

MARKET STATEMENT OF THE CZECH REPUBLIC

1. Main trends of the economy development in the Czech Republic, mainly in industry, manufacturing and building industry in 2011. Comparison of the Czech and EA 12 economy. Development of forest industry and wood-processing industry. Prediction of the development for 2012 and 2013 in the Czech Republic.

a) Basic economy trends of the economy development in the Czech Republic in 2011.

Czech economy, mainly its growth in the second half of 2011, was under the strong stress caused by the Eurozone debt crisis. Although the development of Czech economy showed expected year-on-year increase of GDP in constant prices in the first half of 2011, i.e. an increase of 2.4 %, the increase slowed down to 1.3 % in the third quarter of the year and the increase dropped 0.6 % in the fourth quarter. However, the Czech economy performance reached a year-on-year increase of 1.7 % of the GDP in constant prices, i.e. a higher increase as compared to EA 12 where the increase amounted only to 1.5 %. Nevertheless, the year-on-year increase of GDP amounted to 2.6 % in Czech Republic in 2010. In 2011, in spite of the issues related to the Eurozone debt crisis the Czech financial sector was and remains stable and well-capitalized. This stability however does not provide protection - should more problems arise within EU - against negative impacts on the Czech economy in 2012 and in the future.

In the Czech Republic, a pro-export oriented country, GDP growth achieved in 2011 can be credited to the foreign trade. Despite the culminating problems of European economy, the foreign trade showed fairly good results. In 2011, the trade balance surplus was higher than in 2010, when the economy grew faster. The year-on-year growth of export and import amounted to 14.1 % and 10.9 % respectively. Import growth was partly hampered by dropping demand domestic households. The overall Czech export of goods amounted to 67 % of GDP. Over 50 % of the export comprises machinery and transportation facilities, semi-finished products (sub-deliveries) and consumer industrial goods. 82 % of the total Czech export was exported into EU, with one third thereof being exported to Germany. Germany, Slovakia (8 %), Poland (6 %), France (6 %), UK (5 %), Austria (4 %) and Italy (3 %) remain the main export partners of the Czech Republic. The largest Czech import territories comprise Germany (27 %) and China (14 %).

Under the current circumstance, achieving a good GDP growth was possible mainly due to certain thriving branches of the Czech industry, under the circumstances when sophisticated, competitive and not overcharged products were produced and effective market opportunity arose. In the period of world crisis, during the worldwide revitalisation of economy in 2010 and under the Eurozone debt crisis, both the manufacturing industry and the entire Czech economy showed that they are flexible and viable also in troubled times. In 2011, both the manufacturing industry and the entire Czech economy proved that they can handle the hard economy situation without any help, and to do so in similar way as leading world economies. This is proven by the GDP mentioned above. In 2006, the Czech GDP grew by 7.0 % year-on-year; in 2009 an inevitable decrease by 4.7 % year-on-year was recorded. In 2010, the GDP showed again a growth of 2.6 % and in 2011 it showed again a

year-on-year growth – however due to the debt crisis - only of 1.7 %. In 2006, EA 12 economies showed a year-on-year GDP growth of 3.2 %; in 2009 there was a decrease by 4.2 % and in 2010 again a year-on-year growth of 1.9 % and in 2011, GDP showed again a growth by 1.5 %.

It is necessary to stress again that the achieved growth of the Czech economy in 2011 must be credited mainly to the industry. In 2011, the industry reached a year-on-year production growth of 6.5. %. It should be underlined that the year-on-year GDP growth in 2011 was achieved also with the market shrinking rapidly worldwide. In 2011, the annual sales increase between 6 and 7 % was reached worldwide, albeit it amounted up to 10 % in the pre-crisis years. The Czech manufacturing industry increased the year-on-year production in spite of the known problems by 7.7 % - measured by the index of industry production (IIP). 18 Czech manufacturing industry branches out of the total of 24 branches reported a growth in 2011. The growth driver – measured by IIP – was the production of motor vehicles (growth of 21.2 %), machinery production (12.3 %), electric appliances production (10.5 %) and the production of rubber and plastic products (10.1 %). On the other hand, a decrease was reported by the PC, electronic and optical appliances production, namely by 9.8 %. This decrease in production caused the drop of HIGH-TECH products by 2.8 percentage point. In 2011, the decrease in production was also reported by the wood-processing industry and manufacturing of wooden products (by 2.0 %), i.e. branches subject to this report, but also food industry (3.3 %). Despite the smaller year-on-year growth of volume of new orders in the Czech Republic in 2011 (-5.5 %), there was a year-on-year growth of volume of new orders from foreign countries by 12.1 %. This also proves the statement on the stability and well-capitalized financial sector.

In 2011, a year marked by the impacts of the debt crisis in the entire EU, the Czech manufacturing industry managed to increase - despite several problems - the usage of active production capacities. Whereas the usage of active production capacities amounted to approx. 75 % in 2009, in 2011 the usage grew to 83 %. The overall productivity of production factors at the end of 2011 amounted only to 12 % of the results achieved in 2007. The real GDP, reflecting the pension situation of the Czech economy, grew only insignificantly year-on-year, so that the pension situation of economy entities was lower than the realized performance growth. The labour productivity of the manufacturing industry grew by 5.4 % year-on-year.

Inadequate undesirable results were reported by the building production. The decrease of the building production has persisted for the last three years and it dropped further by 3.5 % in 2011 (in constant prices). The production of ground construction industry and of the utility lines construction decreased year-on-year by 0.3 % and by 8.7 % respectively. The situation of several construction companies deteriorates and the companies have problems to stay on the market under these circumstances. This applies mainly to big companies with over 1,000 employees. In 2011, the productivity of “S” value within the construction industry dropped by 1.3 % year-on-year, whereas productivity of basic construction production stagnated.

The average unemployment rate amounted to 6.7 % in 2011; this means a year-on-year decrease by 0.6 %. It was even lower than the average for all EU-countries and for the Eurozone. The average inflation rate amounted to 1.9 %; this means a year-on-year increase by 0.4 %. Upon taking the inflation rate into account, the real salaries grew only by 0.3 % in 2011. The lowest exchange rate of Czech koruna towards euro and US dollar was achieved in February and May respectively.

The results of the Czech manufacturing industry – under the worldwide difficult situation as documented above - show that they deserve more attention from the EU in regard of EU subsidies concerning competitiveness; this applies mainly to branches, which have been neglected so far such as wood processing and wood production realized by forestry.

b) Comparison of the economy in the Czech Republic and in EA 12. Albeit the Eurozone debt crisis and dropping growth rates of the world trade above, Czech Republic achieved the economy level – expressed by GDP per capita upon recalculation to common parity of purchase force – of 72 % of the average for EA 12 in 2011. However, a much higher average should have been reached in those years. The economy problems caused by the crises above resulted in stagnation and

slight divergence of this index as compared to the period from 2000 to 2007 in the Czech Republic. Not-reaching the higher performance of the Czech economy relates also to the inadequate fast growth of oil prices on the world market; the prices of Brent type oil was increased by 79 % as compared to 2009 and amounted to 111 USD per barrel in 2011 and it depends also on internal economic and political problems.

c) Development in forestry and wood-processing industry in the Czech Republic in 2011. Whereas the value added in constant prices grew in by 89.4 % in the manufacturing industry 2011, in agriculture, forestry and fishery it grew by 6.5 % year-on-year. The benefit of this value for forestry only could not be calculated at the point of composing this statement.

However, the benefit of **forestry** for the country cannot be neglected, even though the timber harvest was decreased by 1.36 mil. m³ year-on-year to the total of 15,38 mil. m³ in 2011. This situation was influenced by the slow growth, rather stagnation, of domestic wood and wooden product consumption. In 2011, the harvest of broad-leaved timber increased as compared to previous years; this mainly due to the higher demand on foreign market. The demand for raw timber rose - except for the Czech Republic - despite the significant increase of average prices of important assortments. The harvest of broad-leaved timber amounted to 13.3 % of the total raw timber harvest. In 2010, it was 10 % and on 2009 only 9.4 %. The overall harvest per capita amounted to 1.47 m³ in 2011 as compared to 1.59 m³ in 2010.

The improvement of the situation in 2011 was even more complicated as the investments made into constructions and into the development in the field of wood processing sector dropped significantly. The usage of production capacities, level of availability of new machines and facilities and technologies dropped as well. Unfavourable situation for small and medium enterprises incl. furniture production persists. The construction production in constant prices as reported by the building industry showed a year-on-year decrease by 3.5 % and a further year-on-year drop by up to 6.1 % is predicted for 2012. The number of apartments, where the construction started in 2011, dropped by 2.1 % year-on-year and the number of finished apartments then by 21.4 %.

In spite of lower harvest dynamics a certain effect of the drop in this branch was recorded within forestry; it accelerated the solution of expenses and further cost-cuttings. The achieved results are even more pronounced when compared to the situation around 2009, when there were huge problems with the market for raw timber and timber products and costs for individual operations increased, namely in case of the state forests by 0.8 % year-on-year and by 2.8 % in case of private forests. The revenue from the overall operations within the branch dropped too, namely by 3 %. The average profit per m³ expressed in CZK dropped significantly as well.

In spite of this situation, the economy of forest production recorded a positive trend due to the growing timber prices. As compared to 2009, the overall costs for individual operations were decreased significantly in 2011. As for state forest enterprise, managing 60 % of all forests in the Czech Republic, there was a year-on-year decrease by 22.2 percentage points and by 27.3 points as compared to 2009. As for municipal forests (managing less than 40 %), there was a year-on-year decrease of costs by 1.6 percentage point and by 4.9 points as compared to 2009. As for private forests, there was a year-on-year increase of costs by 0.6 % and a decrease by 4.4 % as compared to 2009. In 2011, the share of the revenue from sale of timber from the total rose year-on-year in the state forests, namely by 3.8 % (by 9.1 % as compared to 2009); as for municipal forests there was a year-on-year decrease by 9.9 % (decrease by 1.4 % as compared to 2009); as for private forests the monitored share rose by 2.7 % (by 21.1 % as compared to 2009). The average profit from timber in CZK per m³ rose in case of all forest owners; as compared to 2010: by 19.2 % in case of state forests, by 11.3 % in case of municipal forests and by 14 % in case of private forests; and as compared to 2009: by 48.6 % in case of state forests, by 34.3 % in case of municipal forests and by 31.8 % in case of private forests.

The growing timber prices resulted in the year-on-year increase of the profit before tax per 1 ha of forest in average for state, municipal and private forests in total by 43.9 % in 2011. This means

a quadruple increase as compared to 2008. The year-on-year increase of the profit before tax amounted to 61 % in 2011, i.e. 6.6 times more than in 2008. Nevertheless the profit does not correspond to the needs arising from the increased competitiveness of this branch. These trends will probably not continue in the following years.

In spite of a certain effectiveness achieved within forest production in 2011, the unfavourable situation of the timber harvest and timber market had an adverse impact on the development of the **wood processing industry**. Dropping harvest, significant decrease of domestic consumption mainly regarding round wood and saw logs, significant increase of export mainly of round wood, dropping construction industry, blocked market of wood processing products to abroad and other problems caused a year-on-year decrease of the index of industry production of the Czech wood processing industry (CZ-NACE 16) by 2 % in 2011 and an increase of furniture production (CZ-NACE 31) by 3.3 %. The unfavourable development of the wood processing industry could not be prevented by the slight production increase in the paper industry, namely by 1.2 % year-on-year, and in the polygraphy industry even by 8.2 %. This situation had impact on the wood processing industry, namely in form of reduction of production, growth of unemployment, closing down operations and lower salary growth. Due to the overall drop in the GDP as originally assessed and due to the adverse prediction of the development for 2012 and 2013, the prospects of improvement are low even for the wood processing industry in the Czech Republic. Market and the production are dropping, raw material prices are growing, available assets are scarce and acquiring a credit for these branches is getting more and more difficult. Further assessment of this sector of the wood processing industry can be found under 3 and 4d.

d) Outline of the probable development of Czech economy in 2012 and prediction for 2013. Prediction of the Czech economy growth in 2012 and 2013 depends greatly on the economy situation in the EU, Eurozone and worldwide in general. The uncertainty in EU is reflected in the economy results of the Czech Republic. From January to July 2012, a growth of the index of industry production amounting only to 1.3 % was reported for manufacturing industry. Revenue dynamics, incl. revenues from direct export remain stable in July 2012. The same applies to new orders originating in the Czech Republic. The new orders from foreign countries maintain also quite good dynamics. As for the production within the automobile industry, there will be probably a decrease in the revenues in spite of the good sales figures, mainly in India, China and East Europe. With regard to the present situation, one can expect rather stagnation than a significant improvement of the development.

Based on the "no-event" scenario, which assumes no dramatic events within the debt crisis and no geo-political events with significant economic impact, the Czech GDP in constant prices could show a slight decrease in 2012 as compared to 2011, namely up to 0.5 %. In 2013, there could be a certain year-on-year increase by 1.0 %. These are only assumptions which can be influenced greatly in both directions by further development both in the EU and in the world.

One of the options for a positive change for the Czech economy could be the signalled revitalisation of German economy growth. If the German development shows a permanent growth, this would have a positive impact on the growth of the Czech economy. As for the export economy of the Czech Republic, one cannot expect that also other key export partners will report an economy growth. This applies to France and partly to Spain, possibly Italy and one cannot rule out Greece and Portugal; one can expect certain preconditions for slowdown of the economy growth also in Poland and Slovakia.

Positive for the Czech Republic is the fact that it is not a risky country from the prospective of the debt crisis. Financial market views the Czech Republic as a trustworthy country. However, the fact is that the escalation of problems in the Eurozone could cause the transfer of external negative shocks also to the Czech economy.

2. Measures to support the forest and wood processing product market taken by the Czech Republic over the last 18 months

a) Measures taken in the field of economic stimuli. Over the last 18 months, no measures had to be taken within the government agenda and by the resort administration within the sector of Czech forestry and wood processing industry and in the field of economic stimuli. It was not necessary, albeit there were problems causing the decrease of economy growth in the sector in question in 2011, to adopt out-of-market solutions to support the market – mainly the foreign one – neither with raw timber nor with production of wood processing industry. The government did not even consider – not only for this economic sector – to introduce economic stimuli or any other measures limiting the free market. Non-market measures have not been adopted by the Czech economy even in relation with the worldwide crisis, when the economy and mainly the foreign trade were strongly limited.

Adopting the Act No. 104/2011 Coll., amending the Act No. 13/1993 Coll., Customs Act, as amended and also the Act No. 185/2004 Coll., o. Customs Service of the Czech republic, as amended also the Act No. 99/2004 Sb., on fishery, regulation this field and amending certain parts of the Fishery Act, intermediated indirectly the solution of the situation on the market with forestry and wood processing products. None of the acts above limits the free trade.

Further solutions provided in this field comprise the realisation of intentions for reaching the increase of the production effectiveness and energy savings within forestry and parallel environmental friendly harvest incl. the skidding of the timber from the forest incl. further savings impacts on the forestry. The objective is to increase the competitiveness within this field. This comprises measures taken by producers, not the government, and used in the Czech Republic for several years, but not mentioned here so far as the results were not known. Such measures comprise the use of assortment method applied by harvesters and forwarders. In 2011, 35 % of the harvest was processed by this method. In the future, over 80 % of the timber should be harvested by those technologies. One assumes that these machines will be connected to GPS and to the atlas of forestry maps of the Czech Forest Enterprise; it should be extended to all forest owners. Mendel Forestry University Brno adapts machines for harvesting in the conditions of the Czech Republic and it should participate in those projects as well.

There are no economic stimuli which would use extra-market mechanisms to support or restrict the free trade introduced in the Czech Republic. The trade with all products is based on free competition and on the current demand and offer. Should any benefits be granted such as contribution to insurance of exported goods or to help businesses to search for new markets, they are granted within the resort possibilities and in accordance with the operational programmes provided according to EU rules.

With regard to the character of the forestry, certain subsidies – again according to EU rules - are provided. These subsidies are regulated under the Czech Forestry Act, which stipulates the financial obligations of the state regarding the realisation of forestry policy in the forests. The listed obligations of the state – as measures – originated in the past, but they are redefined every year. The forestry policy focuses on the support of forest owners' responsibility for their property, but only on protection of state interests within forest management. The content and the final product of those many mentioned actions – viewed in the context of the Forest Act are absolutely and socially vital - partly to entirely support the effectiveness of the forestry products market. In 2011, the state obligations arising under the Forest Act amounted to 236.4 mil. CZK. As compared to 2010 and due to cost savings, the sum disbursed was by 2.6 % lower in 2011. From the total sum in 2011, 14.7 mil. CZK were paid to subsidize the planting of amelioration reinforcing tree species, 157.2 mil. CZK were paid for the activity provided by professional forest managers, 26.5 mil. CZK for processing forest management plans and 38.0 mil. CZK to subsidize amelioration and torrent control.

b) Measures taken in relation to climate change, supporting timber market. As for climate change and its impact on the increase and improvement of the timber market, no separate

measures had to be taken in the Czech Republic, not even over the last 18 months. This topic – although no measures were taken during the period in question – has been presented by the National Forestry Programme II (NFP II), which was approved by the Czech government already on 1 October 2008. This is also a solution related to the respective EU measures. Actual solution – as part of these issues – is realised by “Impact of Climate Change on Protective Measure in Forests” research task; this task is tackled at the Faculty of Forestry and Wood Sciences of the Czech University of Life Sciences Prague. However, in this field, the main driver is the NFP II. This is a strategic document and conceptual programme, defining the direction of forestry policy in the future. Individual objectives of NFP are incorporated in the related resort policies and respective government resolutions regarding the NFP intentions are incorporated in mid-term regional policies. The realisation of NFP is a common task of Ministry of Agriculture and Ministry of Environment.

Along with application of sustainable forest management principles NFP focuses on increase of competitiveness of forestry. This also corresponds with the issue of market increase in this field. Moreover, it comprises policy of climate protection incl. environmental measures formulated as recommendations directly for forestry. Parallel, this programme fulfils the EU Forestry Strategy and related EU Forest Action Plan. The programme is executed for the period to 2013. It fulfils also suitable measures taken in relation with climate change to support the timber market. Measures related to climate change in the Czech Republic are formulated by the some departments of the Academy of Sciences of the Czech Republic which cooperate directly with Forestry and Wood technology Faculties in Prague and in Brno.

c) Measures supporting the promotion of higher market effectiveness incl. participation in the research and development issues. Nor these measures had to be implemented in the Czech economy over the last 18 months, as these issues are tackled by the means of operational programmes, among others namely by the operational programme "Enterprise and Innovations 2007-2013 " under the competence of Ministry of Industry and Trade. It was approved by the Czech government under the resolution no. 1302 on 15 November 2006 and by the Decision of the European Commission K (2007) 6104 on 3 December 2007. In 2011, it was revised for the second time and approved by the Decision of the European Commission K (2011) 9981 on 21 December 2011. Operational programme "Enterprise and Innovations" (OPEI) uses finances both from the national budget and from the structural funds and Cohesion Fund of EU member state. It is a programme focusing mainly on small and medium enterprises. The objective is to increase the competitiveness of industry as the key potential for generation of the Czech GDP. OPEI represents approx. 20 individual programmes. They can be used not only by entities active in the field of wood processing and wooden products production. The programmes are used by the entities for better development of their business, higher effectiveness of their operations and for more effective and developed search of market and better use of the market in general. They are used also for improvement of management, acquiring know-how in order to increase the level of sophistication of their production, value added, productivity, etc. Certain market effectiveness is provided for Czech entrepreneurs also via orders placed with research institutes, almost always private ones. This field also relates to the issues discussed under paragraph e). Every year, entities may apply with the Ministry of Industry and Trade to participate in the respective programmes from individual operational programmes.

As for programmes related to forestry, they are represented by the Rural Development Programme of the Czech Republic (RDP CR). This programme is based on the National Strategic Rural Development Plan which was drafted in accordance with the Council Regulation (EC) No 1698/2005 and with the implementing rules of this regulation. The measures under RDP CR are generally perceived as the strategic objective both for competitiveness improvement and support of dynamic development of business activities within forestry and for realisation of higher performance of forestry operations, restructuring this sector and improvement of environment conservation. They are used to tackle the low level of investments, outdated and unsuitable availability of machines and

insufficient infrastructure. In 2011, the total of 985.6 mil. CZK was disbursed for these measures. However, for such a vast branch this is not sufficient. One cannot omit the Supportive and Guarantee Funds for Agriculture and Forestry which targets the reduction of interest load of credits.

The experience from the realisation of the programmes above shows that several entrepreneurs do not apply for the operational programmes. This relates to their lack of funding due to the business decline; this is also the reason for problems with acquiring credits in those unfavourable economic times. According to several small and medium enterprises within the field of wood processing, some of those programmes seem to be unsuitable in terms of their focus and actual help. Funding offered to them, which they have to pay from their own pocket anyway, is not sufficient to reach competitiveness.

d) Measures taken to increase the responsibility of social associations (corporations).

No new measures had to be implemented in the Czech Republics in this field. These issues of social responsibility and social care are generally tackled by the respective ministry in consistent a way and according to effective Czech Law and they are implemented by local authorities.

As for certain social associations (corporations) within forestry, there are several NGOs and non-profit generating organisation protecting their members' interests. None of those organisations has the field in question, i.e. rising responsibility in social issues, in its manifesto. If they touch these issues then only together with other fields. In 2011, there were 13 such organisation registered within forestry.

As for individual associations there is for example the "Association of Entrepreneur within Forestry with the Agrarian Chamber of the Czech Republic". This organisation along with legal consultancy, representation of its members in legal issues and drafting the NFP II programme defined the following objectives: monitoring of preservation of social securities in the field of employment for all employees within the forestry sector, maintaining the performance on the forestry market whilst maintaining the professional care for forests as such and proper management and maintenance of forest property. Another entity is for example the "Czech Academy of Agricultural Sciences – Forestry", which unites forestry researches and university teachers. This organisation has several professional committees used by both the ministry and other professional units and it helps to answer question regarding social issues posed by its members. Another organisation is the "Association of owners of municipal and private forests in the Czech Republic"; it enforces the owners' rights of its members, increases the prestige of forestry and the use of forest biomass, incl. the responsibility within the social sphere and it activates the cooperation with local authorities, with ministries and other official bodies and institutions. From the whole range of similar or even more important organisation, the following are worth noting: Czech Association of Forestry Entrepreneurs as a professional NGO advancing the interests of SMEs incl. social issues; then the Association of Self-Employed Persons in the field of Forestry which strives along with creation of best conditions for employees to develop forestry also to support the business, to intermediate contacts among self-employed persons and to protect its members.

The objectives of the endeavours and the responsibility for the actions – incl. social responsibility - taken lies within the competence of those organisations. The government neither directs nor manages these organisations. Therefore, there are neither directives nor measures incl. social ones issued to those associations.

e) Measures taken in the field of research and development in order to increase the timber and wooden product market. These issues are tackled by both public and private research institutions within forestry based on the requirements, definitions and orders given by bodies and organisations such as the ministries, entrepreneurs' associations, individual companies and other participants. As for public institutions those comprise Forestry and Game Management Research Institute (FGMRI), Forestry and Wood technology faculty of Mendel University Brno, Academy of Sciences in České Budějovice and in Brno and private research institutions.

In 2011, several projects and tasks – both solved and in solution - were tackled by those organisations. As for the increase of timber and wooden product market, the projects dealt for example with forest management for increasing the production, growing fast-growing tree species, improving management, issues of effectivity of low forest, economic effectiveness of silviculture, development and modelling of growing processes, new planning and forest optimisation, harvesting and skidding technologies, using landscape in Central Europe, ecophysiology of plants, etc. The institutions above started the research concerning the sectors of wood and wood processing industry with the focus on the increase of their performance and effectiveness.

Whereas there is a research funded by the government in the field of forestry, such research is missing in the field of wood processing industry. If there is a research in this sector, it is a private one, established by organisations that also finance it. The issues of basic and applied research in forestry focuses on forest and landscape ecosystems, forest and forest environment evaluation, increase of forest resistibility to climate change, research of new technology procedures within forest management, new options for forestry, and partly for wood processing industry, social development of Czech society, landscape care, new disciplines within bionics, biomechanics and bioenergetics, application of new calculation methods to physical and biological processes, modification properties of natural materials and partly it focuses on research of issues regarding applied design within housing, new methods for construction of wooden building and their elements which will hopefully increase the demand for wooden houses in the Czech Republic, etc.

Generally, the timber and wooden products market in the Czech Republic, incl. its benefits to the GDP generation, is fully governed by the conditions of the free trade.

3. How does the development of the market with the products of the wood processing, paper, polygraphy and furniture industry and especially timber market help to the overall development of Czech economy and manufacturing industry

In the Czech Republic, the market with wood processing industry products and other wooden products (CZ-NACE 16), with paper industry products (CZ-NACE 17), with polygraphy industry products (CZ-NACE 18) and with furniture production (CZ-NACE 31), shortly with wood processing industry products (WPI) did not develop in the way needed for the Czech economy from 2005 to 2011. This is shown by the selected year-on-year production indices in constant prices ¹⁾:

CZ-NACE	2006/2005	2007/2006	2008/2007	2009/2008	2010/2009	2011/2010
16 Rev	113.1	112.4	94.6	86.4	101.3	99.4
16 AVA	116.2	105.7	94.0	85.2	102.4	93.0
16 LpL	115.4	106.1	95.9	95.8	110.5	98.5
CZ-NACE						
17 Rev	99.8	111.9	91.5	87.3	110.5	102.2
17 AVA	103.5	114.6	90.5	88.2	106.9	89.1
17 LpL	102.4	110.5	94.3	98.6	109.6	89.1
CZ-NACE						
18 Rev	107.5	110.0	104.5	88.5	97.9	107.6
18 AVA	112.9	103.6	106.3	90.6	97.3	100.1
18 LpL	110.5	100.8	103.9	102.5	101.9	101.5
CZ-NACE						
31 Rev	101.5	107.3	95.6	81.8	96.5	101.0
31 AVA	99.2	105.9	100.1	87.8	95.8	98.7
31 LpL	100.6	106.9	106.7	98.6	103.8	102.1

Manufacturing industry in total

MI Rev	111.8	109.5	98.6	83.7	111.3	107.8
MI AVA	113.2	107.7	95.3	86.0	109.4	105.0
MI LpL	112.0	105.2	95.6	98.6	112.1	101.8

1)

Rev = revenues for sale of own products and services AVA = accounting value added LpL = labour productivity from the acc. value added on labour MI = manufacturing industry

The comparison of results of the development dynamics of respective indices of selected production characteristic of individual sectors within the wood processing industry with the results reached in the entire manufacturing industry shows that these sectors did not lack behind the average of the entire manufacturing industry up to 2009, they actual kept up the pace. A break came after this year and it is quite pronounced one. In defence of the wood processing industry one has to point out that that there branches of the wood processing industry with the annual revenues ten times higher than the timber branches; the level of availability of robots and automats in the timber branches is so high that it can never be reached by the wood processing industry and the same applies to technologies. Meanwhile the average labour productivity per employee within the WPI and within the manufacturing industry in total is almost comparable. In some year, e.g. in 2009, it lacks behind only by 7.7 %. It is shown in the following table (in ths. CZK per employee):

CZ-NACE	2005	2006	2007	2008	2009	2010	2011
16 LpL/z	475 060	548 325	581 567	557 944	534 422	590 410	581 384
17 LpL/z	652 393	668 301	738 397	696 002	686 490	752 252	670 123
18 LpL/z	568 650	628 252	633 131	657 802	674 231	687 232	697 585
31 LpL/z	366 534	368 820	394 180	420 666	414 592	430 394	439 471
Man. indus.	563 565	631 168	663 720	634 437	625 465	700 978	713 447
WPI aver.	515 659	553 425	586 819	583 104	577 434	615 072	597 141
MI/WPI in %	-8.5	-12.3	-11.6	-8.1	-7.7	-12.3	-16.3

The deterioration of the ratio between the average labour productivity per employee within WPI and manufacturing industry between 2009 and 2011 was caused by the increase of the year-on-year productivity of refinery oil products (increase by 52.8 % in 2011 as compared to 2009), metallurgy and foundry industry (by 56 %), chemicals production (by 35.8 %) and motor vehicle production (by 29.2 %), i.e. in fields where this could be achieved by growing prices mainly petrol prices.

One can conclude that the benefit of WPI for the country cannot be compared with the industrial giants. However, if the WPI sector shows that it can keep up the pace regarding production indices under comparable conditions, that it has sufficient domestic and renewable resources for its production, then one has to take its production into account and develop it. Moreover, because the usage of wood in the Czech Republic amounts to one quarter of the usage e.g. in Austria. The annual wood consumption per capita is by 150 % higher in USA or Japan (where the wood volume is limited) than in the Czech Republic and the share of timber used within construction amounts only to one fifth of the share in Germany. Even more, some of the manufacturing industry branches may not prosper for ever.

The issues regarding an effective growth of WPI are still to be tackled. These issues should be granted attention also by the EU. Wood, as raw material, is abundant in the Czech Republic. The level of present and future effective competitiveness of the Czech WPI will be either actively or passively projected into the competitiveness of the entire EU. Therefore, it also in EU interests that the Czech wood harvesting and processing industry is comparable at least with the Austrian one.

As for forestry activities, they were also strongly influenced by the drop of production (harvest) during the monitored period. It was almost identical with the impact within the WPI

sector. The harvest of raw timber decreased by 13 % in 2011 as compared to 2006 and the salvage felling was twice as low in 2011 as compared to 2006. From 2005 to 2011, the share of forestry in the gross value added dropped gradually every year. Parallel, with the decreasing harvest the number of employees within the forestry activities dropped as well. Their year-on-year decrease amounted to 6.7 % in 2011. The decrease was gradually substituted by the usage of machinery and using self-employed persons.

4. Development of timber and wooden products market in 2011.

a) Market with wood raw materials (wood in total, round wood, pulp wood and fire wood).

aa) Market with wood raw materials. In 2011, the Czech Republic had a total timber stock amounting to approx. 683 mil. m³. However, not the entire stock is available for harvesting. The average stock calculated for stands incl. clear cut areas amounts to 263.1 m³ per hectare. In 2011, 15 381 ths. m³ of raw coniferous and broad-leaved timber were harvested in Czech forests, i.e. were delivered on the market (excl. import). As compared to 2010, this means a decrease of the delivery on the wood market by 1 355 ths. m³. Just for comparison, in 2009, 15.5 mil. m³ were harvested. The lowest deliveries of raw timber since 2000 were realised in 2002, namely 14.54 mil. m³, and then in 2000, when they were even by another 0.1 mil. m³ lower as in 2002. The drop in the total harvest above influenced economies both within the EU and in the Czech Republic in 2011. The limited market with wooden products showed a year-on-year decrease of raw wood consumption, namely by 11.7 %.

Under these circumstances, the main focus of harvest was the processing of salvage timber (3.81 mil. m³) and delivery of the timber to wood processing industry. The processing of salvage timber created better conditions for forest management as compared to previous years. One cannot omit the so called “exhalation felling of timber”, i.e. damage of forest stands incurred due to immissions, which are becoming scarcer in the Czech Republic. In 2011, only 19 ths. m³ of this timber were harvested, i.e. approx. the same volume as in 2010. However, the volume of contemporary damaged forests increases and their harvest is necessary but not planned. These comprise stands influenced by splashes and distribution of road salt in winter, soils damaged under the previous immissions and adverse impact of various nutrient deficiencies, etc. Thousands of hectares of forests are damaged. The most significant damage is in the Krušné and Orlické hory Mountains. This includes also the so called spruce yellowing recorded in Moravia-Silesia Region and in Karlovy Vary Region. This phenomenon was registered on 40 ths. ha of forests in 2011.

The deliveries (harvest) of coniferous wood amounted to 86.7 %, i.e. volume of 13 340 ths. m³ of the total raw wood supply in 2011. This means a year-on-year decrease by 1 726 ths. m³. The supplies of broad-leaved wood amounted to 2 041 ths. m³ and they grew year-on-year by 371 ths. m³. The increase of the broad-leaved wood supplies amounted to 13.3 % of the total timber volume supplied to the market in 2011. In 2011, the increase of the share of broad-leaved wood supplies in the total supplies was the highest as compared to previous years. From 2006 to 2009 the ration amounted to 8 to 9 % and from 2000 to 2004 it amounted to 10 to 11 %. The increased share of broad-leaved wood in the total harvest was caused by higher demand on the market and the structure of available stock of mature forest stands.

The long-term, subvention policy of the government facilitated the gradual change of species composition in the Czech forests in favour of broad-leaved species. As compared to 2000, the forest area covered by broad-leaved species grew by 80 540 ha in 2011, i.e. z 22.3 % in 2000 to 25.3 % in 2011. Beech reached the highest increment, i.e. as compared to 2000 an increase by 39 466 ha – from 6 % to 7.5 %. As for oak, the increment was increased by 16 836 ha, i.e. from 6.3 to 7.0 %. On the other hand, the forest area covered by coniferous species was reduced by 65 597 ha, i.e. from 76.5 %

to 73.6 %. The highest reduction was recorded at spruce, namely by 55 591 ha, i.e. from 54.1 % to 51.7 %. As for pine, the reduction amounted to 18 957 ha, i.e. an area reduction from 17.6 to 16.7 %. The forest stand area covered by larch was increased, namely by 3 647 ha, i.e. by 0.1 %.

In the situation of reduced consumption on the domestic market, the raw timber producers used the demand of foreign countries and they exported 5 125 ths. m³ of broad-leaved and coniferous round wood, pulp wood and fire wood in 2011. This represents a year-on-year export increase by 1 184 ths. m³. In 2011, the total imported volume of assortments above and fire wood amounted to 2 893 ths. m³ as compared to 2 100 ths. m³ in 2010. The year-on-year increased import had to realized, because the domestic sawmills and paper factories in some regions experienced an exceptional shortage of round wood and pulp wood caused by the decreased harvest. These commodities were imported mainly from Slovakia, Germany and Poland.

ab) Market with round wood, incl. pole and mining timber. In 2011, the production of coniferous and broad-leaved round wood dropped again after the revitalisation on the market from the previous year, and the coniferous round wood harvest did not even reach the level of 2009. In 2011, the total supply of coniferous and broad-leaved round wood, incl. pole and mining timber, into sawmills amounted to 8 838 ths. m³. The supply basically equal to the supply in 2009 (8 852 ths. m³) and it dropped by 14 ths. m³ as compared to 2010. Out of the total supply above, the supply of coniferous round wood, incl. pole and mining timber, amounted to 8 014 ths. m³. This means a significant decrease by 968 ths. m³ and by 318 ths. m³ as compared to 2010 and 2009 respectively. The supply of broad-leaved round wood, incl. pole and mining timber, amounted to 824 ths. m³. This represents an increase of annual supplies by 379 ths. m³ and by 304 ths. m³ as compared to 2010 and 2009 respectively.

In 2011, the export of coniferous round wood amounted to 3 100 ths. m³ as compared to 1 658 ths. m³ in 2010 and 2 514 ths. m³ in 2009. The year-on-year increase of this assortment amounted to 1 442 ths. m³, i.e. important increase by 46.5 %. The export share in the total harvest amounted to 38.7 %. In 2011, the import of coniferous round wood was also significant and amounted to 1 670 ths. m³, as compared to 786 ths. m³ in 2010 and only 416 ths. m³ in 2009. The annual year-on-year growth amounted to 884 ths. m³, i.e. reaching the double figures. In 2011, the export of broad-leaved round wood amounted to 387 ths. m³ as compared to 85 ths. m³ in 2010 and only 82 ths. m³ in 2009. The annual year-on-year export increase of broad-leaved round wood was really significant and amounted to 302 ths. m³, i.e. a 4.6 times increase. The import of broad-leaved round wood amounted to 114 ths. m³ in 2011, to 193 ths. m³ in 2010 and only to 122 ths. m³ in 2009. The year-on-year decrease of the import by 79 ths. m³ corresponds with both the decrease of manufacturing industry production and the necessity to increase the import of broad-leaved round wood for some sawmills in selected regions.

ac) Breakdown of coniferous and broad-leaved round wood. Also the results of the breakdown of round wood and the production of sawn wood are to be mentioned in relation with the supplies of this assortment. The total of 7.0 mil. m³ of coniferous and broad-leaved round wood was broken down by domestic sawmills in 2011. However, in 2010 and in 2009, the breakdown of round wood meant for sawmills amounted to 8.0 mil. m³ and only to 6.7 mil. m³ respectively. In 2011, 4 454 ths. m³ sawn wood were produced from the total volume of coniferous and broad-leaved round wood meant for sawmills; this means a year-on-year decrease by 290 ths. m³, i.e. by 6.5 %. As compared to 2009, this figure was higher by 406 ths. m³, i.e. by 10 % in 2011. One has to mention that the demand for sawn wood persisted abroad in 2011; on contrary the sawn wood was on decline in the Czech Republic. This trend became pronounced not only at sawmills but also in the further wood processing industry and in the wood and wooden products consumption in general in the Czech Republic.

In 2011, the domestic consumption of coniferous and broad-leaved sawn wood amounted to 2 160 ths. m³ (in 2010, it amounted to 2 368 ths. m³), which means a year-on-year decrease by 8.8 %. As for coniferous sawn wood the consumption amounted to 1 810 ths. m³ and it was by 216 ths. m³

lower than in 2010, which means a year-on-year decrease by 10.7 %. As for broad-leaved sawn wood the domestic consumption amounted to 350 ths. m³ and it was by 8 ths. m³ higher than in 2010, which means a year-on-year increase by 2.3 %.

The situation above was strongly influenced by average prices of essential assortments of coniferous and broad-leaved round wood and pulp wood. Whereas one m³ of round wood of spruce III A/B class, i.e. round wood for sawmills cost 1 745 CZK and 1 857 CZK in 2006 and 2007 respectively, the price dropped to 1 526 CZK/m³ in 2008, dropped further to 1 473 CZK/m³ in 2009 and grew to 1 819 CZK/m³ in 2010 and rocketed to the maximum of 2 041 CZK/m³ in 2011. Therefore, the prices had a negative influence on the costs. The losses grew and competitiveness declined.

ad) Market with pulp wood incl. groundwood. In 2011, the total production of coniferous and broad-leaved pulp wood amounted to 4 629 ths. m³ in the Czech Republic, this means a year-on-year decrease of the prediction by 715 ths. m³, i.e. by 13.4 %. In 2011, the import of coniferous and broad-leaved pulp wood amounted to the total of 1 109 ths. m³ and it was lower by 12 ths. m³ as compared to 2010. In 2011, the export of coniferous and broad-leaved pulp wood amounted to the total of 1 638 ths. m³ and it was lower by 560 ths. m³ as compared to 2010. As for supplies from the coniferous pulp wood production only, they dropped and reached the total of 4 277 ths. m³ in 2011; they dropped year-on-year by 470 ths. m³. In 2011, the supplies of broad-leaved pulp wood on the market amounted to 352 ths. m³, this means a year-on-year decrease of supplies by 245 ths. m³. The export of coniferous pulp wood amounted to 1 564 ths. m³ in 2011, which means a year-on-year decrease by 540 ths. m³. The import reported a year-on-year decrease, namely by 13 ths. m³. In 2011, the total domestic consumption of coniferous and broad-leaved pulp wood amounted to 4 100 ths. m³, which means a year-on-year decrease by 167 ths. m³, i.e. by 3.9 %. In 2011, the domestic consumption of coniferous pulp wood grew as compared to 2010, namely by 57 ths. m³ to the total of 3 800 ths. m³ per year. In 2011, the domestic consumption of broad-leaved pulp wood recorded a year-on-year decrease by 224 ths. m³, so the annual consumption amounted to 300 ths. m³, as compared to 524 ths. m³ in 2010. The average prices of coniferous wood of V. quality class, i.e. wood for cellulose production, such as spruce pulp wood grew by 31.5 % and pine pulp wood grew by 18.2 % in 2011. The average price for oak and beech amounted to 993 CZK/m³ and 1 065 CZK/m³ respectively.

ae) Market with fire wood. The supplies of fire wood amounted to the total of 1 914 ths. m³ in 2011. They were lower by 51 ths. m³ and higher by 181 ths. m³ in 2010 and 2009 respectively. In 2011, the supplies of coniferous fire wood on the market amounted to 1 049 ths. m³, which means a decrease by 288 ths. m³ and by 110 ths. m³ as compared to 2010 and 2009 respectively. In 2011, the supplies of broad-leaved fire wood on the market amounted to 865 ths. m³, which means an increase by 237 ths. m³ and by 291 ths. m³ as compared to 2010 and 2009 respectively. In 2011, 46 ths. m³ of this commodity were imported, which means a year-on-year decrease by 34.3 %. However, the export amounted to 112 ths. m³, which means a year-on-year increase of the export by 16.6 %. In 2011, the total domestic consumption of fire wood amounted to 1 848 ths. m³ in the Czech Republic., it means a year-on-year decrease by 91 ths. m³, i.e. by 4.7 %. The average prices of fire wood rose significantly in 2011, too. So for example, the price of coniferous fire wood grew by 27 % and it amounted to 682 CZK/m³; the price of broad-leaved fire wood grew by 12.8 % and it amounted to 907 CZK/m³.

b) Issues of acquiring energy from wood (governmental stimuli to achieve increase). In 2011, the Ministry of Industry declared the National Programme for Support of Energy Savings and Use of Renewable Energy Resources the so called EFEKT 2011 programme. 30 mil CZK were assigned to this programme. It focuses on a whole variety of possibilities to use energy savings and renewable resources which is available to everyone; on the other hand the Operational Programme for Business and Innovation (OPPI) cannot be used by entities located in the Capital City of Prague.

Subsidies from this programme can be received in advance not retrospectively after the end of the programme as it is the case of OPPI.

The use of residues e.g. of wood for energetic purposes is solved in a way that fulfils our obligations stipulated under the Directive 2009/28 EC. This directive stipulates binding target share of renewable energy resources in the gross household electricity consumption, i.e. share of 13 % by 2020.

Czech government implemented the production of electricity from biomass under the Decree no. 482/2005 Col. and Decree no. 5/2007 Coll. Both Decrees of the Czech government are based on the Act No. 180/2005 Coll., which was amended in 2010. The Biomass Action Plan for the Czech Republic for the period from 2009 to 2011 was adopted by the Government Resolution No. 47 on 12 January 2009.

Further measures for improvement of use of forest biomass for energy production are defined under programme no. 4, which is part of the National Forestry Programme. The option of use of harvest residues for energy purposes is assessed by the Forest management Institute in Brandýs nad Labem and by the Forestry and Game Management Research Institute in Strnady u Prahy.

In 2011, the total production of electricity from biomass amounted to 1 682.7 GWh. Nevertheless, this represents only 0.019 % of the total volume electricity produced in the Czech Republic in 2011. The share of electricity produced from wood waste, chips, bark etc. in the total of 1 682.7 GWh electricity produced from biomass amounts 49.2 %, share of cellulose extracts to 31.3 % and the share of plant material to 19.5 %.

In the Czech Republic, coal and nuclear energy are the most used sources for producing energy (except for transport); ground gas is used less and renewable resources are used only marginally, as already stated. There is another energy source which is almost not used, namely waste. Presently, approx. 3 mil. tons of communal waste are produced per year. Approx. 75 % are deposited at dumping sites, 15 % are used for materials and other purposes and only 10 % are used for energy purposes.

The issue of use of forest harvest residues for energy purposes is not solved completely. The forestry practise is still not linked with the energetic practice and vice versa. The current situation provides neither for sustainable production nor for competitiveness of companies participating in this processing chain. There are several financial discrepancies and legal imperfections.

c) Certification of forest products.

The second Ministerial Conference on Forest Protection in Europe hold in Helsinki in 1993 defined the sustainable management in forests as the management and use of forests and forest land in the way and to the extent which maintains their biodiversity, production ability, regeneration capacity, vitality and forest ability to fulfil respective ecological, economic and social function on local, national and international level in the present and in the future and which does not damage other ecosystems.

Forest certification – which exists in the Czech Republic for several years – has been fully proven as one of the most effective market tools for supporting sustainable management principles of forest management. In the Czech Republic, the certification comprises the process where an independent organisation issues to the forest owners a certificate confirming that their forest management practises meet the pre-defined criteria of sustainable management. Upon accepting the certificate, forest owners confirm obligations to manage forests according to the defined criteria. The obligations relate to the timber harvest, wide complex of social, ecological and economic forest functions which are related to the sustainable use of natural resources. Therefore, the Czech certification system fulfils the Helsinki definition.

The Czech Republic uses two forest certification systems: PEFC (Programme for the Endorsement of Forest Certification Schemes) and FSC (Forest Stewardship Council).

As for PEFC, which is the most common in the Czech Republic, the area of certified forests exceeded 70 % in 2011. As compared to 2010, the increase was only marginal. Since February 2010, a revision of the certification standards has been running. The objective of the check is to implement new scientific information, conclusions of ministerial conferences on forest protection, international documents of PEFC International and other national and international treaties and requirements. The revision showed the compliance with the Helsinki definition and was approved on international level.

In 2011, 117 entities were certified by the FSC system in the Czech Republic. There was a year-on-year increase by 31.5 %. The forest owners under FSC system comprise for example: Capital City of Prague, The Administration of Krkonoše Mountains National Park, Mendel University Brno, Wood Processing Co-operative Lukavec or Biocel Paskov; in 2011 there was a newcomer under the FSC system, namely Mondi Štětí.

As for the forest certification in the Czech Republic, one has to point out that the certification helps the protection and revitalisation of endangered and damaged forests. A product made out of certified wood gives the clients the certainty that they origin from sustainably managed forests. Clients are informed that they purchase products manufactured from timber harvested legally and environmental friendly and with respect of human and social rights. In 2011, a campaign supporting the marks knowledge, namely FSC certificate, took place in the Czech Republic. 6 regional seminars incl. excursions about sustainable forest management were organised.

d) Value added of wood products.

The annual value added of the wood products in current prices produced by wood processing industry and other wooden products (CZ-NACE 16), paper industry products (CZ-NACE 17), polygraphy industry products (CZ-NACE 18) and furniture production (CZ-NACE 31), based on the actual results achieved from 2005 to 2011, shows that the achieved results are comparable to relatively more developed manufacturing industry sectors in the Czech Republic. Even the amplitudes in the decrease of value added of wooden products during the world crisis and EU debt crisis are comparable with other more developed manufacturing sectors.

In those sectors, the missing decline of such significant index such as the value added shows that the wood processing industry sectors stand a good chance to be among prospering sectors in the future, sectors which can be competitive and can find effective place on domestic and world market and moreover to process their domestic raw materials into reasonable products.

However, it will not be possible without support from the EU and without realisation of certain stimuli for involvement. It is necessary to bear in mind that no investments were made for 41 years since 1948. Approx. 17 to 18 years after the privatisation, during those the re-stored small and medium forest owners once they paid their debts incurred to pay for their formally stolen property and to start and to provide for new production and again – not out of their fault – they ended up in almost unsolvable problems caused by worldwide and debt crisis, were not long enough to provide for the necessary stability of this sector despite certain benefits brought by new big foreign owners with cutting-edge machines and technology.

From 2005 to 2011, the annual value added of the wood products in current prices produced by wood processing industry and other wooden products (CZ-NACE 16), paper industry products (CZ-NACE 17), polygraphy industry products (CZ-NACE 18) and furniture production (CZ-NACE 31) was the highest in sectors 16 and 17, in 2007 and in sectors 17 and 18 in 2008.

In 2007, the annual value added in current prices generated in the wood processing sector no. 16 amounting to 26 025 663 ths. CZK was by 9.1 % lower than the annual value added generated by the production of computer, electronic and optical appliances and facilities (CZ-NACE 26) from 2006, but it was higher by 30 % in sector 16 than the value added generated in the sector 26 in 2005, or in 2007. Since 2008 to the end of 2010, the value added of sector 26 products dropped year to year, in 2011 the value added of wood processing products (16) was by 70.9 % higher than in sector 26.

As for value added generated by products of paper industry (17), it amounted to 16 132 456 ths. CZK in 2007 and equalled to the value added generated by the products of other manufacturing industry (CZ-NACE 32) in the same year. Since 2007 to 2011, the value added in sector 17 dropped year to year by up to 24 %. As for sector 32, it grew by 6.4 % in the same period.

From 2005 to 2011, the annual value added in current prices generated by the products of polygraphy industry (18) reached the highest values in 2008, namely 14 439 200 ths. CZK. In 2008, the value added in sector 18 was higher by 3.8 % as compared to textile production (CZ-NACE 13). In next years, the difference in favour of sector 18 grew, so that the value added of sector 18 was higher by 9.8 %, by 9.1 % and by 1.8 % in 2009, 2010 and 2011 respectively.

As for the value added generated by the furniture production (CZ-NACE 31), the highest value was reached in 2008, namely 11 548 727 ths. CZK. As compared to 2008, it was lower by 16.9 % in 2011. It is not easy to find a match to the furniture production within the manufacturing industry in terms of annual value added in current prices. The best comparison in terms of value added could be made with the production of pharmaceuticals (CZ-NACE 21). Whereas the annual value added was always higher from 2005 to 2008 as compared to value added generated within furniture sector (by up to 13 %); in 2009 the values were equal and from 2010 to 2011 the value added in sector 21 dropped, namely by 11.5 % and 18.5 % respectively.

The availability of technologies and automatic production facilities within the pharmaceuticals production cannot be compared to furniture production or the one within wood processing production with the one in PC production; furniture and wood processing production are always beaten. Reaching higher increase of value added is easier with better technologies, mainly when including cutting-edge machines and technologies in the production process. This has to be taken into consideration too.

It will be useful to combine the value added in constant prices with the table of labour productivity in constant prices and in ths. CZK per employee for respective sectors of the wood processing industry and the Czech manufacturing industry in total, which is listed in part 3. It is necessary to point out that for reaching the average (listed hereunder) of the total labour productivity per employee within the manufacturing industry, the significant role is played by sectors with high automation level and special technologies as mentioned above. It will never be possible to implement these special technologies within the wood processing industry. This comparison is made with sectors such as refinery of oil products, chemicals production, pharmaceutical industry, motor vehicle industry etc. In those sectors the labour productivity per employee amounts to 964 401 ths. CZK per employee in automobile industry, to 100 998 ths. CZK in chemicals production, to 1 219 235 ths. CZK per employee in oil refinery or to 1 226 686 ths. CZK in pharmaceutical industry. These figures were achieved in 2011 and are lower as compared to 2010. Such productivity cannot be achieved in none of the remaining 18 sectors. These extremes aside, this index can support the fact that conclusions about the effective development in these wood processing sectors can be realised.

e) Market with coniferous sawn wood.

In 2011, the total of 4 454 ths. m³ of coniferous and broad-leaved sawn wood were produced in the Czech Republic; this means a year-on-year decrease by 290 ths. m³. The import of this assortment amounted to 1 030 ths. m³ in 2011; this means a year-on-year decrease by 0.5 %. The export amounted to 3 324 ths. m³ and it was lower by 87 ths. m³.

In 2011, 8 014 ths. m³ of coniferous round wood, incl. pole and mining timber, were harvested. This means a decrease by 968 ths. m³ and by 318 ths. m³ as compared to 2010 and 2009 respectively. From the volume above, 4 153 ths. m³ of coniferous sawn wood were produced. This mean a year-on-year decrease by 339 ths. m³, i.e. by 7.5 %. As compared to 2009, the production grew by 353 ths. m³. The export and import amounted to 74.3 % and 17.8 % respectively from the total volume of coniferous sawn wood production (i.e. 3 084 ths. m³) in the Czech Republic. In 2011, 1 810 ths. m³ of coniferous sawn wood were left for domestic consumption. This means a year-on-

year decrease by 216 ths. m³, which generates a deficit of 10.7 % that clearly relates to the drop in the overall construction production and the adverse situation of the entire economy.

A rough comparison shows that e.g. Poland - that produced 3.9 mil. m³ coniferous sawn wood (probably incl. pole and mining timber) with the production effectiveness coefficient amounting to 0.333 (as compared to the Czech Republic by 0.25 mil. m³ less) - reached the domestic consumption of 3.98 mil. m³. In 2011, the Czech domestic consumption amounted to 1.81 mil. m³ with the production effectiveness coefficient amounting to 0.5181, again with significant volumes of pole and mining timber. The comparison shows that the production of this product highly requested by consumers per capita in Poland amounts to 0.10 m³ and to 0.41 m³ per capita in the Czech Republic. As for Austria that produced 2.3 times more of coniferous sawn wood than the Czech Republic in 2011, i.e. 9.5 mil. m³ with the production coefficient amounting to 0.5714. The Austrian domestic consumption reached 5.1 mil. m³ (in 2010, 4.06 mil. m³); this means the consumption per capita of 1.17 m³. In spite of the misbalance between export - the Czech Republic exported 74.3 % of the total production; Austria 64.2 % and Poland 10.8 % - the situation of production effectiveness and of sawn wood consumption is alarming. EU should consider these issues urgently, if the statement about increasing competitiveness in all EU countries persists.

f) Market with broad-leaved sawn wood.

In 2011, a fairly good volume of broad-leaved round wood incl. pole and mining timber was produced in the Czech Republic. In 2010 and 2009, the production amounted to 445 ths. m³ and 520 ths. m³ respectively. 301 ths. m³ of broad-leaved sawn wood were produced from this round wood (again, as for the Czech Republic, incl. pole and mining timber) in 2011; in 2010 and 2009, the production amounted to 252 ths. m³ and 248 ths. m³ respectively. In 2011, the import of broad-leaved sawn wood amounted to 289 ths. m³; in 2010 and 2009, the import amounted to 335 ths. m³ and 409 ths. m³ respectively. The export amounted to 240 ths. m³ in 2011; in 2010 and 2009, the export amounted to 245 ths. m³ and 292 ths. m³ respectively. 350 ths. m³ remained for the domestic consumption in 2011; in 2010 and 2009, the domestic consumption of broad-leaved sawn wood amounted to 342 ths. m³ and 365 ths. m³ respectively. As for broad-leaved sawn wood (incl. pole and mining timber) the coefficient amounted to 0.3659 in the Czech Republic, to 0.5714 in Austria and to 0.1760 in Poland. In 2011, the export out of the total volume of broad-leaved round wood amounted to 29.1 % in the Czech Republic, to 46.4 % in Austrian and to 3.7 % in Poland. The final performance effect is obvious.

g) Market with wood-based panels (particle board. incl. OSB. fibreboard. OSB, plywood).

As for particle boards incl. OSB, the development in the Czech Republic was not favourable, mainly in terms of production from 2009 to 2011, except for 2010 after the crisis; the same applies to the production of other wood-based panels. There was a year-on-year decrease of the production of particle boards incl. OSB, namely by 3 %. It dropped from 1 085 ths. m³ in 2010 to 1 052 ths. m³ in 2011. In 2011, similarly to 2010, the majority of the production (incl. import) was exported, namely 1 339 ths. m³. In 2010, the export of particle boards incl. OSB amounted to 1 285 ths. m³. The particle boards incl. OSB are mainly exported into EU. In 2011, 476 ths. m³ of particle boards incl. OSB were imported; in 2010 the import amounted to 473 ths. m³. In 2010 and 2011, the import ranged from 44 to 45 % of the production; in 2009, it was 31 %. The domestic consumption amounted to 189 ths. m³ in 2011, as compared to 273 ths. m³ in 2010. There was a year-on-year decrease almost by 31 % (30.8 %).

As for the production of OSB desks within the total particle board production in 2011, it amounted to 49.9 %. The share of OSB import and export in the total particle board import and export amounted to 18.9 % and 45.6 % respectively.

Fibreboards. In the Czech Republic, the production of fibreboards is traditionally low. This product is imported; the imported volume amounts to five times of the volume produced in the Czech Republic. In 2011, the fibreboard production amounted to 42 ths. m³, i.e. the same volume as in 2009. In 2011, the import of this product amounted to 217 ths. m³ as compared to 205 ths. m³ in 2010. However, in 2009, the import amounted to 223 ths. m³ with the domestic production reaching 44 ths. m³. The domestic consumption has been declining since 2009; it amounted to 185 ths. m³ in 2009, it reached 164 ths. m³ in 2010 and only 162 ths. m³ in 2011.

Plywood. Even though the annual production of plywood exceeded the domestic consumption by 63 ths. m³ in 2011, the overall domestic production was lower by 12 ths. m³ than the domestic consumption in 2010. In 2010, along with the domestic consumption, 36 ths. m³ of plywood were imported as compared to 65 ths. m³ in 2011, which were exported along with 63 ths. m³ from domestic production in 2011. The total export amounts to 128 ths. m³ of plywood in 2011, as compared only to 36 ths. m³ in 2010 and 141 ths. m³ in 2009. The annual domestic consumption of plywood has been increasing (except for 2011) since 2009; it amounted to 104 ths. m³ in 2009, to 216 ths. m³ in 2010 and to 118 ths. m³ in 2011.

h) Wood pulp and paper.

In 2011, 3 576 ths. m³ of raw coniferous wood were used to produce wood pulp. This figure comprises 2 479 ths. m³ of coniferous pulp wood and 1 097 ths. m³ of wood chips and coniferous splinters. In 2011, the paper industry produced the total of 700 ths. tons of chemical pulp and mechanical pulp, thereof 697 ths. tons of chemical pulp and 3 ths. tons of mechanical pulp. There was a year-on-year decrease in chemical pulp production by 8 ths. tons and in mechanical pulp by 10 ths. tons. In 2011, 145 ths. tons of pulp were imported, as compared to 177 ths. tons in 2010. 328 ths. tons were exported in 2011, as compared to 386 ths. tons in 2010. The total consumption reached 517 ths. tons of these products in the Czech Republic. This means a year-on-year increase of the consumption by 8 ths. tons, i.e. by 1.6 %.

The production of paper, cardboard and paperboard amounted to 775 ths. tons in 2011, this means a year-on-year increase of the production only by 0.78 %. Along with the production, 1 236 ths. tons of paper, cardboard and paperboard were imported in 2011. In 2010, the import amounted to 1 289 ths. tons, this means a year-on-year decrease of the import by 4.1 %. The export amounted to 683 ths. tons as compared to 786 ths. tons in 2010. The domestic consumption amounted to 1 328 ths. tons in 2011, this means a year-on-year increase by 56 ths. tons, i.e. by 4.4 %.

As the misbalance in the structure of the Czech paper industry has persisted over decades, the current structure of this sector – which is not owned by Czech companies - is not adequate to the situation in the Czech Republic. The pulp production amounted to 718 ths. tons in 2010. The import from this production amounted to 24.7 % in 2010 as compared to 20.7 % in 2011. However, the export from this production amounted to 53.8 % and 46.9 % in 2010 and 2011 respectively. I.e. we export a huge volume of this product from production, but we import pulp with short fibre, which we do not produce in the Czech Republic, even though we could. As for paper products, we export assortments with low value added and import goods with high value added. The misbalance then results in significant financial losses in the foreign trade and balance. We have been reporting this misbalance to the EU several times, however, solution is provided by EU neither for this issue nor for the entire wood processing industry.

i) Carbon trading in the forestry sector.

This issue is dealt with neither at the Ministry of Agriculture nor at any of its workplaces presently. The competence over the carbon trading lies within the Ministry of Environment. Therefore the Ministry of Agriculture cannot provide statements regarding this issue.