

## 4. Specific features of 2008

In 2008, the growth in all the aggregate characteristics measuring the performance of the Czech Republic's economy slowed down with the exception of the consumer expenditure of households at current prices, where a slight acceleration of its growth occurred in association with the increase in gross disposable income. In reality, however, this increase was swallowed by the increasing rate of inflation. The growth of the expenditure on gross capital formation slowed the most from all the aggregate indicators and this was associated with the low creation of inventories of commercial goods in particular. The slightly lower rate of growth in the expenditure on gross fixed capital formation than GDP is associated with the fact that its increase was influenced in real terms more by the capital coefficient and less by the investment quota one year before. The increase in household primary income slowed significantly in real terms and the gross operating surplus grew the most out of the income entries in GDP. The rate of growth in the gross domestic income significantly slowed in real terms, which was caused by the high loss of national work during the realisation of the results in the international markets, because the terms of trade for foreign trade were significantly unfavourable.

The structural movements on the supply and demand side of the economy were associated with a change in the growth rates for the fundamental macroeconomic characteristics. On the supply side, the share of the domestic effective supply in the aggregate supply rose and strengthened the branch of market services in the gross added value. On the demand side, the share of household consumption expenditure in the aggregate demand increased, which was exclusively contributed to by the rapid rise in consumer prices, whereby the share of the expenditure on the gross capital formation also fell. In general, the changes in the external economic relations, especially the significant slowdown in growth in the export and import of goods and the contradictory changes in the price levels of the internal and foreign markets, especially the faster growth in consumer prices than industrial producer prices and the greater fall in export prices than import prices, had the greatest impact on the structural movements. Apart from the slowdown in economic growth and the structural changes, 2008 was also characterised by a significant shift in the influence of the demand entries in the GDP as a consequence of the completely different growth rates for domestic final expenditure and the results of foreign economic operations.

The entry of the Czech economy into 2008 was marked by the developments in the 2<sup>nd</sup> half of 2007, when the GDP growth rate had already undergone a slowdown. The overall performance of the economy worsened during the course of 2008 and GDP growth gradually slowed until it rose only insignificantly in the 4<sup>th</sup> quarter. The yearly increase in GDP (by 3.2% in real terms) was substantially slower than in the previous year (by 2.8 percentage points) when the 2.2% growth in expenditure on final consumption occurred in connection with a 1.4% fall in the expenditure on gross capital formation. As such, net exports most contributed to the growth in GDP, albeit that its influence was negative in the 4<sup>th</sup> quarter. Gross domestic income grew significantly less than GDP in 2008 (by just 1.7%), when it fell by 0.8% in the 4<sup>th</sup> quarter, which led to a substantial commercial loss as a consequence of the unfavourable terms of trade. The gross disposable national income also grew less than in the previous year, because net payments to production factors abroad increased substantially. The result was a fall in the gross national savings in conjunction with the increased value of the final consumption and as such these savings were insufficient to finance the expenditure on gross capital formation to a greater extent than in 2007 and it was necessary to use more foreign funds.

### Gross added value

#### ***The advance of growth in intermediate consumption over the growth in production halted***

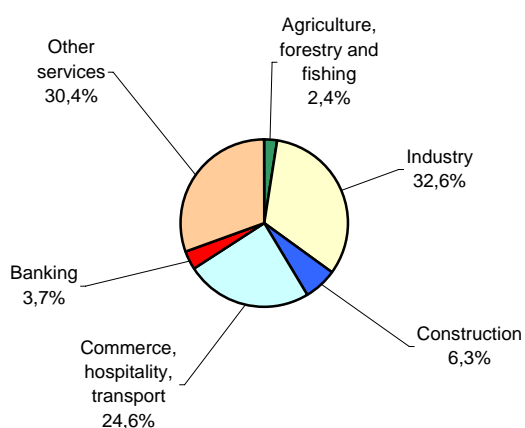
The gross added value, as the first result of the transaction with the products, amounted to 3,318.6 billion CZK at standard fundamental prices for 2008 and was larger year-on-year by 136.8 billion CZK, when the decisive positive factor was the fall in the demands of the gross added value on the consumed intermediate product. The growth in the physical volume, which was substantially higher than in the previous year, had a significantly escalating influence (85.2%) on the aforementioned increase. The branch structure of the gross added value changed quite significantly; the share of industry was lower than in the previous year (by 1.3 percentage points) and the share of commerce, hospitality and transport increased (by 0.8 percentage points).

**Table no. 4.1 Gross added value – the branch structure**

	2007		2008		2007		2008	
	billions of CZK current prices	structure in %	billions of CZK current prices	structure in %	previous year = 100 from constant prices	Influences in percentage points	previous year = 100 from constant prices	Influences in percentage points
Gross added value	3181.8	100.0	3318.6	100.0	105.8	5.8	103.6	3.6
of that: agriculture, forestry and fishing	76.3	2.4	77.4	2.3	88.6	-0.3	116.6	0.4
industry	1037.9	32.6	1037.5	31.3	108.9	2.9	105.4	1.7
construction	199.2	6.3	208.9	6.3	103.8	0.2	95.2	-0.3
commerce, hospitality and transport	784.0	24.6	843.2	25.4	106.1	1.6	107.6	1.9
banking	116.6	3.7	126.9	3.8	120.5	0.6	106.3	0.2
other services	967.8	30.4	1024.7	30.9	102.7	0.8	98.9	-0.3

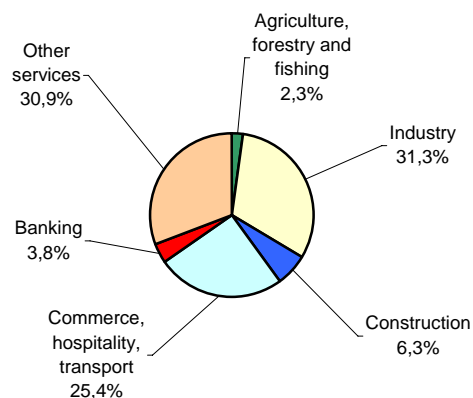
Source: the Czech Statistical Office, own calculations

**Graph no. 4.1 Gross added value – the branch structure in 2007 (in %)**



Source: the Czech Statistical Office

**Graph no. 4.2 Gross added value – the branch structure in 2008 (in %)**



Source: the Czech Statistical Office

• **A rapid slowdown in the growth of gross added value in the 4<sup>th</sup> quarter**

The slowdown in the growth in the 4<sup>th</sup> quarter manifested itself markedly in the 4<sup>th</sup> quarter, when its share in the yearly value of the gross added value fell year-on-year by 0.7 of a percentage point and the slight year-on-year growth (by 0.5% in real terms) was substantially slower than in the previous year. The gross added value grew more in real terms during the 1<sup>st</sup> to 3<sup>rd</sup> quarters of 2008 than during the entire year; it grew most in the 1<sup>st</sup> quarter (by 4.9%).

**Table no. 4.2 Gross added value by quarters**

	2008 billions of CZK current prices	2007	2008	Change in percentage points	
		same period of previous year = 100 in % of constant prices		2007	2008
				compared with the same period of the previous year	
1 <sup>st</sup> quarter	788.4	105.9	104.9	-1.4	-1.0
2 <sup>nd</sup> quarter	850.7	105.6	104.8	-1.6	-0.8
3 <sup>rd</sup> quarter	835.8	105.5	104.5	-1.5	-1.0
4 <sup>th</sup> quarter	843.7	106.1	100.5	-0.9	-5.6
Year	3,318.6	105.8	103.6	-1.3	-2.2

Source: the Czech Statistical Office, own calculations

- **The growth in gross added value was less labour intensive in 2008 than in 2007**

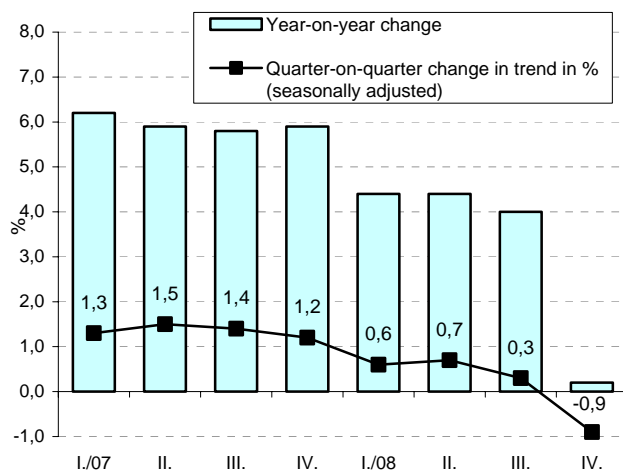
In 2008, the highest level of work productivity measured by the gross added value at current prices per worker was achieved in the tertiary sector, especially in banking. Work productivity expressed in real terms also grew the most in the same branch; however the growth in work productivity was most influenced by its increase in the secondary sector, especially in industry and in the tertiary sector, in particular in commerce. In 2008, work productivity increased year-on-year in real terms by 2.4% and its growth was slower than in the previous year by 0.6 of a percentage point. However, the influence of work productivity on the increase in gross added value strengthened and the influence of employment weakened. The growth in work productivity in 2008 contributed to the increase in the gross added value to 67.5%, which was essentially more than in 2007.

## Gross Domestic Product

- **The influence of the net taxes on GDP**

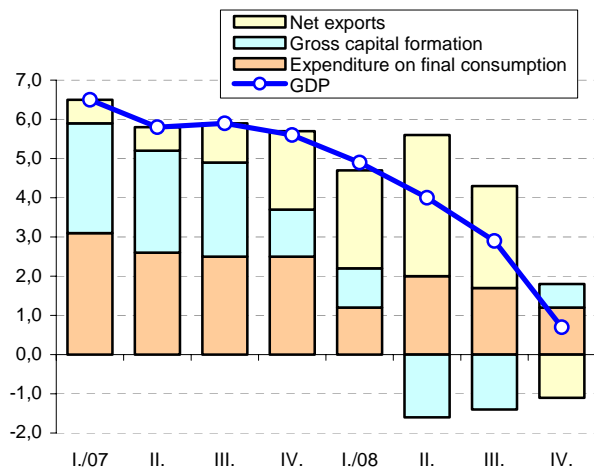
The created gross added value at the basic prices does not include net tax (the product tax minus the product subsidies); once this has been added to the gross added value, the GDP is ascertained at purchase prices as the final result of the production activities of the resident production units. The value of the net tax of 387.3 billion CZK for 2008 was higher year-on-year by 38.8 billion CZK and it grew faster than the GDP sources. The net tax in relation to GDP reached 10.5%, which was more than in the previous year. In real terms, however, the net tax fell year-on-year by 0.7%, when the product tax was lower and the product subsidies were higher. The high implicit deflator for net taxes led to a lower GDP growth rate in real terms than the gross added value.

**Graph no. 4.3. GDP (the year-on-year change in %, the seasonally adjusted quarter-on-quarter change in %, constant prices 2000)**



Source: the Czech Statistical Office

**Graph no. 4.4. Contributions to GDP growth in percentage points (year-on-year GDP change in %, constant prices 2000, seasonally adjusted)**



Source: the Czech Statistical Office

- **A substantial change in the structure of GDP use**

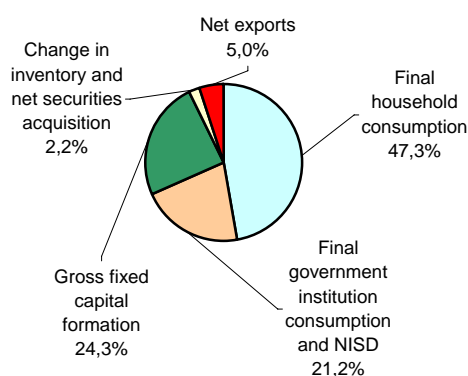
The value of the 2008 GDP at 3,705.9 billion CZK increased year-on-year by 175.6 billion CZK and this increase was accounted for by 65.4% growth in physical volume, while the remaining 34.6% of the influence was accounted for by the increase in the aggregate price level. This combination of the influences of the volume and the price changes was slightly different in comparison with the development in the previous year, when the implicit GDP deflator was substantially higher in 2007. The decisive influence on the change in the stated ratio, i.e. the slight reduction in the influence of the implicit deflator on the GDP value increase in 2008, was exercised by the terms of trade for foreign trade, because the implicit deflator for gross domestic final expenditure, especially the household consumption expenditure, was significantly higher in 2008 than in 2007.

The GDP in 2008 changed year-on-year in favour of expenditure on final consumption, the share of which rose from 68.5% in 2007 to 70.0% in 2008, of which

household consumption expenditure rose from 47.3% to 48.9%, which also confirms the increase in the rate of consumption and the fall in the rate of household savings in their gross disposable income.

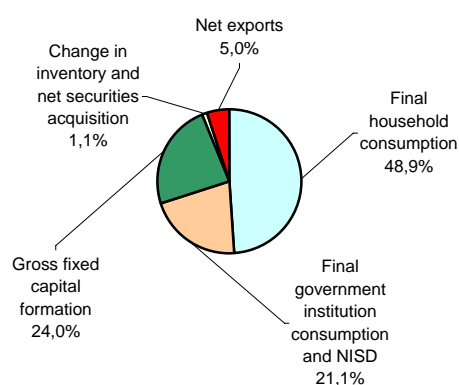
At the same time, the share of expenditure on gross capital formation fell from 26.5% to 25.0%, which was caused to a greater extent by the creation of inventories than by expenditure on fixed capital. The share of inventory in GDP changed from 2.1% in 2007 to a mere 1.0% in 2008. Other buildings and structures had a dominant share of the expenditure on fixed capital formation. After the rapid increase in expenditure on housing in previous years, its share fell in 2008.

**Graph no. 4.5 GDP – the influence of the entries on its growth in 2007 (in %)**



Source: the Czech Statistical Office

**Graph no. 4.6 GDP – the influence of the entries on its growth in 2008 (in %)**



Source: the Czech Statistical Office

• **The reduction of the share of goods operations in foreign trade**

Whereas the share of goods operations in foreign trade transactions substantially increased in previous years, they fell in 2008, because the share of earnings and expenditure for services increased. The coverage of imports by exports of goods was thus lower than the coverage of imports by the export of services. The relatively high share of net exports in GDP achieved in 2007 (5.0%) was maintained in 2008, when there was the same fall in the ratio of overall exports and overall imports to GDP (by 3.4 percentage points.). The gross national final expenditure of 95.4%, of which expenditure on household consumption was 81.4% and expenditure on gross fixed capital formation was 17.3%, which was mostly influenced by the movement of prices in the domestic market, contributed marginally to the value increase in GDP. The share of the increase in net exports in the increase in GDP (4.4%) was significantly lower than in the previous year.

**Table no. 4.3 Gross Domestic Product – the material and time structure**

in billions of CZK at current prices

	2008				The change in 2008 compared to 2007			
	1 <sup>st</sup> Q	2 <sup>nd</sup> Q	3 <sup>rd</sup> Q	4 <sup>th</sup> Q	1 <sup>st</sup> Q	2 <sup>nd</sup> Q	3 <sup>rd</sup> Q	4 <sup>th</sup> Q
Gross Domestic Product	876.9	949.1	937.1	942.8	59.0	52.8	43.9	19.9
Final consumption	593.0	643.6	655.9	700.0	41.0	48.7	48.6	38.0
- households	420.5	453.7	466.8	471.3	37.4	39.3	37.9	28.4
Gross capital formation	218.7	243.9	234.0	231.5	10.6	-12.2	-15.0	8.3
- fixed	200.7	228.6	225.5	233.5	10.2	10.9	7.4	2.1
Net exports	65.2	61.6	47.2	11.3	7.4	16.3	10.3	-26.4
Informatively								
Total exports	734.5	749.1	698.3	665.4	57.7	44.5	-0.8	-84.4
Total imports	669.3	687.5	651.1	654.1	50.3	28.2	-11.1	-58.0

Source: the Czech Statistical Office, own calculations

- ***Net exports had a significantly positive influence on GDP growth in 2008 ...***

In 2008, GDP increased year-on-year by 3.2% in real terms and its growth was slower than in 2007 by 2.8 percentage points. The relationship between the GDP and its components changed significantly; this mostly concerned the difference between the fall in expenditure on gross capital formation and its massive growth in the previous year. Whereas GDP grew more quickly than gross domestic final expenditure by 0.9 of a percentage point in 2007, in 2008 the difference increased to 2.0 percentage points. In relation to the increase in GDP, exports grew faster in the previous year by 8.9 percentage points and imports by 8 percentage points, but in 2008 the growth rate was reduced to 3.7 percentage points and 1.4 percentage points respectively. The greater growth in expenditure on gross capital formation than in expenditure on final consumption was characteristic for 2007 (+4.6 percentage points), but a fundamental change was noted in 2008 (-3.6 percentage points.).

The expenditure on final consumption, which directly satisfies consumer wishes and represents the greatest part of GDP, increased year-on-year in 2008 by 2.2% in real terms, which was 1.6 percentage points slower growth than in the previous year; its influence on the increase in GDP reached 1.5 percentage points. Household consumption grew somewhat more quickly (2.9%), but this was significantly less than in the previous year. From household consumption expenditure, purchases of long-term consumption items increased the most, while the expenditure on short-term consumption items grew almost insignificantly.

A smaller part of the GDP takes the form of capital expenditure for the acquisition of buildings and structures and machines and equipment; this especially includes the state of inventories which represents the most fluctuating components of GDP. The total expenditure on gross capital formation fell in real terms by 1.4%, which was 9.8 percentage points less compared to the growth in the previous year. The expenditure on the gross fixed capital formation grew in real terms by 3.1% and its influence on the increase in GDP reached 0.7 percentage points. The greatest growth from fixed capital was achieved by expenditure on means of transport and on other machines and equipment. At the same time, there was a significant fall in expenditure on housing. The demands of the GDP on gross capital formation fell in real terms (from growth of 0.7% in 2007 to a slight fall in 2008). With regard to the development of the investment demand, it is worth mentioning that the investment quota (the share of expenditure on the gross fixed capital formation to GDP together with the increase in GDP at the ratio to the created fixed assets) had a significantly variable influence on the growth in GDP in real terms in 2008 in comparison with 2007. Whereas the slowdown in the GDP growth rate in 2007 (by 0.8 of a percentage point) was the result of a lower GDP growth coefficient to expenditure on gross fixed capital formation by 3.0 percentage points and the slightly lower investment quota (by 0.1 of a percentage point), in 2008 the greater slowdown in the growth of GDP was the result of a significantly lower capital coefficient and a relatively higher investment quota.

The net exports as a relatively small part of GDP contributed to the increase in GDP with 2.1 percentage points, while the positive influence of exports (5.5 percentage points) was higher than the negative influence of imports (3.4 percentage points). A large change occurred in the relationship between the development of operations in goods and in services. In 2007, the export of goods grew more quickly in real terms than the export of services by 6.1 percentage points and the import of goods grew more quickly than the import of services by 6.7 percentage points, but in 2008 these relationships in the growth rates reversed and the export of goods lagged behind the export of services (which had increased by 15.1% in real terms) by 9.4 percentage points and the growth in the imports of goods was 3.7 percentage points lower than the import of services (which had increased by 7.9%). The import demands of GDP admittedly increased in real terms by 1.4%, but their growth was substantially slower than in 2007.

**Table no. 4.4 Gross Domestic Product – the influence of its components on its growth**

	2007		2008		2007		2008	
	billions of CZK current prices	structure in %	billions of CZK current prices	structure in %	previous year = 100 of constant prices	influences in percentage points	previous year = 100 of constant prices	influences in percentage points
Gross domestic product	3,530.2	100.0	3 705.9	100.0	106.0	6.0	103.2	3.2
Final consumption	2 416.1	68.5	2 592.5	70.0	103.8	2.7	102.2	1.5
- households	1 669.3	47.3	1 812.3	48.9	105.2	2.5	102.9	1.4
Gross capital formation	936.5	26.5	928.1	25.0	108.4	2.2	98.6	-0.4
- fixed	857.7	24.3	888.3	24.0	106.7	1.6	103.1	0.7
Net exports	177.6	5.0	185.3	5.0	x	1.1	x	2.1

Source: the Czech Statistical Office, own calculations

**• ... but they had a negative effect in the 4<sup>th</sup> quarter**

The variety of speeds in the growth of the components of the gross domestic final expenditure and the foreign trade transactions in comparison with the GDP growth rate especially stands out in the individual quarters of 2008, when the GDP growth structure and its year-on-year changes were very different. The average annual slowdown in GDP growth and its structural components in 2008 hide large differences within the year which bear witness to the substantial rapidity of the changes within the time horizon. One of many examples points to the large variety of these changes; whereas the GDP growth rate was 1.5 percentage points slower than in the previous year in the 2<sup>nd</sup> quarter of 2008, while the growth in total exports was faster by 0.6 of a percentage point, in the 4<sup>th</sup> quarter of 2008 GDP slowed down by 5.7 percentage points year-on-year and exports fell by a huge 22.2 percentage points. The spread of the standard deviation and the interval of the growth rates for GDP and its structural components is substantially different in the individual quarters.

The substantial disparity in the transactions with products and in the financial flows in the individual quarters manifested itself during the measurement of the development of GDP and its components and during the monitoring of the influence of these components on the growth in GDP. Whereas GDP increased substantially more than expenditure on final consumption in the 1<sup>st</sup> quarter of 2008 (by 2.8 percentage points), in the 4<sup>th</sup> quarter of 2008 this relationship was reversed (-1.5 percentage points). In relation to the growth of the expenditure on gross capital formation, GDP increased in the 2<sup>nd</sup> quarter of 2008 by more than 9.7 percentage points and by less than 2.9 percentage points in the 4<sup>th</sup> quarter of 2008. The largest differences occurred in external transactions. GDP grew 10.6 percentage points slower in relation to exports in the 2<sup>nd</sup> quarter of 2008 and 8.9 percentage points faster in the 4<sup>th</sup> quarter of 2008.

This shows the substantial differences in the affects of the demand components on GDP. Whereas expenditure on gross capital formation affected GDP growth (4.0%) in a substantially negative way (-1.6 percentage points) and net exports affected it positively (4.2 percentage points) in the 3<sup>rd</sup> quarter of 2008, in the 4<sup>th</sup> quarter of 2008 this relationship changed radically (+0.3 percentage points and -0.6 percentage points).

**Table no. 4.5 Gross Domestic Product by quarter**

	2008 billions of CZK current prices	2007	2008	Change in percentage points	
		same period of the previous year = 100 in % of constant prices		2007	2008
		compared to same period in previous year			
1 <sup>st</sup> quarter	876.9	106.2	104.4	-0.7	-1.8
2 <sup>nd</sup> quarter	949.1	105.9	104.4	-0.9	-1.5
3 <sup>rd</sup> quarter	937.1	105.8	104.0	-0.9	-1.8
4 <sup>th</sup> quarter	942.8	105.9	100.2	-0.8	-5.7
Year	3 705.9	106.0	103.2	-0.8	-2.8

Source: the Czech Statistical Office, own calculations

## Gross Domestic Product – income structure

- ***The initial division of the income***

The income structure of the GDP shows the result of the initial division of the created monetary and natural income between the institutional sectors. The main income components of GDP consist of remuneration to employees (wages and salaries and employer social contributions), net production and import tax (production and import tax after the deduction of subsidies), gross mixed household income and the gross operating surplus. These income components and the development of the relations between them form the basis for the domestic realised demand and they are important not only for the standard of living of the population, because the lion's share of household expenditure on final consumption is paid from wages and salaries, but also for material accumulation, because they form the basis for its realisation by means of the expenditure on the gross fixed capital formation.

- ***The influence of the reduction of the basis of assessment for the change in the income structure of GDP***

From the total value of GDP for 2008, 1,630.7 billion CZK (i.e.44.0%) was accounted for by remuneration to employees, of which 1,241.2 billion CZK (i.e.33.5%) was accounted for by wages and salaries, 402.8 billion CZK (i.e.10.9%) was accounted for by gross mixed household income, 1,312.4 billion CZK (i.e. 35.4%) was accounted for by the gross operating surplus and 360.0 billion CZK was accounted for by net tax. In comparison with 2007, the share of wages and salaries increased (by 1.0 percentage point) and the share of the gross operating surplus fell (by 1.7 percentage points). The ratio of the employers' social contributions to the total wages and salaries fell year-on-year by 1.1 percentage points to 31.4% for 2008 as a consequence of the reduction in the basis of assessment from 1<sup>st</sup> January 2008. The year-on-year increase in wages and salaries by 8.4% corresponded to an increase in the employers' social contributions by just 4.9%, which practically means that its value of 389.5 billion CZK for 2008 could have been higher by 13.2 billion CZK given the preservation of the same conditions as in the previous year.

- ***The variety of the quarterly changes in income***

The movements of income in the individual quarters of 2008 were also significantly different. In comparison with the growth in the value of GDP in each quarter in 2008, payments to employees and net taxes increased more quickly, mostly thanks to the fall in production subsidies, and the gross operating surplus and mixed income increased more slowly, albeit at varying rates. As a consequence of this, the GDP value included a year-on-year higher share of payments to employees ranging from 1.3 percentage points (1<sup>st</sup> quarter of 2008) to 0.9 percentage points (3<sup>rd</sup> quarter) and the share of net tax ranged from 1.4 percentage points (1<sup>st</sup> quarter of 2008) to 0.5 of a percentage point (2<sup>nd</sup> and 4<sup>th</sup> quarters 2008) and the lower share of the operating surplus and mixed income ranged from 2.7 percentage points (1<sup>st</sup> quarter of 2008) to 1.5 percentage points (2<sup>nd</sup> quarter 2008). The overall change in income movements manifested itself most strongly in the 4<sup>th</sup> quarter, when the growth of net taxes increased despite a slower deceleration in the growth of payments to employees than GDP growth and given a fall in the gross operating surplus and mixed income.

- ***Significant real term growth in the operating surplus***

After the calculation of the individual income components in 2008 using comparable conditions to those in 2007 with the appropriate implicit deflators, the ratios between the primary incomes of the institutional sectors expressed in real terms changed. The implicit deflator of household expenditure on final consumption was substantially higher than the deflator for the remaining expenditure components of the GDP, which led to the fact that the real term initial household income increased substantially more slowly than the primary incomes of the remaining institutional sectors. The gross operating surplus, which grew by 6.5%, had the greatest influence on the increase in GDP for 2008 by 3.2% in real terms (2.4 percentage points). The increase in the volume of the payments to employees by 1.9% contributed 0.8 percentage points and had a small positive influence on the growth in GDP, as did net tax (0.2 of a percentage point). The gross household mixed income fell by 1.7% with a negative influence of 0.2 percentage points.

**Table no. 4.6. The income structure of the Gross Domestic Product**

	2007		2008		2007		2008	
	billions of CZK current prices	structure in %	billions of CZK current prices	structure in %	previous year = 100 of constant prices	influence in percentage points	previous year = 100 of constant prices	influence in percentage points
Gross Domestic Product	3,530.2	100.0	3 705.9	100.0	106.0	6.0	103.2	3.2
Payments to employees	1,516.1	42.9	1 630.7	44.0	106.3	2.8	101.9	0.8
- wages and salaries	1,144.7	32.4	1 241.2	33.5	106.3	2.1	102.7	0.9
- soc. contributions	371.4	10.5	389.5	10.5	106.3	0.7	99.4	-0.1
Net tax	315.8	9.0	360.0	9.7	108.3	0.7	101.6	0.2
Mixed income	388.4	11.0	402.8	10.9	103.0	0.3	98.3	-0.2
Operating surplus	1,309.9	37.1	1 312.4	35.4	105.9	2.2	106.5	2.4

Source: the Czech Statistical Office, own calculations

## Gross Domestic Income

- The concept of the GDI**

The movement of the prices on the internal and external markets does not influence the real term expression of the year-on-year changes in GDP, whose expenditure components (gross domestic final expenditure) and exports and imports are expressed at the constant prices of a certain period, i.e. after the elimination of the price influence. In external economical relations, however, price movements occur which must be taken into account during the calculation of the income of the local people in real terms, i.e. the gross domestic income (hereafter simply referred to as the GDI) at constant prices. GDP in real terms shows the physical volume, but the GDI expresses not only the volume, but also the relationship between the export and import prices.
- The significant loss of value of national work in the international markets**

In 2008, Czech national work lost value in the goods operations and services transactions in foreign markets. This arose from the commercial loss from the unfavourable development of the terms of trade at the amount of 55.0 billion CZK, which represents a significant change in comparison with the profit from the favourable terms of trade of 33.9 billion CZK in 2007 which had a highly decisive influence on the development of the GDI in real terms in both years. Whereas GDP increased in real terms by 6.0% year-on-year in 2007, the GDI increased more (by 7.0% in real terms) which was a result of the stagnation of export prices during a fall in import prices. In 2008, GDP increased in real terms by 3.2% while the GDI increased by substantially less (by 1.7% in real terms), which was the consequence of the larger fall in export prices than import prices and the inclusion of the influence of the commercial losses from the unfavourable terms of trade. From the point of view of the time horizon, the development of the GDI was substantially variable in the last two years with a tendency ranging from substantial year-on-year growth in the 1<sup>st</sup> quarter of 2007 (by 8.1%), when the largest commercial profit (12.5 billion CZK) was achieved thanks to the favourable terms of trade, through to low growth in the 3<sup>rd</sup> quarter of 2008 (by 1.7%), when the largest commercial loss (21.9 billion CZK) occurred as a consequence of the unfavourable terms of trade, while the GDI fell by 0.9% in the 4<sup>th</sup> quarter of 2008. A significant change occurred in the relationship between the growth in export purchasing power (by 16.4% in 2007 and by 4.9% in 2008) and the growth in the import demands on the resources produced by exports (by 12.8% in 2007 and 6.6% in 2008).
- The largest slowdown in GDI growth in the 4<sup>th</sup> quarter of 2008**

The difference of 28.8 billion CZK between the commercial profit in the 3<sup>rd</sup> quarter of 2007 and the commercial loss in the 3<sup>rd</sup> quarter in 2008 had an influence on the slowdown in the growth of the GDI by 5.0 percentage points, whereby the GDI fell by 0.9% year-on-year in the 4<sup>th</sup> quarter of 2008, which represented a substantial 6.9 percentage points in comparison with its growth in the 4<sup>th</sup> quarter of 2007.



**Table no. 4.7 Gross Domestic Income**

Period	Gross Domestic Product in billions of CZK		Terms of trade for previous year = 100	Commercial		Gross Domestic Income		
	constant prices 2000	prices in the previous year		profit	loss	in billions of CZK		previous year = 100 of constant prices
				in billions of CZK		constant prices 2000	prices in the previous year	
<b>2007</b>	2,975.9	3,407.0	101.2	33.9	x	3,069.5	3,440.9	107.0
1 <sup>st</sup> quarter 2007	697.7	798.8	102.2	12.5	x	723.7	811.3	108.1
2 <sup>nd</sup> quarter 2007	757.7	867.5	101.8	9.1	x	782.0	876.6	107.4
3 <sup>rd</sup> quarter 2007	751.5	860.3	101.1	6.9	x	773.6	876.2	106.7
4 <sup>th</sup> quarter 2007	769.0	880.4	100.0	5.4	x	790.2	885.8	106.0
<b>2008</b>	3,071.6	3,643.7	98.1	x	55.0	3,120.4	3,588.7	101.7
1 <sup>st</sup> quarter 2008	728.6	864.3	98.8	x	4.2	747.9	860.1	103.3
2 <sup>nd</sup> quarter 2008	790.9	938.2	97.9	x	14.9	802.8	923.3	102.7
3 <sup>rd</sup> quarter 2008	781.4	927.0	97.1	x	21.9	787.0	905.1	101.7
4 <sup>th</sup> quarter 2008	770.7	914.2	98.5	x	14.0	782.7	900.2	99.1

Source: the Czech Statistical Office, own calculations

### Aggregate demand and supply

- ***The different effects of domestic and external prices***

The structure of the aggregate demand and supply further changed to the detriment of the external sector which was a completely different tendency to the one in the previous year. The share of the external demand and the internal supply in the aggregate demand and supply fell by 4.4 percentage points to 45.0% and 42.1% respectively. The slightly larger change on the demand side than the supply side led to the fact that the coverage of the external supply by the external demand rose by 0.3 of a percentage point to 107.0%. The domestic effective supply exceeded the domestic realised demand by 5.3%, which was slightly less than in the previous year (by 0.1 of a percentage point). The value increase of the aggregate demand and the aggregate supply was influenced differently by the price changes; by the increase in the price level for the domestic supply and demand and the reduction of the price level for the external supply and demand. The implicit deflator for domestic demand was 2.0 percentage points higher than the implicit deflator for domestic supply and the price level for external demand fell by 1.8 percentage points more than the price level for external supply.

- ***Faster growth in the domestic supply than the domestic demand***

The aggregate supply and demand in 2008 increased year-on-year by 4.5% in real terms and grew 4.7 percentage points slower than in 2007, which was influenced by the relatively greater reduction in the growth rate of external demand than domestic demand on the demand side and by the relatively greater reduction in the growth rate of external supply than domestic supply on the supply side. External economic relations had a greater influence on the growth and slowdown in the growth of the aggregate supply and demand than the transactions in the domestic market. As a consequence of the growth in the gross disposable household income and the reduced willingness of non-financial companies to invest in fixed assets as a consequence of the slowdown in equity formation (in real terms), the domestic realised demand weakened and grew in real terms by only 2.5%, which is 2.1 percentage points less than in the previous year; its contribution to the growth of the aggregate demand at 1.3 percentage points was significantly lower than in 2007. The increase in external demand by 6.9% was also lower than in the previous year and it influenced the aggregate demand by 3.2 percentage points. The domestic effective supply increased relatively substantially (by 4.4%), mainly due to the influence of the reduced creation of inventories, and it contributed to the growth in the aggregate supply by 2.5 percentage points. The remaining 2.0 percentage points of the contribution to the growth of the aggregate supply fell to external supply which increased by 4.6%, i.e. by 9.6 percentage points less than in the previous year.

Given the contradictory changes in the price levels for the internal and external market and the different changes in the prices of domestic demand and domestic supply, it is necessary to state that the coverage of the domestic demand by the domestic supply increased in real terms in 2008, but by less than in the previous

year. At the same time, the coverage of the external demand by the external supply grew less than in 2007. The ratio between the faster growth in the external supply than the domestic supply fell significantly in 2008.

**Table no. 4.8 The aggregate supply and demand**

	2007		2008		2007		2008	
	billions of CZK current prices	structure in %	billions of CZK current prices	structure in %	previous year = 100 of constant prices	influence in percentage points	previous year = 100 of constant prices	influence in percentage points
Aggregate demand	6,104.2	100.0	6,327.9	100.0	109.2	9.2	104.5	4.5
domestic demand	3,273.9	53.6	3,480.7	55.0	104.6	2.5	102.5	1.3
external demand	2,830.3	46.4	2,847.2	45.0	114.9	6.7	106.9	3.2
Aggregate supply	6,104.2	100.0	6,327.9	100.0	109.2	9.2	104.5	4.5
domestic supply	3,451.5	56.5	3,666.0	57.9	105.5	3.1	104.4	2.5
external supply	2,652.7	43.5	2,661.9	42.1	114.2	6.1	104.6	2.0

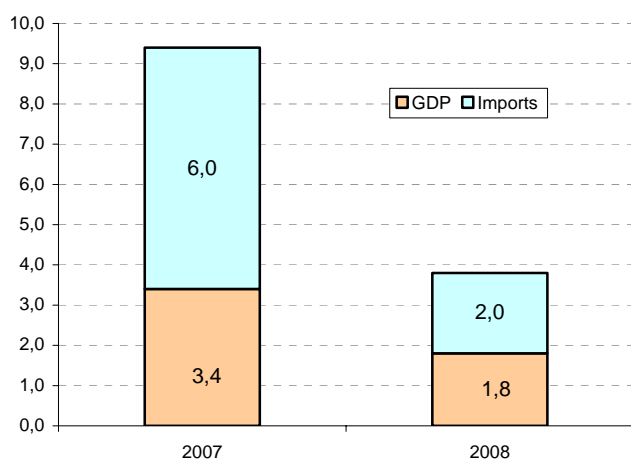
Source: the Czech Statistical Office, own calculations

### Disposable funds and total final expenditure

- The increase in the share of GDP in disposable funds**

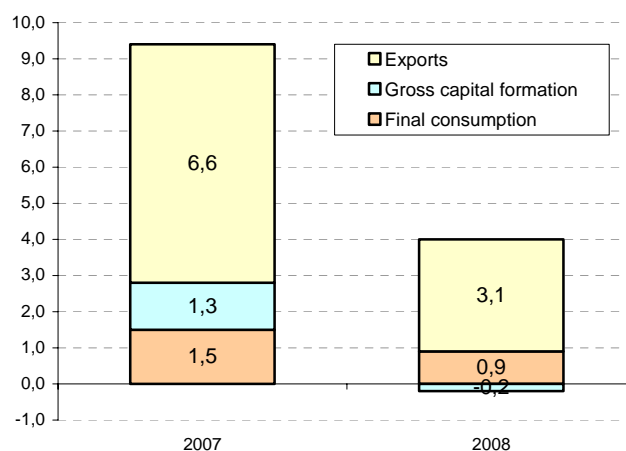
The value of the disposable funds for the total final expenditure and the use of 6,367.8 billion CZK in 2008 rose year-on-year by 184.9 billion CZK. Their structure changed in association with the movements of the components of the aggregate supply and demand. In 2008, GDP contributed to disposable funds by 58.2%, which was 1.1 percentage points more than in the previous year; the remaining 41.8% of the share was accounted for by overall imports. The share of the gross domestic final expenditure in the total final expenditure of 55.3% was also higher year-on-year; the remaining share (44.3%) was accounted for by total exports. The GDP overhang above the gross domestic final expenditure or the degree of its coverage by means of the GDP formation remained almost the same year-on-year. The difference between the change of the GDP share in the usable funds and the change of the share of the gross domestic final expenditure in the total final expenditure remained unchanged; the marginal increase in GDP substantially exceeded the growth in imports, just as the increase in the gross domestic final expenditure exceeded the increase in exports.

**Graph no. 4.7 Disposable influences – the influence of the components on their growth (in %)**



Source: the Czech Statistical Office

**Graph no. 4.8 Total final expenditure – the influence of the components on their growth (in %)**



Source: the Czech Statistical Office

- The reduced influence of the domestic final expenditure on use**

The disposable funds for final expenditure and total final expenditure increased year-on-year by 3.8% in real terms in 2008 and their growth was 5.6 percentage points slower than in 2007. The stated increase was contributed to more on the side of imports (2.0 percentage points) than GDP and on the side of applied exports

(3.1 percentage points) than gross domestic final expenditure; the ratio between these influences changed to the disadvantage of the external sector on the side of funds and in favour of the side of the use of funds.

**Table no. 4.9 Disposable funds for the total final expenditure**

	2007		2008		2007		2008	
	billions of CZK current prices	structure in %	billions of CZK current prices	structure in %	previous year = 100 of constant prices	influence in percentage points	previous year = 100 of constant prices	influence in percentage points
GDP	3,530.2	57.1	3,705.9	58.2	106.0	3.4	103.2	1.8
Imports	2,652.7	42.9	2,661.9	41.8	114.2	6.0	104.6	2.0
Disposable funds	6,182.9	100.0	6,367.8	100.0	109.4	9.4	103.8	3.8
Final consumption	2,416.1	39.1	2,592.5	40.7	103.8	1.5	102.2	0.9
Gross capital formation	936.5	15.1	928.1	14.6	108.4	1.3	98.6	-0.2
Gross domestic final expenditure	3,352.6	54.2	3,520.6	55.3	105.1	2.8	101.2	0.7
Exports	2,830.3	45.8	2,847.2	44.7	114.9	6.6	106.9	3.1
Total final expenditure	6,182.9	100.0	6,367.8	100.0	109.4	9.4	103.8	3.8

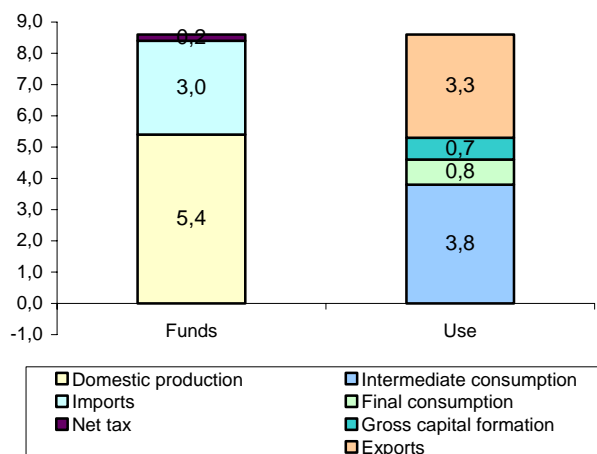
Source: the Czech Statistical Office, own calculations

### Creation and use of created funds

• **The reduction of the share of imports on the creation of funds to 21.4% ...**

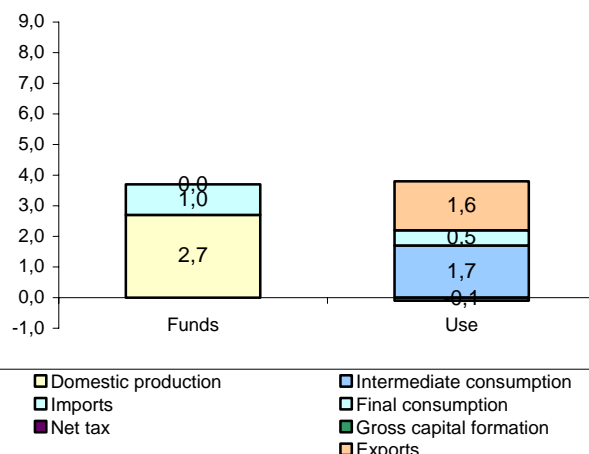
The balance of the total created national economy funds and the use of the funds provides a somewhat different structural view. Their value of 12,423.4 billion CZK for 2008 was larger year-on-year by 364.2 billion CZK, mainly thanks to the internal production of goods and services on the supply side (the creation of funds) and their final use on the demand side (the use of funds). Internal production accounted for more than two thirds of the created funds (75.5%, i.e. 0.4 of a percentage point more than in 2007) and the remaining entries were accounted for by imports at 21.4% (0.6 of a percentage point less than in 2007) and net taxes at 3.1%. The use of the funds was contributed to by intermediate consumption (from internal production and from imports) at 48.7% and the final use was accounted for by total expenditure on consumption at 20.9%, expenditure on gross capital formation at 7.5% and exports at 22.9% (also 0.6 of a percentage point less than in 2007).

**Graph no. 4.9 Funds and their use – influences on their growth in 2007 (in percentage points.)**



Source: the Czech Statistical Office

**Graph no. 4.10 Funds and their use – influences on their growth in 2008 (in percentage points.)**



Source: the Czech Statistical Office

- **... a change in the ratio between the influence of intermediate consumption and final use**

In 2008, the created funds and their use increased by 3.7% year-on-year and grew more slowly than in 2007 by 4.9 percentage points. On the supply side, domestic production contributed to the aforementioned increase at the amount of 2.7 percentage points, while the contribution of imports accounted for the remaining 1.0 percentage point. On the demand side, expenditure for final use (2.0 percentage points) had a greater influence than intermediate consumption (1.7 percentage points). In comparison with the influences which were in play in 2007, there was a relatively substantial strengthening of the contribution of production on the side of fund creation concurrently with a weakening of the contribution of imports and there was a relatively smaller strengthening of the influence of intermediate consumption on the side of fund use concurrently with a weakening of the influence of final use, although this led to a slight strengthening of the contribution of exports.

**Table no. 4.10 Created funds and their use**

	2007		2008		2007		2008	
	billions of CZK current prices	structure in %	billions of CZK current prices	structure in %	Previous year = 100 of constant prices	Influence in percentage points	Previous year = 100 of constant prices	Influence in percentage points
Created funds	12,059.1	100.0	12,423.4	100.0	108.6	8.6	103.7	3.7
Domestic production	9,058.0	75.1	9,374.2	75.5	107.1	5.4	103.5	2.7
Imports	2,652.7	22.0	2,661.9	21.4	114.2	3.0	104.6	1.0
Net taxes	348.4	2.9	387.3	3.1	107.4	0.2	99.3	0.0
Use of funds	12,059.1	100.0	12,423.4	100.0	108.6	8.6	103.7	3.7
Intermediate consumption	5,876.2	48.7	6,055.6	48.7	107.8	3.8	103.5	1.7
Final use	6,182.9	51.3	6,367.8	51.3	109.4	4.8	103.8	2.0
Final consumption	2,416.1	20.0	2,592.5	20.9	103.8	0.8	102.2	0.5
Gross capital formation	936.5	7.8	628.1	7.5	108.4	0.7	98.6	-0.1
Exports	2,830.3	23.5	2,847.2	22.9	114.9	3.3	106.9	1.6

Source: the Czech Statistical Office, own calculations

### Gross national disposable income

- **Net payments to international manufacturing factors reached 300 billion CZK**

The value of the gross national disposable income (hereafter simply referred to as the GNDI) of 3,406.8 billion CZK for 2008 was larger year-on-year by 165.1 billion CZK. In 2007, the value of the GDP exceeded the GNDI by 8.9% and the rate of this excess fell slightly in 2008. Net payments to production factors abroad grew significantly; they reached 8.1% in relation to GDP which was only slightly more than in the previous year. The decisive factor was the fact that the primary income to non-residents increased substantially concurrently with a fall in the primary income from non-residents. This had a negative influence on the gross national savings and the rate of financing of capital expenditure from domestic funds. The structure of the GNDI changed in 2008 in favour of expenditure on final consumption which increased by 8.7 percentage points more than the gross national savings; the ratio of 74.5% to 25.5% from 2007 changed to 76.1% to 23.9% in 2008. The smaller increase in the GNDI than the GDP concurrently with a greater increase in expenditure on final consumption could not be sufficient for the creation of the necessary amount of the gross national savings; their value of 814.3 billion CZK was 11.3 billion CZK, i.e. 1.4%, smaller than in the previous year.

- **The reduction of the gross saving rate**

The relationship between the sectors of the domestic economy and the rest of the world (non-residents) is expressed by the fact that the difference between the lower gross national savings and the higher expenditure on gross capital formation, which also constitutes the balance of the balance of payments current account, grew year-on-year. This difference representing the balance of the national current transactions with non-residents reflects the behaviour of the domestic economy's sectors from the point of view of savings and investments (from the point of view of the national accounts, this also includes the creation of inventories – as unwanted, unintended investments). The balance of the national current transactions with non-residents for 2008 (-113.8 billion CZK) was larger than in 2007 and it shows that the gross national

savings were insufficient to finance the expenditure on the gross capital formation from domestic funds to a greater extent than in the previous year. The savings rate in 2008 (23.9%) was lower than the investment rate (27.2%) and the difference between them only changed slightly in comparison with 2007. The financing of capital expenditure from external funds increased from 11.8% in 2007 to 12.3% in 2008. With regard to the active capital transactions, the scope of the net borrowing fell (from 91.3 billion CZK in 2007 to 82.7 billion CZK in 2008). Net capital transfers from non-residents fell significantly and contributed to the more advantageous development of the net borrowing.

**Table no. 4.11 The Gross national disposable income and the gross national savings**

	2007		2008		Change 2007		Change 2008	
	billions of CZK current prices	structure in %	billions of CZK current prices	structure in %	billions of CZK current prices	structure in %	billions of CZK current prices	structure in %
Gross domestic product	3,530.2	108.9	3,705.9	108.8	314.6	143.1	175.7	106.4
Net primary income	-288.5	x	-299.1	x	-94.8	x	-10.6	x
Gross disposable income	3,241.7	100.0	3,406.8	100.0	219.8	100.0	165.1	100.0
Final consumption	2,416.1	74.5	2,592.5	76.1	163.8	74.5	176.4	106.8
Gross national savings	825.6	25.5	814.3	23.9	56.0	25.5	-11.3	-6.8
Gross capital formation	936.5	28.9	928.1	27.2	84.3	38.4	-8.4	-5.1
Balance of transactions with non-residents	-110.9	- 3.4	-113.8	- 3.3	-28.3	-12.9	-2.9	-1.8

Source: the Czech Statistical Office, own calculations

• **High international funds financing the capital in the 4<sup>th</sup> quarter**

The movements of the income, expenditure and capital transactions in the individual quarters point to the exceptionally high year-on-year changes mainly concerning the gross national savings and the rate of financing the expenditure on gross capital formation using foreign funds. The gross national disposable income increased most year-on-year in the 3<sup>rd</sup> quarter of 2008 and least in the 4<sup>th</sup> quarter of 2008. At the same time, the gross national savings fell significantly in the 2<sup>nd</sup> quarter of 2008 and also fell in the 4<sup>th</sup> quarter of 2008, which negatively influenced the year-round change. In the 1<sup>st</sup> quarter of 2008, the achieved savings (29.6%) admittedly fell slightly year-on-year, but they were 3.6 percentage points higher than the investment rate. In the three following quarters of 2008, the rate of savings was lower than in the previous year; by 3.2 percentage points in the 1<sup>st</sup> quarter, 0.9 percentage points in the 2<sup>nd</sup> quarter and 2.0 percentage points in the 3<sup>rd</sup> quarter. The problem of financing the expenditure on gross capital formation is associated with this; whereas funds of domestic origin were sufficient to finance this in the 1<sup>st</sup> quarter of 2008, they had to be supplemented with foreign funds from the 2<sup>nd</sup> quarter of 2008. The highest rate of the financing of capital formation from external funds was in the 4<sup>th</sup> quarter of 2008 (25.1%), when the balance of national current transactions with non-residents of 58.2 billion CZK was larger year-on-year by 19.0 billion CZK.

**Table no 4.12 Gross disposable income by quarters**

in billions of CZK at current prices

	2008				Change in 2008 compared to 2007			
	1. Q	2. Q	3. Q	4. Q	1. Q	2. Q	3. Q	4. Q
Gross disposable income	841.9	831.5	860.1	873.3	53.3	30.0	54.5	27.3
Final consumption	593.0	643.6	655.9	700.0	41.0	48.7	48.6	38.1
Gross national savings	248.9	187.9	204.2	173.3	12.3	-18.7	5.9	-10.8
Gross capital formation	218.7	243.9	243.0	231.5	10.6	-12.2	-15.0	8.2
Balance of transactions with non-residents	30.2	-56.0	-29.8	-58.2	1.7	-6.5	20.9	-19.0

Source: the Czech Statistical Office, own calculations