2. Macroeconomic Development

2.1. Factors of Economic Development¹

In 2009, the Czech economy declined for the first time in the monitored period
The accelerating rate of year-on-year GDP growth, which started in 2003, continued until its peak in 2006. The economic slowdown, which began in the second half of 2007 and continued in 2008, hit the Czech economy the most heavily in the beginning of 2009.

The year-on-year decrease in performance of the Czech economy was apparent throughout 2009, with GDP decreasing by 4.2%, although the seasonally adjusted GDP increased on a quarter-to-quarter basis in the third and fourth quarter. Compared to the average year-on-year growth rates from the period 2001–2008 (4.3%), this was lower by significant 8.5 percentage points. This resulted from the adverse internal and external factors, decrease in domestic and foreign contracts or, as the case may be, insufficient sales of products on both domestic and foreign markets. During 2009, we witnessed exceptionally irregular fluctuations of the particular GDP components. The sharpness and power affecting the changes in GDP rates, the components of gross domestic final expenditure as well as exports and imports in the particular year quarters of 2009 were unprecedented in the Czech Republic.

 Decrease in GDI was lower than decrease in GDP
In 2009, there was a strong appreciation of the Czech national labour in commodity operations and transactions in services on foreign markets. Trading profit of 61.8 billion CZK for 2009 resulting from favourable terms of trade in foreign trade (+3.8%) represented – compared to the trading loss of 45.6 billion CZK for 2008 – a substantial positive change, which was reflected in the development of gross domestic income (GDI). With the GDP decreasing, the decline in the gross domestic income was lower. The year-on-year negative change in GDI (-2.6%) was naturally worse than the medium-term average of the period 2001–2008 (+4.5%).

As a result of higher outflow of net transfers to foreign factors of production, the gross disposable national income in current prices was 3.4% lower than in 2008, which was a worse result than the nominal GDP decrease by 1.7%. The ratio of GDNI and GDP decreased by 1.5 percentage points (to 93.3% in 2009).



¹ Data indicated in this part are not seasonally adjusted, unless specified otherwise.

Demand side of the economy

• Households restrained their final consumption expenditure Gross domestic final expenditure ² decreased in the Czech Republic, on a year-toyear basis, by 4.6%, although it was still rising by 1.1% just a year ago and by around 5.5% in 2007 and 2008. From the point of view of medium-term average growth during the years 2001–2008, which reached 3.5%, this implied a great loss of dynamics. In addition, the household consumption decreased by 0.3%, which was once again below the average of the period 2001–2008 (average growth by 3.7%). Final consumption expenditure of households declined in spite of a faster real wage growth than a year ago.

As a result of the decreased inflation, the devaluation of the population's savings was lower. Furthermore, the tighter conditions for providing consumer and mortgage loans reduced the possibilities to finance household expenditure from foreign sources. The year-on-year increase in value of aggregate deposits on the bank accounts of households reached 110.3 billion CZK. In addition, it was not mitigated by inflation pressures, which resulted in lower devaluation of savings. These aspects together with the risk of job loss were behind the restraining of the household consumption. Consumers expected their economic situation to deteriorate in the following years.



• Government increased its expenditure The government consumption growth rate increased significantly compared to 2008, rising from 1.0% to 4.4%, which shows the efforts to mitigate the economic recession. In the medium term, the year-on-year growth in the period 2001–2008 was 2.4% on average.

• Business investments decreased substantially in absolute terms ... As a result of the unfavourable internal and external investment environment and the weakening of the foreign demand, investment activities of businesses at the territory of the Czech Republic were significantly suppressed. Gross capital formation dropped by 18.1% in 2009, on a year-to-year basis, which was the worst result since 1996 when the first time series were available. The average from the period 2001–2008 was much higher and positive (4.2%). The size of investments was also affected by the negative perspectives of entrepreneurs for the following years as regards the demand, and by their subjective feeling of lack of funds.

² Gross domestic final expenditure is calculated as the sum of final consumption expenditure by households, non-profit institutions and government, and gross capital formation.

both the decrease in fixed capital formation and decrease in inventory

... as a result of Gross fixed capital formation (GFCF) decreased by 8.7% when the 2001–2008 average was 4.2%, and contributed with approximately one half to the drop in gross capital formation. The negative change in corporate inventory participated with the other half.

> The material structure of the gross fixed capital formation (in current prices) in 2009 shifted strongly in favour of investments in other buildings and constructions as their share in GFCF increased from 36.6% in 2008 to 41.2% in 2009. The share of intangible fixed assets recorded a lower growth (by 1.1 percentage points). On contrary, there were less investments in other machinery and equipment (decrease of share by 3.2 percentage points) and in means of transport (decrease of share by 2.2 percentage points). The share of investments in housing recorded only a slight decrease by 0.5 percentage points. It is apparent that the interest in machinery investments and purchase of cars dropped. Households were also less interested in new housing. Household investments in new housing were limited not only by the tighter conditions for providing housing loans, but also by the expectations for lower apartment prices. The growing share of other buildings and constructions was influenced by higher investments of the government in transport infrastructure.



Recession in trading partner countries decreased exports ...

For Czech exports, recession in the economies of the most important trading partners, and thus also a loss of foreign demand visible, particularly, through the downturn of export-oriented branches of the processing industry, was - to a limited extent only - compensated by exchange rate depreciation. The depreciation of the crown exchange rate also partially mitigated the decrease in prices of inputs commodities traded on the world markets. It was exactly the influence of the developments in the world prices and exchange rates that caused the substantial improvement of terms of trade in 2009. While, in the previous years, the exports of goods and services recorded a two-digit growth, which slowed down to 6.0% in 2008, the year of 2009 was already marked by a year-on-year drop by 10.2%, amounting to 21.3 percentage points less than the 2001–2008 average. This decrease was crucially affected by exports of goods, whereas exports of services recorded a yearon-year growth.

... and resulted in a change of their territorial and commoditv structure

The economic slowdown of the main trading partners was reflected, in particular, in the territorial structure of foreign trade. Out of the countries, which are the destination for Czech goods of more than 100 billion CZK, the strongest drop was recorded for exports to Poland by 21.4%, Italy by 18.5%, Austria by 12.8%, Slovakia by 12.7%, Great Britain by 11.2%, France by 10.8% and Germany by 8.5%. Exports to EU-27 countries decreased by 13.2% which, however, resulted in a slight growth by 0.9 percentage points of their share in the total exports of the Czech Republic to 86.1%. The businesses successfully increased exports only to certain countries in Asia and Africa and to Israel and Turkey. The commodity structure of exports of goods changed as well. The strongest increase was recorded in the share of inedible materials, except for fuels, and surprisingly also in the share of machinery and means of transport. On contrary, the strongest decrease was recorded in the share of food products and live animals and, identically by 0.3 percentage points, in the share of industrial consumer goods and mineral fuels, lubricants and related materials.



• Significant difference between the import rates of goods and services The reasons behind the decreasing growth rate of imports were the slightly declining demand of not only Czech households, but also – and primarily – of businesses. Czech exports, particularly from processing industry, are largely dependent on the imports of raw materials, materials or components that are processed at the territory of the Czech Republic in order to be exported. The depreciation of the exchange rate of the Czech crown, making the imports more expensive, also played its role. Imports of goods and services to the Czech Republic decreased by 10.2% on a year-to-year basis, which was 20.3 percentage points less compared to the high average for the period 2001–2008. Similarly to the exports, the dynamics of goods and services was also different in imports. While imports of services increased by nearly one-fourth, imports of goods declined by 14.8%.

Seasonally adjusted decrease in GDP by 4.1%³ was influenced, in particular, by Decrease in GDP was gross capital formation, contributing -4.5 percentage points, and by net exports of goods and services, contributing -0.4 percentage points. The influence of household influenced by gross consumption was close to zero. Positive effect on the change in GDP can be capital formation attributed to government consumption only; its contribution was 0.9 percentage and net exports points. Within gross capital formation, the decrease in GDP was primarily affected by change in inventory (-2.5 percentage points), also supported by the negative contribution of gross fixed capital formation (-2.0 percentage points). Compared to the medium-term average of the period 2001–2008, most contributions experienced a reversed effect, except for government consumption having an even larger effect on the GDP change. The average contribution of household consumption to GDP growth in the period 2001-2008 reached 1.8 percentage points, government consumption 0.5 percentage points, gross capital formation 1.2 percentage points, and gross fixed capital formation 1.1 percentage points. The average contribution of change in inventory and net exports in the period 2001-2008 was 0.1 percentage points and 0.7 percentage points, respectively, with the contributions of these components showing the highest volatility in the particular years.

³ The numerical discrepancy between the GDP change and the sum of contributions to its change is caused by rounding up.





Supply side of the economy⁴

• Severe deterioration of production characteristics The production performance of the Czech economy, which can be measured in several ways, such as with the volume of goods and services produced, intermediate production consumed or gross value added (GVA) generated, showed dynamic growth during the years 2001–2008. The growth of all three basic production characteristics culminated in 2006 when production increased by 10.5%, intermediate consumption by 12.2% and GVA by 7.6%. In 2007 and 2008, the year-on-year growth rates were gradually slowing down. The year 2009 marked a break in this trend and a shift to year-on-year decreases. For this reason, this year appears to be strongly below average from the point of view of the average value for the period 2001–2008. Production decreased by 8.4%, which was nearly 15 percentage points less than the average referred to above. Intermediate consumption also declined (by 10.4%) and its difference against the average was -17.7 percentage points. GVA growth in 2009 was 9.1 percentage points lower than the medium-term average of the period 2001–2008.

Table No. 2.1.1	Values of and changes in production, intermediate consumption and gross
	value added

	2001	2002	2003	2004	2005	2006	2007	2008	2009
Production - billion CZK, current prices	5,874.0	6,033.2	6,385.4	7,059.1	7,437.0	8,318.8	9,234.7	9,672.7	8,759.8
PR = 100.0, from constant prices	107.3	103.1	105.1	106.8	105.3	110.5	109.0	103.2	91.6
Intermediate consumption - billion CZK, current prices	3,741.6	3,793.1	4,042.3	4,529.4	4,761.7	5,411.1	6,056.7	6,351.3	5,500.9
PR = 100.0, from constant prices	110.1	103.4	106.4	108.2	104.7	112.2	110.6	103.2	89.6
GVA – billion CZK, current prices	2,132.4	2,240.1	2,343.1	2,529.7	2,675.3	2,907.7	3,178.0	3,321.4	3,258.9
PR = 100.0, from constant prices	102.5	102.5	102.9	104.5	106.6	107.6	105.9	103.4	95.4
								-	

Source: CZSO

• Tertiary sector strengthened at the expense of secondary and primary sectors The long-term trends in the structural change of the supply side of the economy continued in 2009. These trends consisted, in particular, in a withdrawal of the primary and secondary sectors in the Czech economy and, on contrary, increase in the share of the tertiary sector. These processes could have been additionally supported by the economic recession. This could have been caused by different sensitivity of the individual sections (or their branches, as the case may be) to the

⁴ As this Chapter uses the national accounts data, Branch Classification of Economic Activities (BCEA) (according to NACE rev. 1.1) is applied. For this reason, it can be different from other Chapters as regards the definition of sections, subsections, etc.

economic cycle. While branches in agriculture and services are typically less sensitive to the cyclical development of the economy, industrial branched tend to respond more heavily to it. The fact that particularly industrial branches are dependent on exports, i.e. on foreign demand, which was decreasing last year, also plays its role in the Czech economy.

In the primary sector (agriculture, forestry, fisheries – BCEA A+B), the decrease in its share in GVA, observed since 2005 already, continued further to 2.3%, which was the lowest value in the monitored period. In the 2001–2008 average, the average representation of primary sector was 3.0%. The share of secondary sector (mining, industry, construction – BCEA C+D+E+F), continued decreasing for a second year in row, reaching 37.2%. The medium-term average value ranged around 37.6%. The tertiary sector (services – BCEA G to P) further strengthened its position in the supply structure, exceeding 60% share in GVA again after five years. This value was above average; the 2001–2008 average was 59.3%.

Tab. 2.1.2	Structure of gross value added
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... was also

reflected in the

change of its

structure

									n %, curre	ent prices
Sector		2001	2002	2003	2004	2005	2006	2007	2008	2009
Primary		4.0	3.3	3.1	3.3	3.0	2.6	2.5	2.5	2.3
Secondary		37.7	36.7	35.9	38.6	37.9	38.2	38.4	37.6	37.2
Tertiary		58.3	60.0	61.0	58.1	59.1	59.2	59.1	59.9	60.5

Source: CZSO

The processing industry was hit the most by the economic downturn in the Czech Sharp drop of Republic and abroad. Many branches of the processing industry are, indeed, closely the processing industry ... linked to foreign demand. More than a half of its production is destined for foreign markets, and approximately 60% of new contracts for the Czech industry come from abroad. It was due to lower external and internal demand that industry as a sector dropped by 13.1% in 2009 (expressed in GVA in 2000 constant prices), although its average growth between the years 2001 and 2008 was 5.9%. This fall was, logically, driven the most by the decreased performance in the processing industry, which declined by 15.2% in 2009 and its rate was nearly 23 percentage points lower compared to the period 2001-2008. Export-oriented branches, such as manufacture of machinery and equipment n. e. c. or manufacture of electrical machinery and apparatus, were the most hit by the decrease in domestic and particularly foreign contracts. Since mid-2008 already, production capacities in industry had been used less and less; year-on-year decreases in the industrial production index were recorded from the 3rd quarter of 2008. During 2008, industrial capacities were used for 87.5% on the average, dropping as low as 76.6% in 2009.

> The development in the structure of gross value added indicated rather substantial changes in the performance of the particular branches in the processing industry. Compared to 2001, the composition of GVA in processing industry in 2008⁵ was more predominated by businesses focussing on manufacture of motor vehicles (other than motorcycles) and manufacture of trailers and semi-trailers, which increased by 3.3 percentage points to 12.4% in terms of its share in GVA. Oddly enough, the gradually increasing trend in the share of this sub-section, prevailing in the previous four years, was interrupted. Manufacture of rubber and plastic products also strengthened its position, growing by significant 2.2 percentage points to 7.1%. This share is characterized by interconnection with automobile manufacture, similarly to manufacture of fabricated metal products. The third best sub-section in terms of development was manufacture of machinery and equipment, the share of which grew from 9.8% in 2001 to 11.1% in 2008. In the medium term, industrial businesses specialized less in manufacture of food products and beverages (decrease of share by 3.4 percentage points to 9.7%), manufacture of textiles (decrease by 1.7 percentage points to 1.7%) or manufacture of other mineral products (by 1.5 percentage points to 6.3%).

The most important branches in terms of share in total GVA and thus also in GVA in the processing industry in 2008 included manufacture of basic metals, manufacture of fabricated metal products, manufacture of means of transport and transport equipment, manufacture of electrical machinery and optical devices and equipment.

⁵ Data from annual national accounts have not been available yet for 2009 in the required breakdown.

Manufacture of means of transport and transport equipment took the place of manufacture of food products and beverages and tobacco products, which placed second in 2001, recording thus a rather steep growth, which was extraordinary also within the EU-27 average. The success of this branch can be largely attributed to the foreign direct investments that it attracted.

Graph No. 2.1.10 Shares of selected branches in the gross value added in processing industry (current prices)



Nor services

decrease in GVA

Nor the service sector was able to avoid the year-on-year drop in gross value added in 2009 (in 2000 constant prices). GVA reduced by 3.0%, which was - just like in the were able to avoid a case of industry - the worst result for the period 2001-2009. The 2001-2008 average ranged around 4.3% growth. Sections that were the most hit by the economic recession included trade, repairs of motor vehicles and consumer goods decreasing by 8.1% on a year-to-year basis, followed by real estate, renting and business activities, research and development decreasing by 3.0%, and education decreasing by 1.8%. In addition, these values were naturally significantly lower than the medium-term average. The medium-term average for these sections reached 7.8%, 3.6% and 3.7%, respectively.

> In spite of the unfavourable development across the sector, there were also sections where the gross value added increased compared to 2008. Examples include financial intermediation (banking and insurance) with a 5.9% increase; hotels and restaurants with a 5.4% increase; and other community, social and personal services with a 3.1% increase. In financial intermediation, the growth ranged 0.4 percentage points above the medium-term average; for hotels and restaurant it was 10.3 percentage points higher, and for other community, social and personal services 1.8 percentage points higher.

In 2009, the largest shares in GVA in services were generated by the sections of real Structure of estate, renting and business activities, research and development with nearly a oneservices remained quarter share; trade, repairs of motor vehicles and consumer goods with 19.6% without major share, and transport, storage and communication with 17.3% share. This ranking changes in was the same as in 2001. A more significant increase in the GVA share was comparison of recorded for financial intermediation from 5.6% to 6.7%, or for real estate, renting years 2001 and and business activities, research and development by same extent. In the medium 2009 term, on contrary, three sections experienced withdrawal - trade, repairs of motor vehicles and consumer goods by -2.9 percentage points; transport, storage and communication by -0.7 percentage points; and hotels and restaurants slightly by -0.2 percentage points.

Graph No. 2.1.11 Shares of selected sections to gross value added in the service sector (current prices)



• Secondary sector had the largest influence on the decrease in total GVA

In 2009, agriculture, fisheries and forestry had a positive effect on the seasonally adjusted decrease in gross value added (-4.4%) and increased the total GVA by 1.2 percentage points, while its average contribution during the period 2001–2008 was zero. On contrary, industry as well as services caused a decrease in the total GVA. Negative contribution by industry was -4.5 percentage points, although the average contribution reached 2 percentage points. It was industry that had the largest influence on the development of change in GVA. Processing industry was responsible for a major part of that influence, "supporting" the decrease by -3.6 percentage points with an identical average contribution as industry. In spite of the unfavourable development in its sector, construction was able to "pull" the change in GVA in positive direction by 0.1 percentage points. This value corresponded also to its average contribution. Services as a whole contributed to a decrease in GVA by -1.2 percentage points; for that reason, they did not reach their average of 2.4 percentage points. The largest part of this contribution was attributed to services related to trade, restaurants and transport.

Graph No. 2.1.12 Contributions of selected industries to GVA growth (in percentage points, constant prices, seasonally adjusted)



Source: CZSO

Basic industries⁶

• Agricultural production decreased According to preliminary data from the 2009 aggregate agricultural account, plant production accounted for 52.7% and livestock production for 44.1% of agricultural production. Thus, the trend set since 2004 continued; the plant production has been outweighing livestock production. Agricultural production in constant prices decreased in 2009 by 3.2% on a year-to-year basis, with plant production decreasing by 1.9% and livestock production by 4.8%.

• Industrial production in constant prices decreased in 2009 by 13.5% on a year-to-year basis. This fall started in the second half of 2008 already and deepened even further 2009 although the decrease rate of industrial production has been slowing down since the second quarter of 2009.

A dominant position within industry belongs to processing industry; its performance in 2009 contributed to the change in the industrial production index with -13.0 percentage points. In all years of 2001 to 2009, mining and quarrying contributed negatively to the year-on-year industrial production index (with -0.3 percentage points in 2009). The contributions of generation and distribution of electricity, gas, heat and conditioned air ranged in the interval from -0.4 to 1.0 percentage points in the last decade, with -0.2 percentage points in 2009.

Within the processing industry, the largest share in the decrease of industrial production in 2009 was attributed to manufacture of machinery and equipment with a contribution of -2.6 percentage points, although it was contributing with 0.8 percentage points on average in the period 2000–2008. A two-percent negative contribution in 2009 came also from manufacture of fabricated metal products other than machinery and equipment, while manufacture of motor vehicles (other than motorcycles), trailers and semi-trailers contributed with -1.6 percentage points in 2009.



• *Export-oriented industry had less contracts* The value of new industrial contracts in current prices for selected branches decreased in 2009 by 16.4% on a year-to-year basis. The overall development of these contracts in the last decade more or less follows new contracts from abroad, which confirms the export orientation of the Czech industry. New contracts from abroad dropped by 15.3% in 2009.

The greatest fall in 2009 was recorded in new contracts in manufacture of basic metals, metallurgical processing; foundry industry, by a total of 40.7%, with abroad contracts accounting for 39.2%. On contrary, the value of new contracts increased by 59.4% (by 26.1%, respectively) in the manufacture of other means of transport and transport equipment.

⁶ In this part of the Chapter, branches are structure according to classification of CZ-NACE, rev.2.

• Employment in industry declined and wage growth rate slowed down The number of employees in the period 2000–2008 showed a stable development. The most persons were employed in the processing industry. The decrease in industrial production in 2009 came hand in hand with reductions of employees. The average registered number of employees in industry decreased by 12.3% on a year-to-year basis. As a result, there were 38.5 thousand employees in mining and quarrying, 1.1 million employees in the processing industry, and nearly 31.8 thousand employees in generation and distribution of electricity, gas, heat and conditioned air.

The average monthly nominal wage of employees in industry increased by 3.3% on a year-to-year basis in 2009, with a 2.3% growth in real terms. The highest average monthly wages were in generation and distribution of electricity, gas, heat and conditioned air (38,262 CZK), followed by mining and quarrying (27,941 CZK), and the lowest in the processing industry (21,770 CZK).



Source: CZSO, own calculations

• Construction production decreased only slightly Construction was doing somewhat better than industry. In 2009, construction production in constant prices decreased by 1.0% on a year-to-year basis, which was mainly due to the drop in the 1st quarter, with positive values achieved in the other quarters of the year. The decline was caused, in particular, by the decreasing structural engineering (by 7.0% on a year-to-year basis). The growth in civil engineering (by 14.3% on a year-to-year basis) was not sufficient to compensate that decrease.

Less building permits were issued, but for a higher construction value
Building offices issued a total of 112,674 building permits in 2009, which was 7.8% less on a year-to-year basis. Decrease was recorded, particularly, in the number of issued building permits for apartment buildings (by 11.5%) and for new constructions (by 10.5%).
However, the indicative value of the permitted constructions increased by 4.3%, amounting to 407.6 billion CZK. The largest growth was recorded in changes of

amounting to 407.6 billion CZK. The largest growth was recorded in changes of completed buildings (by 17.3%), mainly thanks to the increase number of permits for photovoltaic plants.



Source: CZSO, own calculations

• Number of contracts increased; however, their value was lower

Construction companies with more than 50 employees closed 7.3% more construction contracts, on a year-to-year basis, in the domestic economy. However, the total value of these contracts decreased year-on-year by 26.4% to 183.6 billion CZK. The average value per newly closed construction contract was nearly one-third lower on a year-to-year basis. New contracts in structural engineering and civil engineering in the domestic economy decreased year-on-year by 35.7% and 18.1%, respectively.

The level of contracts at the end of the year was 19.3% lower in 2009 on a year-toyear basis, amounting to 173.7 billion CZK. In the domestic economy, the level of public contracts decreased year-on-year by 20.6% to 116.8 billion CZK and the level of private contracts by 32.8% to 37.8 billion CZK. On contrary, the level of contracts from abroad increased by 62.0% to 19.1 billion CZK.

• *Number of flats initiated was lower than number of flats completed* With regard to low demand on the estate market, only 37,319 new flats started to be constructed during 2009, which was 14.3% less on a year-to-year basis. The largest decrease was recorded in the start of construction of apartments in apartment buildings (by 19.5%) and in family houses (by 18.2%).

Construction activity in apartment construction shifted to completion of apartments under constructions initiated in the past. There were 38,526 flats completed, which was 0.4% more on a year-to-year basis. Thus, for the first time in 15 years, the number of flats completed exceeded the number of flats initiated. This completion took place, particularly, in apartment buildings (up by 10.3%).

• *Employment decreased and wages increased wage increas*



Value of new construction

Graph No. 2.1.20

Number of flats initiated and completed (in thousands)



Source: CZSO

• Decrease in trade in motor vehicles pulled down retail sales

Graph No. 2.1.19

Following a long-lasting growth, sales in constant prices generated in retail trade including motorcar segment decreased by 4.4% on a year-to-year basis. This development was influenced the most by the year-long fall in the branch of wholesale and retail trade and repairs of motor vehicles (-10.9%). Sales in non-food goods excluding fuels decreased by 3.0% and in fuels by 1.5%; on contrary, sales in retail trade in food products increased by 0.4%.

Wholesale and retail trade and repairs of motor vehicles affected the development of the aggregate index of sales in retail trade by as much as three-quarters, causing its overall decrease due to their contribution of -3.3 percentage points.



Source: CZSO, own calculations

• Sales in market services decreased

In 2009, sales in market services decreased year-on-year by 9.3% in real terms. The largest influence on this decrease (-2.9 percentage points) came from transport and storage (Section H) where sales dropped by 9.5%, particularly in land transport and transport via pipelines. The significant decrease of sales in advertising caused also a major contribution (-2.8 percentage points) to the decrease in services for professional, scientific and technical activities (Section M). Administrative and support activities (Section N), with a -1.5 percentage point share, were influenced the most by the decrease in sales in employment-related activities. Sales in information and communication services (Section J) contributed -0.9 percentage points to the year-on-year change. Identical contribution came also from sales in hotels, catering and restaurants (Section I), decreasing by 11.1% on a year-to-year basis.







Sources of economic growth

• Economic recession was determined by the negative contribution of intensive sources In the period of 2001–2008, extensive sources (employment and capital stock) were contributing to the economic growth with approximately 30% and intensive sources (labour productivity and capital productivity) with 70%. Given the average growth of 4.3% in the monitored period, extensive factors were contributing with 1.2 percentage points and intensive factors with 3.1 percentage points. However, the situation in 2009 was completely different. The downturn of the Czech economy was, from the point of view of sources of economic growth, "pulled" solely by the decrease of intensive factors. Intensive sources of economic growth recorded, in total, negative contributions of -4.3 percentage points, while extensive sources contributed positively with 0.2 percentage points. The economic decrease was 4.2%⁷. Compared to the average values referred to above, these values were below the medium-term average of the period 2001–2008.

• Contribution of employment was negative, ... The economic slowdown in 2008 and the subsequent GDP fall in 2009 were negatively reflected in the gradually deteriorating labour market conditions and decreasing employment when the demand side shrank and the supply side was extending. The total employment⁸, expressed in persons, decreased by 1.2% on a year-to-year basis, and was thus 2.0 percentage points below the 2001–2008 average. In consistence with the favourable development of the economy and the labour market, the contribution of employment was rising in the period of 2004–2007. Its contribution to growth in 2008 was still positive, but in 2009 it decreased growth by -0.7 percentage points. The average contribution of this indicated in the period 2001–2008 was 0.5 percentage points.

• ... but the decrease in GDP was affected the most by labour productivity Since 2005, the growth rate of aggregate labour productivity was gradually slowing down until a 2.5% decrease in 2009. Similarly as for the decrease in employment, this negative value was strongly below average, namely -5.9 percentage points below the 2001–2008 average. For this reason, labour productivity was also the major cause of the economic downturn, contributing to it with o -2.4 percentage points, although its average contribution during the period 2001–2008 reached 1.6 percentage points.

⁷ The difference between the sum of contributions from the individual sources and the economic growth is caused by rounding off.

⁸ Employment data were taken from annual national accounts because of their mutual comparability with data concerning the gross national product and gross fixed asset inventory.

⁹ Aggregate labour productivity is calculated as the ratio of gross domestic product (in 2000 prices) to total employment (converted to full-time equivalent).

Capital stock (inventory of gross fixed tangible and intangible assets¹⁰) was growing, Capital stock on average, by 2.1% on a year-to-year basis in the period 2001–2008. Based on the was the only preliminary estimate of CZSO, capital stock increased by 2% in 2009, i.e. slightly less source with a than the average. The reasons behind it can probably be found in the lower positive willingness of businesses and households to invest in tangible assets. Thanks to the contribution growing capital stock and the decreasing employment, the capital-labour ratio increased as well, to a level that was above the average in 2009. Naturally, the contribution of the capital stock to the GDP change also responded to its positive development. In 2008, the contribution reached 0.9 percentage points and corresponded thus exactly to its medium-term average. It was the only source of economic growth with a positive effect, since the contributions of other sources were negative.

• Below-average contribution of capital productivity (inventory of gross fixed assets) already contributed to the economic growth to a more limited extent compared to its average. It was no different in 2009. In that year, capital productivity decreased by -6.1%. It is apparent that this was a substantial reduction compared to the average growth in the period 2001–2008 (amounting to 2.1%). In terms of this comparison, it was the largest fall of all four sources of economic growth. The average contribution of capital productivity reached 1.3 percentage points; however, its contribution in 2009 was -1.9 percentage points. Together with labour productivity, capital productivity contributed the most to the decrease in GDP in 2009.

Graph No. 2.1.25 Contributions of factors of production and their productivities to GDP growth (percentage points, from constant prices)



¹⁰ Data concerning the gross fixed asset inventory were available until 2008; for this reason, its value for 2009 was estimated.