

2.4. Price development

GDP deflator

- ***Differing changes in domestic and external prices***

The Czech Republic's economy has been marked by the long-term different development of the price levels of the internal and international markets which manifested itself exceptionally strongly in 2008 and had a substantial influence in the year-on-year changes in price parities or the ratios between the implicit deflators for the gross domestic final expenditure and the international trade transactions involving products and the individual components of created and used resources.

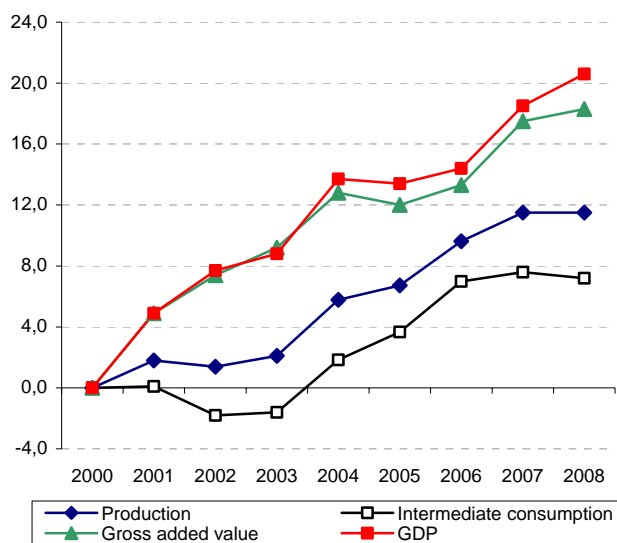
- ***The same growth in the implicit deflator for production as in intermediate consumption***

The total price level for domestic production did not change year-on-year in 2008 and the price level of the consumed intermediate production fell by 0.4%, which is the result of the reduction of the prices for imported goods consumed in this country. The price level of the imported products designated for intermediate consumption was admittedly higher than the prices of the intermediate products produced in this country, but the import price fell significantly. The implicit deflator of intermediate consumption was also influenced by the prices for the products and services consumed in industry which rose, but the reduction of the prices for imported products was predominant. The fall in the price level of the consumed intermediate production during the stagnation of the prices for domestic production is a certain measure of the success of non-financial companies in the domestic market which received additional profits from the realisation of their production upon the basis of the changes in these price parities. An integral result of the aforementioned development was the growth in the total price level of the gross added value; its year-on-year increase of 0.7% in 2008 was slower by a significant 2.0 percentage points than in the previous year. The price level of the gross added value developed significantly differently in the individual branches; it fell greatly in agriculture, hunting and forest management (by 13.1%) and in the processing industry (by 6.8%) and it grew rapidly in companies extracting mineral materials (by 31.2%), in the construction industry (by 10.1%), in hospitality and accommodation (by 8.3%) and in the branches of real estate and services for companies (by 7.6%).

- ***The differing influence of domestic and international prices on the implicit GDP deflator***

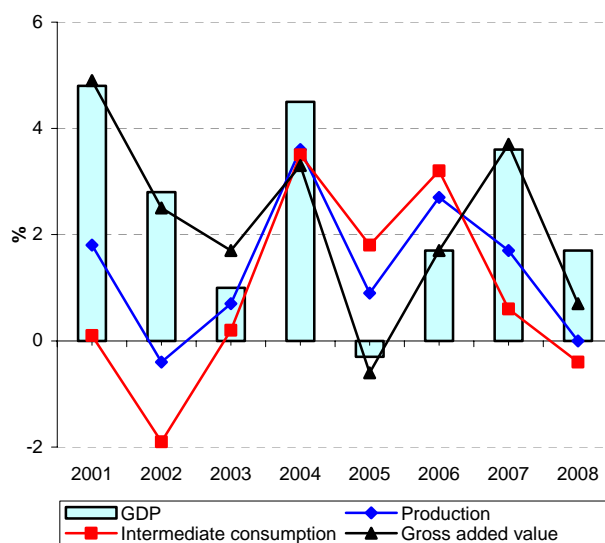
The price changes in the taxes from products and production subsidies affected the development of the aggregate price level of GDP to a substantially lesser extent in 2008 than in 2007. The implicit GDP deflator of 101.7% was 1.9 percentage points lower in 2008 than in the previous year when the net tax deflator had an influence which was completely different from its amount. In 2008, the high product tax deflator (110.8%) and the low product subsidy deflator (100.8%) led to higher growth in the aggregate price level of GDP than the gross added value by 1.1 percentage points. The implicit GDP deflator is influenced not only by the development of the production (output) price, the intermediate consumption (output) and the net taxes, but also by the deflators of domestically realised demand and external demand and supply or the development of the terms of trade. The aggregate price level of the gross domestic final expenditure increased by 3.8% year-on-year in 2008, in which the implicit deflator of final consumption reached 104.9% and gross capital formation reached 100.5%, which was 1.6 percentage points more and 0.8 of a percentage point less than in 2007 respectively. The yearly final expenditure deflator was most influenced by the development in the 1st quarter when the price level increased by 5.7%, of which the level of the household consumption prices increased by 6.8%. The implicit deflator of total exports was 94.1%, which was 5.9 percentage points lower than one year before and the implicit deflator of overall imports was 95.9% which was 2.9 percentage points lower than the year before. The terms of trade of 98.1% brought a significant devaluation to Czech national work in international markets. Organisations involved in international trade activities had a commercial loss of 55.0 billion CZK due to the unfavourable relationship between the development of export and import prices which constitutes a significant negative change in comparison with the commercial profit of 33.9 billion CZK in 2007.

Graph no. 2.4.1 The implicit deflators
(the change in comparison with 2000 in %)



Source: the Czech Statistical Office

Graph no. 2.4.2 The implicit deflators (the year-on-year change in %)



Source: the Czech Statistical Office

- **The increase in the aggregate price level of the gross added values contributed more than one third to their increase in value**

The implicit deflators of production characteristics for 2008 only slightly deviated from the annual average rates of increase achieved in the development over the last eight years, whereby the influence of the changes in the price levels on the value change of production and intermediate consumption is substantially different. The aggregate price level of domestic production rose by 9.3%, intermediate consumption rose by 4.6% and gross added value rose by 18.3% up to 2008 in comparison with 2000. Over the eight years, the change in the prices caused a change in the value of the intermediate consumption of slightly more than one tenth, while the influence approached one fifth for domestic production and reached one third in the case of gross added value.

- **The aggregate price level of domestic final expenditure rose and imports and exports fell**

The implicit deflators of gross domestic final expenditure and exports and imports in 2008 differed significantly from the average annual rates achieved in the previous eight years. In 2008, the GDP price level was higher by 20.3% in comparison with 2000, final consumption was 20.3% higher and gross capital formation was only 2.4% higher. The reduction of the export prices by 12.0% and the import prices by 15.2% lead to an improvement in the terms of trade by 3.8%.

Table no. 2.4.1 The implicit deflators for GDP, domestic final expenditure, exports and imports

in %

	The previous year = 100							
	2001	2002	2003	2004	2005	2006	2007	2008
GDP	104.8	102.8	101.0	104.5	99.8	100.9	103.6	101.7
Final consumption	103.9	101.9	100.5	104.4	101.7	102.5	103.3	104.9
Gross capital formation	100.9	96.9	100.9	101.4	100.0	101.7	101.3	100.5
Exports	99.6	94.5	100.1	102.7	97.6	98.7	100.0	94.1
Imports	97.3	91.6	99.5	101.4	99.5	99.9	98.8	95.9
Terms of trade	102.4	103.2	100.6	101.3	98.1	98.8	101.2	98.1

Source: the Czech Statistical Office

- **The differing developments in the domestic and international price levels**

The development of the price level in the internal market (domestic prices) and foreign trade (the prices for international trade in goods and services) expressed in crowns, which was also influenced by the movements in the CZK exchange rate, differed during the course of the last eight years. This shows the completely different influences of the movements of the production prices and the prices of the gross domestic final expenditure as opposed to the movements of the international prices on the value change of the fundamental economic characteristics on the supply and demand side. Whereas the domestic prices of all the price areas included in the national accounts in the flows of production, consumption and accumulation grew

every year, the prices of the international trade fell with the exception of one year. The prices for imports fell substantially more than the prices for exports, which resulted in favourable terms of trade. The differing development of the price levels of the internal and international markets together with the change in the share of the domestic supply and demand and the external supply and demand on the aggregate supply and demand had a significant influence on the changes in the implicit deflators of the individual components of the created and used resources.

Producer prices

- **Growth in producer prices in all price ranges**

The producer prices in 2008 increased in all price ranges. The year-on-year growth was higher in the case of the prices of agricultural producers. The increases in the prices of industrial producers, construction work and market services were also higher than in the previous year.

- **Prices grew more than in the previous years**

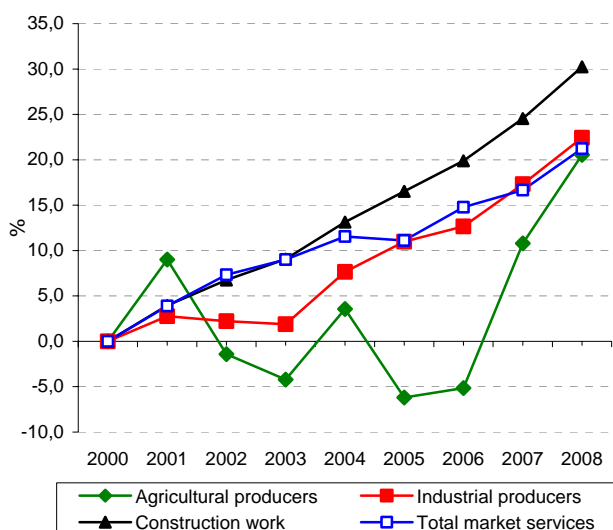
The comparison of the year-on-year increase in the prices in 2007 with the average change in the prices in the period from 2001 to 2007 is interesting. The prices of agricultural producers grew on average by 1.5% in the previous seven years, especially due to the influence of the price jumps in 2001, 2004 and 2007. In 2007, they were only 10.8% higher than in 2000. In 2008, despite the slowdown in growth in comparison with the previous year, their increase was six times higher than the average in the previous seven years.

In 2008, the year-on-year increase in the prices of industrial producers was almost double in comparison with the average for the previous seven years. Of the entire monitored period, the price growth was only higher in 2004. This was especially contributed to by the development of prices in the first three quarters of 2008, when the dynamic growth in the price of oil continued and the prices of foodstuffs also grew quickly. The prices for the extraction of minerals and electricity production, including distribution, were significantly higher.

The price growth in construction work was also higher in comparison with the period from 2001 to 2007. The prices for construction work increased at more than double the rate of the increase in the prices for the materials and products consumed in the construction industry in 2008.

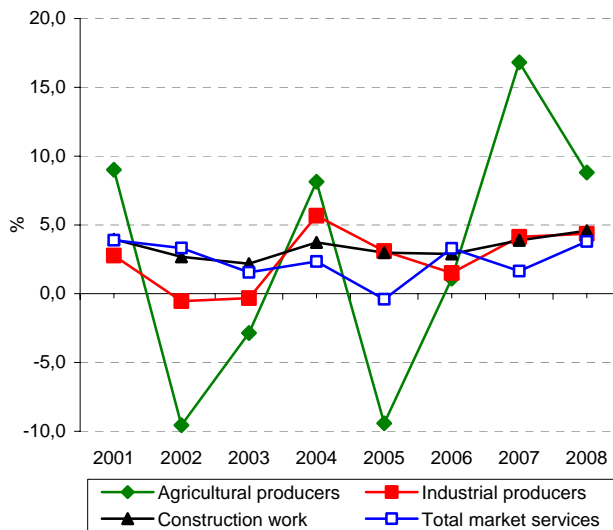
The prices for market services also grew faster than in the last seven years: their growth was only slightly lower than in 2001, when these prices grew at their fastest rate. This was especially caused by the significant growth in the prices for postal services and advertising services and for civil engineering and architectural consultancy.

Graph no. 2.4.3 Producer prices
(the change in comparison with 2000 in %)



Source: the Czech Statistical Office

Graph no. 2.4.4 Producer prices
(the year-on-year change in %)



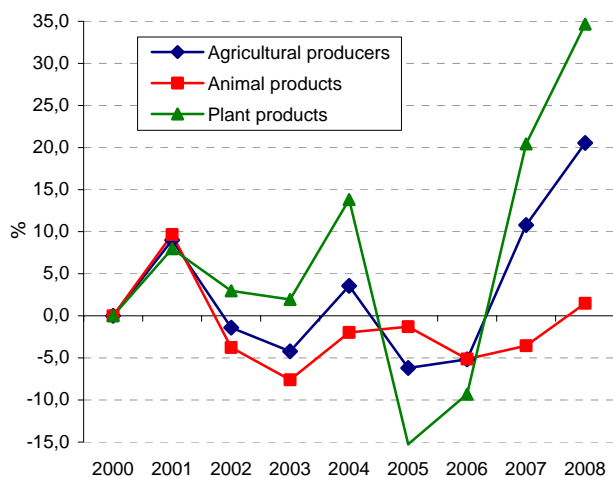
Source: the Czech Statistical Office

- **The dynamic growth of the prices for plant products**

In 2008, the prices of agricultural producers were at their highest level since 2000. This was caused exclusively by the price jump at the turn of 2007 and 2008, which was especially influenced by the prices for plant products. The price impulse which was given not only by the growth in demand for foodstuffs in the world, especially in Asia, but also by the poor harvest in 2007 in the world's main exporters such as the USA, the EU, Australia and the Ukraine manifested itself. The consumption of agricultural crops for the production of bio-fuels was also significant and this pulled prices upwards. The prices of plant products also continued to grow in 2008, albeit at a lower rate than in 2007. They grew by 11.8%, of that grain prices increased by 16.4% and oil plant prices grew by 33.3%. On the other hand, the prices of potatoes fell by 32.4%, vegetables by 15.7% and fruit by 22.3% in comparison with 2007; in the case of all these commodities, the prices returned to approximately 2006 levels.

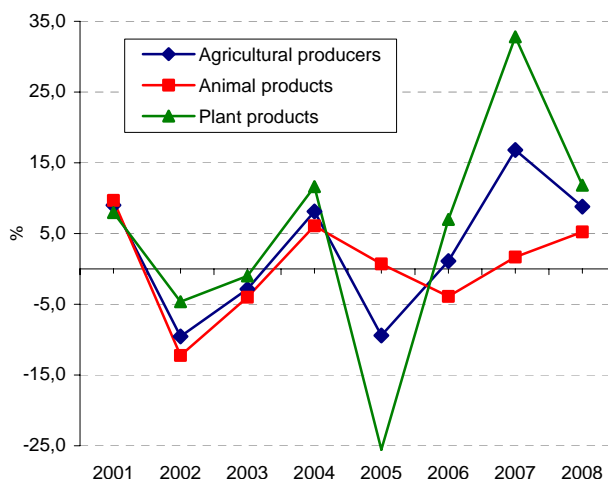
The prices of animal products grew in 2008 by 5.2% and reached a level above the 2000 price level after six years. During the entire eight-year period, they were only higher in 2001. In 2008, the prices of poultry increased year-on-year by 8.0%, milk by 6.5%, eggs by 4.9% and pigs by 4.4%. The prices for meat cattle fell by 2.2%.

Graph no. 2.4.5 Agricultural producer prices
(the change in comparison with 2000 in %)



Source: the Czech Statistical Office

Graph no. 2.4.6 Agricultural producer prices
(the year-on-year change in %)



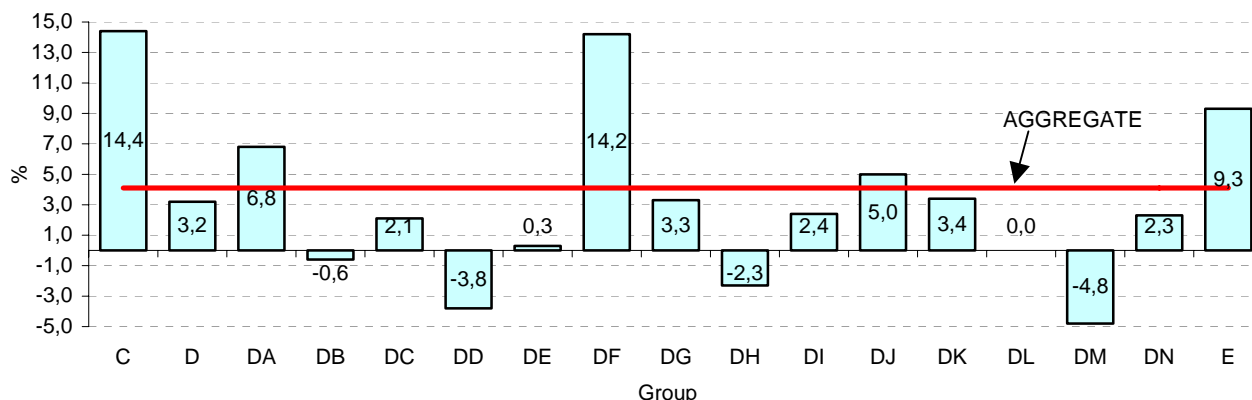
Source: the Czech Statistical Office

- **The rise in industrial producer prices continued**

The increases in the industrial producer prices in 2008 were the fastest in the last four years. The prices for mineral extraction and electricity prices, including distribution, rose dynamically; in the first three quarters of the year, prices for foodstuffs also increased rapidly (by 11.0%, 8.9% and 7.4%), as they also did in the branch of coke and oil refinery products (28.8%, 26.9% and 22.9%). In the last quarter, the prices of foodstuffs were slightly under the level at the close of 2007 and they even fell by 17.1% in the case of the other stated branch. The end of 2008 thus contributed to the slowdown in price growth.

In 2008, prices increased most in the branches of mineral extraction and coke and oil refinery products (over 14%). The prices of electricity, gas and water increased by 9.3% (electricity prices, including distribution, by 11.4%) and the prices of foodstuffs increased by 6.8%. The prices of basic metals, metallurgical and metal working products (by 5.0%) also grew at an above-average tempo (for example, the prices for iron, steel and ferrous alloys grew by 11.8%). The prices for means of transport and equipment, wood and wood products, rubber and plastic products and textiles all fell. In the 4th quarter, the year-on-year increase in the industrial producer prices was only 1.6%.

Graph no. 2.4.7 The industrial producer prices in the individual branches (change in comparison with 2007 in %)



Source: the Czech Statistical Office

- **A significant difference between the increase in the prices for industrial products in the EU 27 and the Czech Republic**

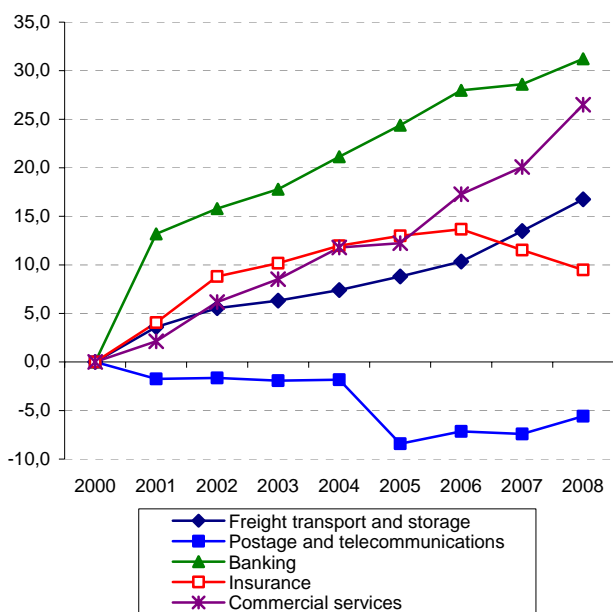
In 2008, the industrial producer prices rose year-on-year in the countries of the EU 15 by 6.2% and the EU 27 by 7.8% and their growth was faster in the Czech Republic by 1.7 percentage points and 3.3 percentage points respectively, which was the absolutely opposite tendency to the development of the inflation differential. From among the individual EU countries, the industrial producer prices increased at an especially fast tempo in the United Kingdom, Luxembourg and Denmark, while the growth slowed substantially during the course of the year.

- **Prices for advertising services increased rapidly**

The prices for market services increased in 2008 by 3.8%, especially as a result of the increased growth in the prices for business services and in the area of real estate by 5.4% (the prices for advertising services increased by 10.3% and for civil engineering and architectural consultancy by 9.5%). From the other areas, in which these prices are monitored, freight transport costs increased by 2.9% and banking prices rose by 2.1%. The prices of postage and telecommunications only increased on aggregate by 1.9%, despite the high increase in postage prices by one quarter. Only the prices in the insurance sector fell (the price of motor vehicle insurance fell by 2.5%).

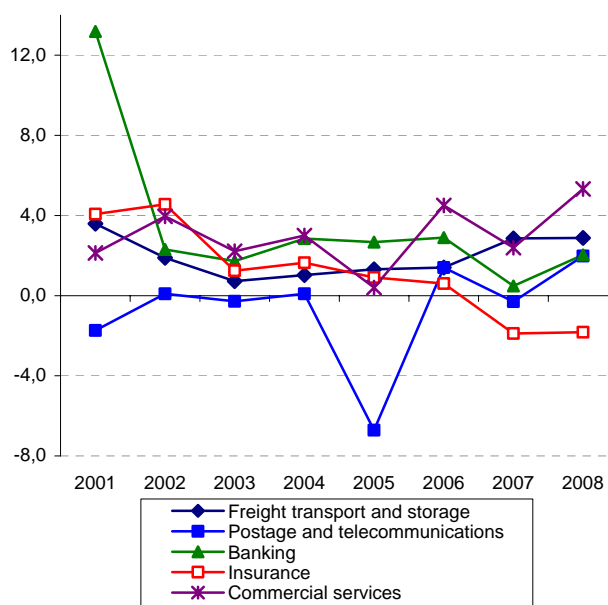
During the course of the last eight years, prices increased the most in banking (by 31.2%) when almost half of the increase occurred in 2001. The prices of business services grew by more than one quarter over the eight year period. The only area where the prices were under their 2000 level throughout the entire period involved postal and telecommunications prices: there was an especially significant fall in prices in 2005 as a consequence of the reduction of prices for mobile telephone services and the services associated with fixed line telephone stations. In the last two years, prices have also fallen in insurance; they were almost 10% higher in 2008 than in the year 2000.

Graph no. 2.4.8 Market service prices
(the change in comparison with 2000 in %)



Source: the Czech Statistical Office

Graph no. 2.4.9 Market service prices
(the year-on-year change in %)



Source: the Czech Statistical Office

Consumer prices

- Record growth in consumer prices**

Consumer prices increased by 6.3% in 2008, which was more than twice as fast in comparison with the previous year. Their growth was last that high ten years earlier (1998). Housing costs contributed to the increase with 2.6 percentage points, foodstuff and soft drink prices with 1.3 percentage points, the prices of alcoholic beverages and tobacco with 0.9 of a percentage point, prices in the health sector with 0.6 of a percentage point and catering and accommodation prices with 0.4 of a percentage point. The influence of the changes in the other sectors was less significant. After a significant price jump at the beginning of the year, inflation fell during the further course of the year.

The increase in inflation in 2008 was especially contributed to by the growth in administratively influenced prices, which included the increase of the VAT rate from 5% to 9%, the increase in consumption tax in the case of tobacco products, the increase in energy prices and regulated rental and the introduction of regulation fees in healthcare. The amount of the television and radio licence fee and public transport prices rose. In the first half of the year, the high increases in the prices of energy and foodstuffs in foreign markets had a pro-inflationary effect.

- The negative impact of the growth in consumer prices on household purchasing power**

The increase in the aggregate level of consumer prices and the loss of value of purchasing power by 5.9% in 2008 manifested itself both in the significant slowdown in the growth of the disposable household income in real terms and in the expenditure on final consumption when households paid 92 billion CZK more for the same goods and services than in the previous year. At the same time, the growth in consumer prices caused the loss in value of the unrealised household purchasing power.

- In comparison with 2000, more than half the increase in prices was caused by the prices for housing, electricity, gas and water**

The growth in consumer prices in 2008 was more than 2½ times higher than the average growth in the previous seven years. In 2008, the consumer prices were more than a quarter higher than in 2000. More than half of the increase in the price level was caused by growth in the prices in the housing, water, energy and fuel sectors. Alcoholic beverages and tobacco, foodstuffs and soft drinks contributed less than 3 percentage points to the growth in prices, while the prices of catering and accommodation contributed only 2 percentage points. In the aforementioned period, the prices in the sectors of clothing, footwear, residential fittings, household equipment and repairs fell.

Table no. 2.4.2 The consumer price indexes (the previous year = 100)

	2001	2002	2003	2004	2005	2006	2007	2008	2008/ 2000
TOTAL	104.7	101.8	100.1	102.8	101.9	102.5	102.8	106.3	125.4
of that:									
foodstuffs and soft drinks	105.1	98.1	97.8	103.4	99.7	100.8	104.7	108.1	118.7
alcoholic beverages and tobacco	103.2	101.9	100.9	102.9	101.4	101.2	110.2	109.9	135.7
housing, water, energy, fuel	109.9	106.1	102.0	103.5	104.1	106.3	103.4	110.3	155.2
health	103.1	104.7	104.0	103.1	107.5	104.8	103.6	131.5	178.8
transport	100.3	98.1	100.1	102.2	101.4	101.6	100.4	102.4	106.6
postage and telecommunications	105.0	103.3	98.0	112.9	107.6	106.8	100.0	97.3	133.9
recreation and culture	105.1	102.0	99.7	101.0	101.8	101.4	100.0	100.8	112.3

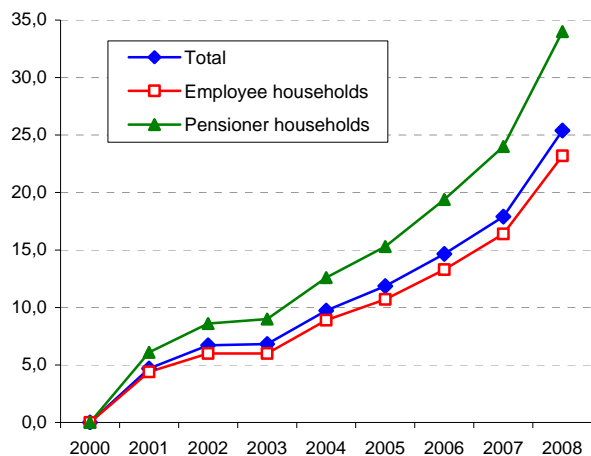
Source: the Czech Statistical Office

• **Faster growth in the costs of living in pensioner households**

As in every year, the cost of living in pensioner households also increased more quickly than in employee households in 2008. This traditional phenomenon is caused by the different consumption structure in pensioner households which especially includes goods and services with faster price increases. The cost of living of employees without hypothetical rental increased by 5.8%, but for pensioners it was 8.2%.

The same thing occurred in each of the last eight years. Throughout the entire period, the cost of living in pensioner households has increased almost fifty percent faster than in employee households. In 2008, the cost of living in pensioner households was 34.0% higher than in 2000, while the growth was 23.2% in employee households.

Graph no. 2.4.10 Consumer prices (the change in comparison with 2000 in %)



Source: the Czech Statistical Office

Graph no. 2.4.11 Consumer prices (the year-on-year change in %)



Source: the Czech Statistical Office

The inflation differential between the EU 27 and the Czech Republic increased

The consumer prices in the member states of the EU 27 (according to the HICP) increased year-on-year by 3.7% in 2008, of which the greatest increase was in the 3rd quarter (4.3%) and the lowest was in the 4th quarter (2.9%). The inflation differential between the growth in the consumer prices in the states of the EU 27 (slower) and the Czech Republic (quicker) changed during the course of the year and it was significantly higher year-on-year in 2008 (2.6 percentage points). The level of the consumer prices in the Czech Republic (according to the preliminary calculations of the Czech Statistical Office) for 2008 were still at the level of approximately two thirds of the average in the developed EU countries.

• **The growth in prices has been the same in the Czech Republic and the EU 27 since 2000**

The price level in the Czech Republic in the last eight years has fluctuated more than the average price level in all of the 27 states of the European Union. In the period from 2001 to 2008, however, the average annual increase in prices in the Czech Republic and the EU 27 was almost identical (2.65% and 2.59% respectively). On average, the prices in the Czech Republic rose only by 0.1 of a

percentage point more quickly than in the EU 27. The ability to dampen the inflationary tendency was supported in the Czech economy to a decisive extent by the rate of appreciation of the Czech crown. The convergence of the price levels in the Czech Republic and the Eurozone was secured for the most part by means of the strengthening of the crown in relation to the Euro. The crown strengthened by 42.8% in 2008 in comparison with 2000, i.e. on average by 4.6% per year.

Prices of foreign trade

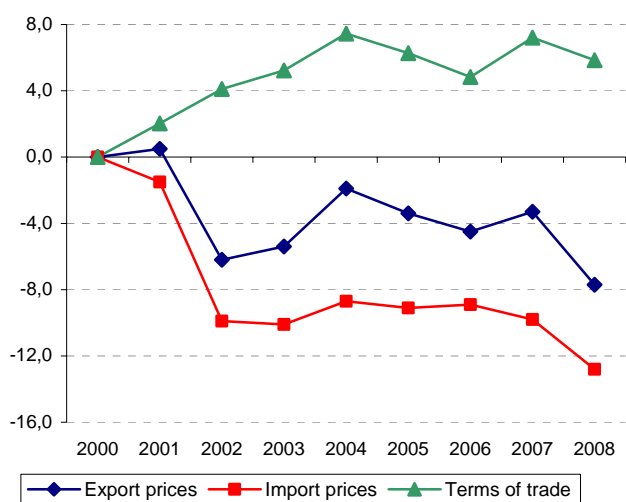
- ***The difference between the fall in the terms of trade in 2008 and their growth in 2007 reached 3.6 percentage points.***

The prices of foreign trade expressed in crowns fell in 2008; year-on-year, the prices of exported goods (4.6%) fell more than the prices of imported goods (3.3%) and the terms of trade were negative (98.7%). In comparison with the year-on-year development for 2007, when export prices rose slightly and import prices fell insignificantly, there was a significantly larger change in the export prices (-5.9 percentage points) than in the import prices (-2.3 percentage points) with an unfavourable impact on the terms of trade (-3.6 percentage points). During the course of 2008, the acceleration in the fall of export prices was greater than in the case of import prices, especially in the 2nd and 3rd quarters when the year-on-year difference in the terms of trade was substantial (5.0 percentage points). In the 4th quarter, the process of acceleration stopped and the terms of trade were slightly favourable. The largest year-on-year counter-movements in the price levels occurred in the 2nd quarter, especially in the case of export prices, when their level was 6.2% lower in 2008 and 2.7% higher in 2007; in the 4th quarter, the difference was already minute. The difference from the movement of the price levels between the loss from the realisation of foreign trade in goods (35.8 billion CZK) in 2008 and the profits (55.8 billion CZK) in 2007 reached a substantial amount (91.6 billion CZK), which had a very negative influence on the development of the gross domestic product
- ***The negative influence of the exchange rate on the terms of trade***

The changes in the foreign trade prices include the influence of the crown exchange rates in relation to the monitored traded currencies. During the appreciation of the crown in relation to both the Euro and the dollar in 2008, the exchange rate influences caused the reduction of prices for imports and exports. According to the calculation of the Czech Statistical Office, the CZK strengthened year-on-year by 8.9% against the currencies, in which foreign trade in goods was undertaken during export operations. The price index "adjusted" for exchange rate influences increased by 2.8% for exports and 5.3% for imports in 2008 which meant that the terms of trade from the "adjusted" price indexes (97.6%) were more unfavourable than from the price ratio expressed in crowns. According to the experimental calculations, exchange rate influences reduced the terms of trade by more than 1 percentage point. In 2006 and 2007, these influences had an opposite influence and exchange rate influences increased the terms of trade.
- ***Import and export prices fell long term***

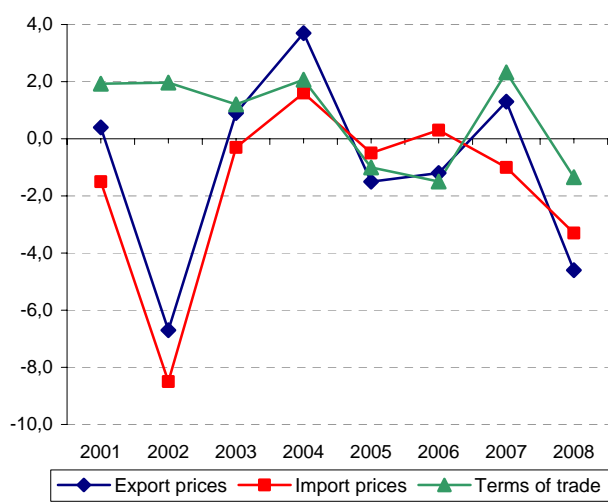
In 2007, the terms of trade were the highest for the last 7 years. The terms of trade were only negative in 2005 and 2006. From 2001 to 2007, import prices only increased twice and suppressed the growth of the prices in the economy. Their largest fall was in 2002, when, for example, the prices of mineral fuels fell by almost one fifth. The fall in the prices in this year was also supported by the strongest appreciation of the crown in the given period. In 2007, export prices were 3.3% lower in comparison with the year 2000, while import prices were almost 10% lower. This was especially caused by the substantial fall in prices in 2002.

Graph no. 2.4.12 Export and import prices, the terms of trade (the change in comparison with 2000 in %)



Source: the Czech Statistical Office

Graph no. 2.4.13 Export and import prices, the terms of trade (the year-on-year change in %)



Source: the Czech Statistical Office