree issued by the Ministry of Agriculture of the Czech Republic. The result was response to the threatening danger by the implementation of defensive measures. In spite of all these facts, the risk of underbark insects on conifers has not been entirely eliminated yet. Furthermore, a range of interconnected measures of biological and technical nature was implemented, including the use of repellents and pesticides to control harmful agents in the forest. In 2007, a total woodland area of 2,345 ha received lime treatment within the framework of revitalization measures in forests damaged by air pollution, again within the framework of valid government decrees. Czech Republic has established a so-called Forest Protection Service providing also counselling to forest owners and users in the Czech territory. Chiefly the Air Fire-Fighting Service assures forest fire control.

Health condition of the forest in the Czech Republic was in 2007 disturbed by the above mentioned unfavourable weather conditions that resulted in the dramatic increase of salvage fellings which doubled as compared with 2006, representing more than 4/5 of annual felling volumes in recent years. Biotic agents damaged in 2007 about 2.2 mil. m<sup>3</sup> of wood mass. Health condition of the forest is in the Czech Republic subject to assessment on the EEC monitoring plots of UN international cooperative programme (ICP Forests) already since 1986. The plots (306) are evenly distributed across the Czech territory according to forest cover percentage. The development of defoliation in coniferous and broadleaved species did not show any changes in 2007 and it corresponded to set up norms. It can be concluded that the health condition of forest stands in the Czech Republic markedly improved in the last twenty years, particularly due to their response to changed air-pollution conditions.

**d) issue of responsibility in forestry, assurance of environmental principles and sustainable forest management.** The solution of outlined issues is in the forestry of the Czech Republic implemented both within the framework of Council Regulation (EC) 1782/2003 concerning the obligation of each EU member country to establish an advisory system by means of research tasks at relevant faculties of agricultural universities but also through the cooperation with NGOs. In 2007, the accreditation was granted within the implementation of the advisory system to 36 private agricultural counsellors and an update

was prepared of the accreditation regulation to meet requirements stipulated by Council Directive (EC) 1698/2005 and Council Directive 1974/2006. There are 12 technical methodologies to cover the issue of cross-compliance legal requirements in forestry and introduction of environmental measures in forest management. Institution responsible for the execution of advisory, counselling, testing and expert activities in the Czech Republic is the Forestry and Game Management Research Institute.

Cooperation in the assurance of environmental principles in forestry, forest health and environment as related to the issues of forest protection, non-wood-producing functions of the forest, planting stock, introduction of new trends in forest management, but also in the advisory, educational and information activities is assured at the present by twenty non-governmental forest organizations. Some of them organized professional discussion and interviews in media that were focused on the management of both own and entrusted forest properties, sustainable forest management and on the enhancement of the image of private forest ownership in the society;

**e) further research and development in forestry.** Forest research in the Czech Republic is the main sphere of activity of the Forestry and Game Management Research Institute in Jíloviště-Strnady (VULHM, v.v.i.) and a number of other organizations such as faculties of forestry and wood technology in Prague and Brno, workplaces of the Academy of Sciences of the Czech Republic and some private research institutions. The Forestry and Game Management Research Institute was in 2007 transformed according to Act no. 341/2005 Coll. into public research institution. In that year, the Institute realized 67 assignments for various customers and commenced work on 3 research projects within the framework of National Research Programme I. Two research projects continued the fourth year of their solution - Stabilization of forest functions in biotopes disturbed by anthropogenic activities in the conditions of changing environment, and Breeding of forest tree species and preservation of genepools of valuable and endangered populations including biotechnological procedures, methods of molecular biology and the latest knowledge in forest seed production. Thirteen other projects were resolved by the National Agency for Agricultural Research as well as within the framework of, National Research Programme I and some other projects for other customers. International cooperation of the Forestry and Game Management Research Institute proceeded within the framework of COST research programme, Forest Focus-Biosoil, ICP Forests, Euforgen, TREEBREEDEX programmes, but also within the framework of bilateral conventions such as Aid to Bosnia etc. A larger part of financial resources for research carried out by this Institute originated from funds of the Ministry of Agriculture of the Czech Republic, from other departments and from the Institute's budget.

Forest research is also carried out at the Faculty of Environmental Science, Czech University of Life Sciences Prague. The Faculty focuses on research in landscaping and ecology, resolving topical issues of anthropogenically used landscape in conditions of Central Europe up to the assessment of environmental impacts (EIA and SEA), environment control systems or environmental education. In the field of international cooperation, mutual contacts with research institutions, environment-focused universities in Europe and elsewhere, international organizations and other entities were further intensified in 2007. Other academic workplaces dealing with forest research in the Czech Republic are the Faculty of Forestry, Wildlife and Wood Sciences in Prague and the Faculty of Forestry and Wood Technology, Mendel University of Agriculture and Forestry Brno;

**f) forest sector reforms in Russian Federation.** The issue is beyond the scope of this sector of the Czech economy.

**3. Policy for the development of timber and paper & pulp industries and its influence on the development of market with their products and forest production.**

Industrial economic policy is set up in the Czech Republic for the manufacturing industry as a whole. Its significance consists in the fact that it creates sound framework conditions for the development of enterprises in the individual branches of manufacturing industry, innovations, attractiveness for industrial innovations and generates jobs. It is not set up for individual branches of the manufacturing industry, i.e. not for timber processing and paper & pulp industries separately. Strength for their development is drawn from the private ownership of production means, from the own development of products and procedures, enhancement of skills in winning access to new markets and from finding new opportunities following out from the technical development and internationalization. Public aid is in general not provided to individual enterprises and is granted only if a kind of market failure is considered reason for the intervention of public authority of the state or for the support of structural changes. For this purpose, public authorities can make use of policy tools such as improved legislation, policy of single market, innovations, research, employment, social policy etc. These are generally applicable in the entire economy without any difference between industrial branches or enterprises and widely implemented, too. The rules hold for the development of timber and pulp industries and their relation to forest production. The relation of forest production to these industrial branches is governed by mutual entrepreneurial activities and namely by competition.

Economic or commercial linkage of timber- or paper & pulp industries to forest production exists predominantly in the supplies of wood raw material or wood semiproducts to customers. No serious problems exist in the volumes of raw material supplied by forest production to manufacturing timber- and paper & pulp industries. If they occurred in the past, they were resolved through entrepreneurial activities. This particularly concerned raw timber supplies to small sawmills namely in winter and at the turn of individual years. Some objections occurred quite recently as to the manner of concluding contracts on raw timber supplies to the timber-processing industry, which are being currently dealt with. The Czech timber industry is capable to process the supplied raw materials at desired quality into competitive products even if the demand for these products increases. Quality of the supplied raw material fully answers the set parameters, and there are no objections on the part of timber- and paper & pulp industries.

**4. Main factors in the development of forest and wood products market.**

**a) Raw wood materials: raw timber, roundwood, pulpwood, forest chips, fuel wood and sawn timber.**

The amount of raw timber harvested in the Czech Republic in 2007 was 18 508 thous. m<sup>3</sup> of which 93.4% softwood and 6.6% hardwood. As compared with year 2006, the volume of harvested timber increased by 830 thous. m<sup>3</sup> which indicates that logging in 2007 reached the highest amount since the coming to existence of the independent Czechoslovak Republic in 1918. However, the total volume of felling was conspicuously affected by the hurricane Kyrill of 18 January 2007, which was responsible for extensive damages in the west of the country,

namely in the regions of Pilsen and South Bohemia and in the Vysočina region in the central part of the country. The storm gale disrupted and devastated older -mainly spruce- stands. With much effort on the part of forest owners, the calamity consequences were removed before the end of the year. The total amount of wood mass processed after Kyrill was about 11 mil. m<sup>3</sup>. The total volume of salvage felling (mostly due to air pollution, pest infestation and other reasons) amounted to about 4 mil. m<sup>3</sup>.

The total amount of roundwood supplied to market in 2007 was 10,504 thous. m<sup>3</sup> of which 10,004 thous. m<sup>3</sup> coniferous roundwood and 500 thous. m<sup>3</sup> broadleaved roundwood. With respect to Kyrill hurricane, the growth was considerably high as compared to years in the past. Pulpwood supplies from manufacturing operations in 2007 amounted to 6,134 thous. m<sup>3</sup> of which 5,784 thous. m<sup>3</sup> coniferous pulpwood and 350 thous. m<sup>3</sup> broadleaved pulpwood.

The amount of forest chips supplied to the market in year 2007 was 100 thous. m<sup>3</sup> of which 80 thous. m<sup>3</sup> were coniferous chips.

The amount of fuel wood supplied to the market in 2007 was 1,770 thous. m<sup>3</sup> of which 1,410 thous. m<sup>3</sup> and 360 thous. m<sup>3</sup> coniferous and broadleaved fuel wood, respectively.

Sawn timber produced in 2007 by sawmills in the Czech Republic amounted to 5,454 thous. m<sup>3</sup> of which 5,187 thous. m<sup>3</sup> and 267 thous. m<sup>3</sup> coniferous and broadleaved sawn timber, respectively.

#### **b) Energy from wood. Government policy to foster production of energy from wood.**

This in fact concerns efficient, purposeful and economical utilization of logging residues, which are considered wood waste after main and intermediate felling, remaining in the forest for a further possible treatment. The logging residues fall in the Czech Republic into the category of biomass and their use is defined in Decree no. 482/2005 Coll. on the determination of biomass types, methods of use and parameters in supporting the generation of electric power from biomass. Another document is Decree no. 5/2007 Coll. by which the above mentioned Decree no. 482/2005 Coll. on the determination of biomass types, methods of use and parameters in supporting the generation of electric power from biomass is amended. Czech Republic has enacted gradual increase in dendromass use for energy with a goal of reaching the increase of renewable energy resources until 2010 by 8% and with a long-term objective of 15-16% until year 2030. In line with the principle of considerate forest ecosystem management, the issue of dendromass usable for energy was in the Czech Republic incorporated in two strategic documents: National Forestry Programme II and Biomass Action Plan. In this connexion, it should be mentioned, however, that current costs for the utilization of logging residues for energy are relatively high. This is why minor financial subsidies are used in the Czech Republic for the purpose. They are to encourage the construction of plants to generate energy from renewable resources, to support the generation of energy from renewable resources of energy in the form of constant purchasing prices, and to support slash removal and subsidize forest machinery for the processing of logging residues. There is however no legal right of the subsidies.

**c) Certification of forest and wood products.** Forest certification in the Czech Republic is at present one of the most efficient market tools determined to support principles of sustainable forest management. It encourages consumption of wood obtained precisely in compliance with the principles of certification and prevents excessive exploitation of the forests. By means of certificate, the forest owner declares his/her commitment to forest management according to defined criteria. It should be pointed out that the current requirements of forest use in the Czech Republic do not concern only timber logging but rather represent a wide range of social, ecological and economic forest functions relating to the sustainable utilization

of natural resources. Together with the effort to inform consumers about ecological qualities of timber as a raw material, the trend is also one of reasons for certification being introduced throughout Europe.

In the Czech Republic, the certification is carried out by using two certification systems – FSC and PEFC of which the latter has a decisive share in the Czech Republic. Of the total woodland area of 2 651,209 hectares, nearly 72% were certified to the date of 31 December 2007 (70.7% by PEFC and 0.54% by FSC).

As to consumer chains, the certificates are granted to timber manufacturers, trading companies, especially to those trading with timber, to sawmills, paper industry and building industry. Year by year, vendors increasingly require information whether wood products are made of certified wood including more detailed data, which provides a good ground for the certification process to continue.

**d) Economic indicators in the field of timber industry products (OKEC<sup>1</sup>-20, NACE rev., 1.1.-20).** In line with economic activities classified according to OKEC, which correspond to the NACE rev. 1.1. international classification, the branch of timber industry divides into sawmill production and wood impregnation, manufacture of veneers, plywood sheets and agglomerated wood products, constructional joinery and carpentry woodworks, manufacture of wooden packaging and manufacture of other timber, cork, wicker-woven and straw products except furniture. In 2007, receipts from the sales of own products and services in the above mentioned branches of timber operations amounted to 91, 122 mil. CZK in current prices. As compared with the year of 2006, this is an increase by 12.6%. The share of added value in operations, again in current prices, amounted in 2007 to 328 thous. CZK, which is an increase by 12.3% as compared with 2006. Labour productivity from added value in production per capita, again in current prices, amounted in 2007 to 417.6 thous. CZK (340.4 thous. CZK in 2006 and 309.5 thous. CZK in 2005). The sector employed 81 243 persons in 2007, which was by 8.1% more as compared with 2006. The relatively high annual growths in the characterized indicators of timber industry categorized in OKEC-20 in 2007 as compared with 2006 were achieved due to the processing of higher wood mass volumes after the Kyrill hurricane. No industrial facility of greater significance was put into operation in 2007. The increased breakdown amount was implemented via technical measures chiefly in the largest capacities of the branch – Stora Enso Timber, s.r.o. in Ždírec and in Planá, and in Mayr-Melnhof Holz Paskov, s.r.o. in Paskov. In 2008, however, the industry has to face certain problems due to a lower demand for generally all kinds of produce including exports. Preliminary data for 2008 suggest that all economic indicators of the branch will exhibit decreasing efficiency.

**e) Coniferous sawn timber.** As mentioned in Part 4a), the amount of coniferous sawn timber produced in the Czech Republic in 2007 was 5,187 thous. m<sup>3</sup>. The produce originates exclusively from the raw material of Czech forests and the amount produced in the Czech Republic represents for example 53% of this product manufacture in Austria and 64% in France. In 2007, the total Czech exports of this product were 2,262 thous. m<sup>3</sup> which represents an interannual increase by 16.5%. Exports from Austria and France were for example ca. 6,300 thous. m<sup>3</sup> and only 1,200 thous. m<sup>3</sup>, respectively. Domestic consumption of the product in the Czech Republic was 64% while it was only 50% in Austria. Notwithstanding the

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<sup>1</sup> Industrial Classification of Economic Activities (OKEC)



figures, the consumption of timber and wood-based products in the Czech economy is considerably lower than in Austria.

**f) Broadleaved sawn timber from the Mediterranean and tropics.** This product is processed in the Czech Republic only at negligible amounts as a complementary material in the manufacture of some selected furniture assortments. The amount of broadleaved sawn timber produced in 2007 from the domestic raw material was 267 thous. m<sup>3</sup> and the annual production remains at approximately the same level. Broadleaved sawn timber imports in 2007 amounted to 168 thous. m<sup>3</sup> which represents an interannual increase by 10.5%. Exports amounted to 46 thous. m<sup>3</sup> which is by 11 thous. m<sup>3</sup> less than in 2006.

**g) Agglomerated materials; particleboards, oriented structural boards (OSB), fibreboards, medium-density fibreboards (MDF) and plywoods.**

Particleboards have recorded a very good development of production and exports. In 2007, annual manufacture of this product with a high added value amounted to 1,428 thous. m<sup>3</sup> which represents an interannual increase by 15.2%. In this indicator, the Czech Republic reaches 60% and 82% of the production of Austria and Great Britain, respectively. The manufacture of this product is expected to be further growing in the Czech Republic. Exports of particleboards in 2007 amounted to 1,017 thous. m<sup>3</sup> with an interannual growth by 28.9%. Imports mainly from Germany amounted to 351 thous. m<sup>3</sup>. The year-on-year dynamics of imports exhibited 8% but the domestic consumption of particleboards did not show increased consumption in 2007 despite the increased constructional operations.

Oriented structural boards (OSB). The manufacture of this product recorded a similar very significant growth in 2007 because a new production line was put into operation towards the end of 2006. Total produce in 2007 was 450 thous. m<sup>3</sup> OSB with an interannual growth by 73.1%. As to annual output of this product, the Czech Republic occupies the second place in the European Union behind Poland with the annual production of 600 thous. m<sup>3</sup> and before France on the third position. Exports of the product recorded an adequate increase, too: 390 thous. m<sup>3</sup> (interannual growth by 69.6%). Imports amounted to 90 thous. m<sup>3</sup> and increased as compared to 2006 by 10 thous. m<sup>3</sup>, i.e. by 12.5%. Domestic consumption of the product increased by 36.4% being contributed to namely by the increased consumption of building industry.

Fibreboards. This product has no special tradition in the Czech Republic. Annual production in 2007 amounted to 94 thous. m<sup>3</sup> and the increase was by 4 thous. m<sup>3</sup> (4.4%) as compared to year 2006. Interannual imports increased by 47 thous. m<sup>3</sup> and totalled 271 thous. m<sup>3</sup> in 2007. Exports of 89 thous. m<sup>3</sup> represent an interannual growth by 32.8%. Domestic consumption recorded an interannual increase by 11.7%.

Medium-density fibreboards (MDF). Annual production volume is the same as in fibreboards and amounts to about 90 thous. m<sup>3</sup>. Annual imports and exports are 38 thous. m<sup>3</sup> and 40 thous. m<sup>3</sup>, respectively.

Plywoods. The annual manufacture of plywoods is slightly increasing in the Czech Republic. Their total amount produced in 2007 was 175 thous. m<sup>3</sup> which represents an interannual growth by 2.9%. Exports of 105 thous. m<sup>3</sup> were by 1.9% higher than in 2006. Imports of 65 thous. m<sup>3</sup> represented a decrease by 2 thous. m<sup>3</sup> as compared with 2006.

**h) Pulp and paper.** In 2007, total produce of the Czech paper and pulp industry was 780 thous. tons of fibrous material of which 777 thous. tons wood pulp. The interannual increase in the production of fibrous material was 1.8%. Exports of fibrous material in 2007 amounted to 372 thous. tons, which represents an interannual growth by 6.3%. Imports decreased by 0.6% and amounted to 180 thous. tons. The manufacture of paper, cardboard and paperboard

according to CEPI classification amounted to 1,023 thous. tons in 2007 which represents an increase by 1.5%. As compared with 2006, the production of brown paper increased by 19 thous. tons and the manufacture of plain wood paper and newsprint paper decreased. The structure of Czech paper and pulp industry production still does not answer domestic demand. Almost 48% of wood pulp production is annually exported from the Czech Republic while up to 165 thous. tons of short-stapled wood pulp is imported which is not manufactured in the country. Another problem is that the country's exports of paper, cardboard and paperboard include a larger part of products with low added value while expensive graphic and printing papers are imported. By contrast, the development of paper, cardboard and paperboard consumption per capita is much favourable and exhibiting a dramatic increase. While the consumption per capita of these products was only 60.5 kg in 1990, in 2007 it amounted already to 156.2 kg.