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Development of external trade price indices in the first quarter of 2010

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Development of external trade price indices in the first quarter of 2010

Quarter-on-quarter comparison:

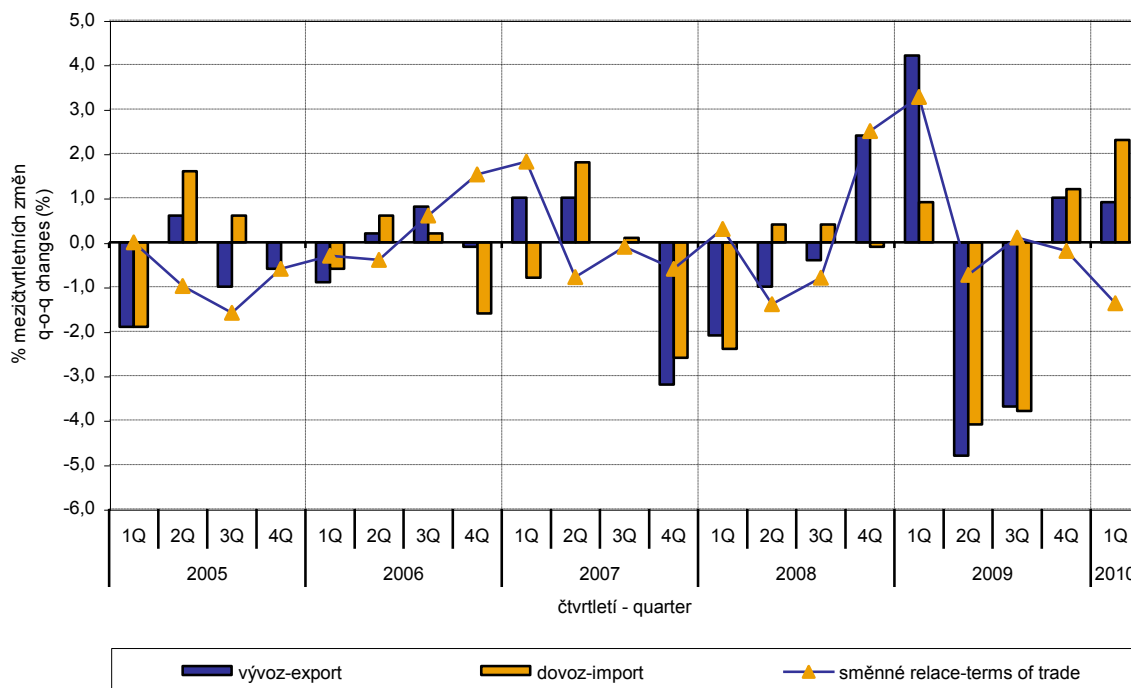
Export prices Q1 2010 compared to **Q4 2009** increased by 0.9% (in Q4 2009 by 1.0%). **Import prices** increased by 2.3% (in Q4 2009 by 1.2 %).

In **export prices** among more important groups prices grew most in 'crude materials, inedible, except fuels' (+10.4%), 'chemicals and related products' (+3.9%), 'food and live animals' (+2.5%) and in 'machinery and transport equipment' (+0.8%). Prices dropped only in 'mineral fuels, lubricants and related materials' (-4.4%).

In **import prices** the biggest growth was registered in 'mineral fuels, lubricants and related materials' (+11.3%), 'machinery and transport equipment' (+1.4%), 'miscellaneous manufactured articles' (+0.8%) and 'manufactured goods classified chiefly by material' (+0.7%). Prices dropped only in groups of the lowest importance, i.e. prices of 'animal oils and fats' (-1.4%) and prices of 'beverages and tobacco' (-0.7%).

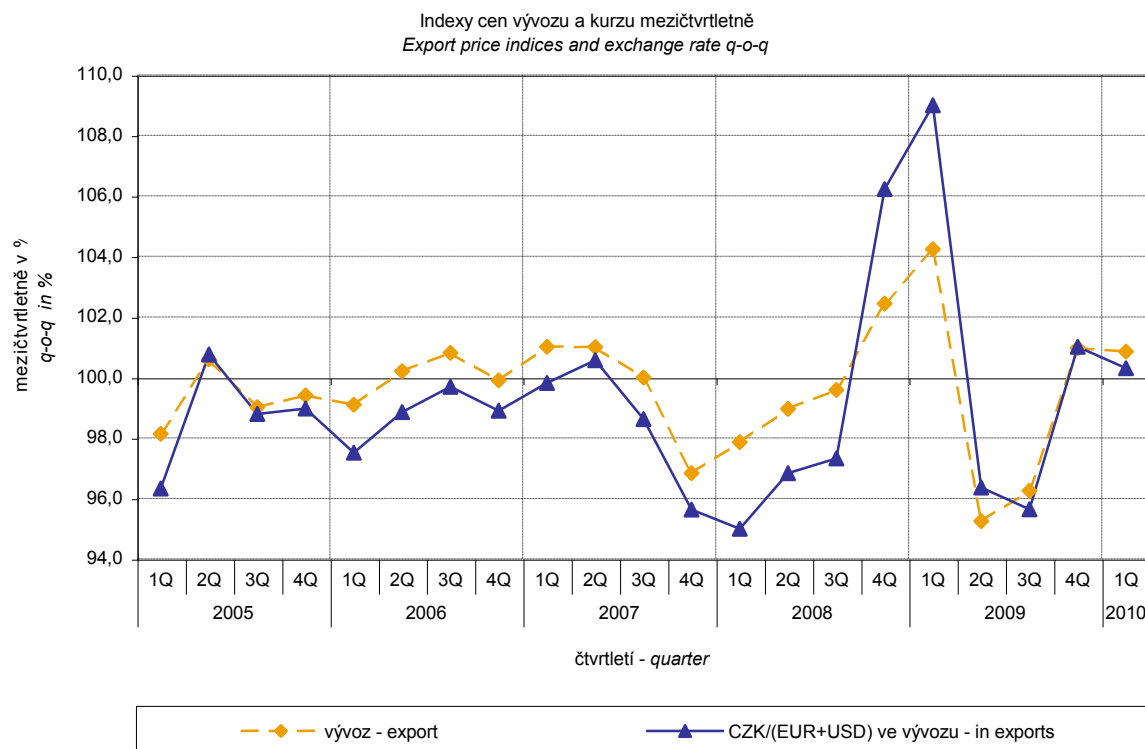
The **terms of trade figures** in **Q1 2010** compared to **Q4 2009** dropped to 98.6% (in Q4 2009 99.8 %). More important negative values were recorded in 'mineral fuels, lubricants and related materials' (85.9%), 'food and live animals' (97.8%), 'miscellaneous manufactured articles' (99.2%) and 'machinery and transport equipment' (99.4%). By contrast, among more important groups, positive terms of trade figures were reported for 'crude materials, inedible, except fuels' (108.9%) and 'chemicals and related products' (103.3%).

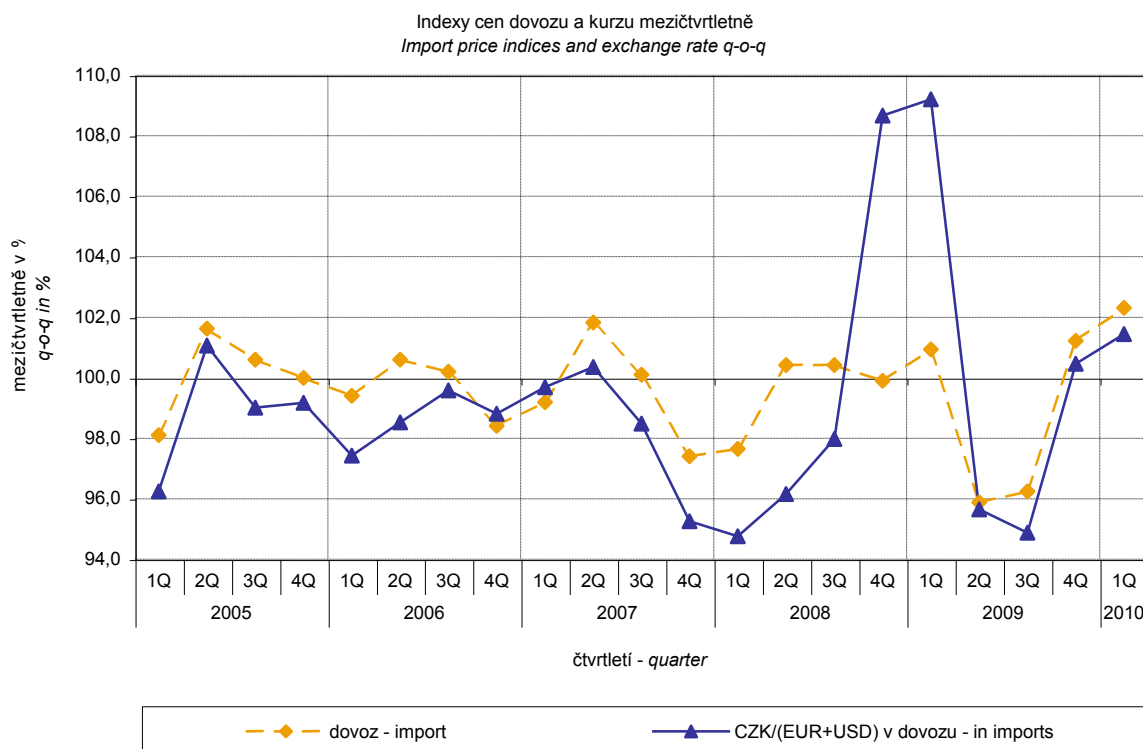
Vývoj cen v zahraničním obchodě (mezičtvrtletní změny v %)
Price trends in external trade (q-o-q changes in %)



External trade price development was widely affected also by the CZK exchange rate to the leading foreign currencies.

The q-o-q exchange rate index includes two most important currencies from the aspect of the Czech external trade, i.e. EUR and USD; q-o-q indices of CZK exchange rate to these currencies were weighted by the weight which pertains to those currencies in the export price index and import price index.





Thus, it becomes clear that in both the imports and exports, external trade prices have a strong relation to exchange rate impacts. This relation could naturally be even stronger in m-o-m comparison, however, also in q-o-q index it is relatively strong as shown in graphs. It is rather logical conclusion because the contracts with foreign entities are, as a rule, signed for a longer period of time and the longer is the contract period, the stronger is the relation to exchange rates.

The above graphs clearly show that strong depreciation of CZK against EUR and USD in Q1 2009 resulted into growing prices of exports and imports. By contrast, in Q2 2009 CZK strengthened against both currencies and prices went down. Prices went down also in Q3 2009 but more moderately. In Q4 2009 CZK weakened against EUR and pushed prices up. This trend continued in Q1 2010 when CZK fell against USD (but it slightly strengthened against EUR). Therefore, import prices recorded a higher growth, while export prices grew more slowly. The reason is that imports report a bigger share of contracts concluded in USD, due to crude oil imports.

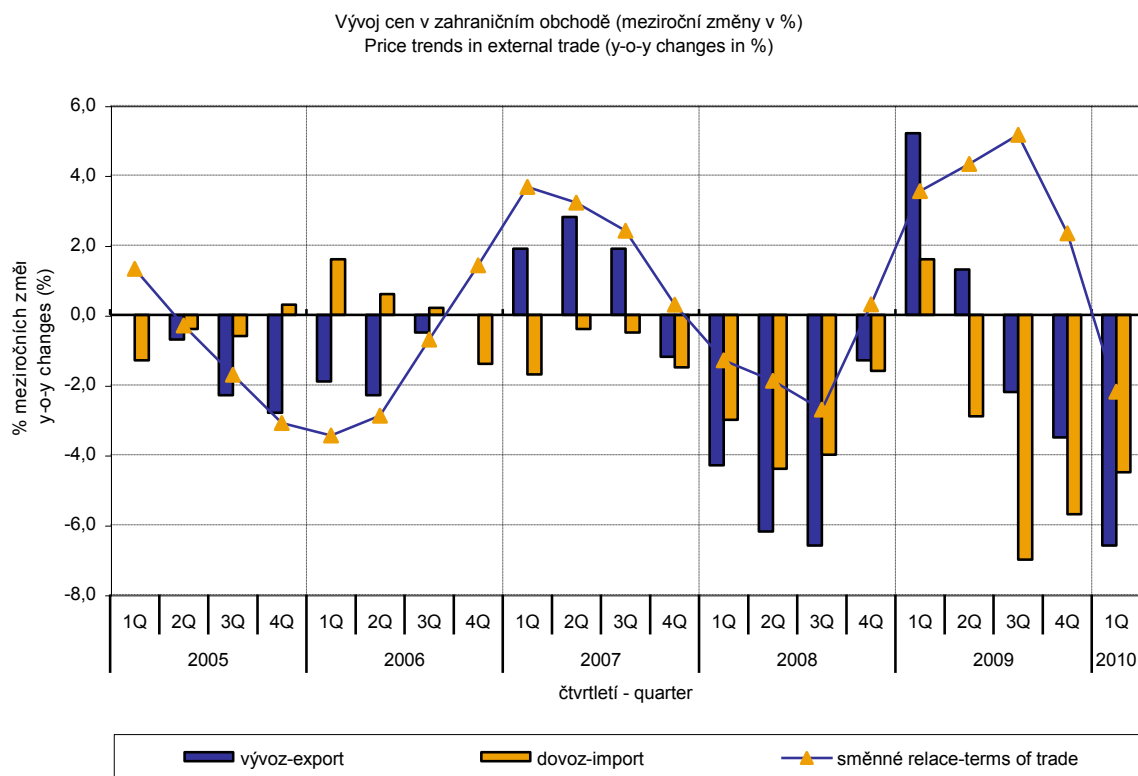
Year-on-year comparison:

Export prices in Q1 2010 decreased by 6.6% (in Q4 2009 by 3.5%). More marked drop was reported for prices of 'mineral fuels, lubricants and related materials' (by 15.1%), 'manufactured goods classified chiefly by material' (by 11.9%), 'machinery and transport equipment' and 'miscellaneous manufactured articles' (both by 5.8%). Prices grew only in 'crude materials, inedible, except fuels' (by 17.9%) and 'chemicals and related products' (by 1.2%).

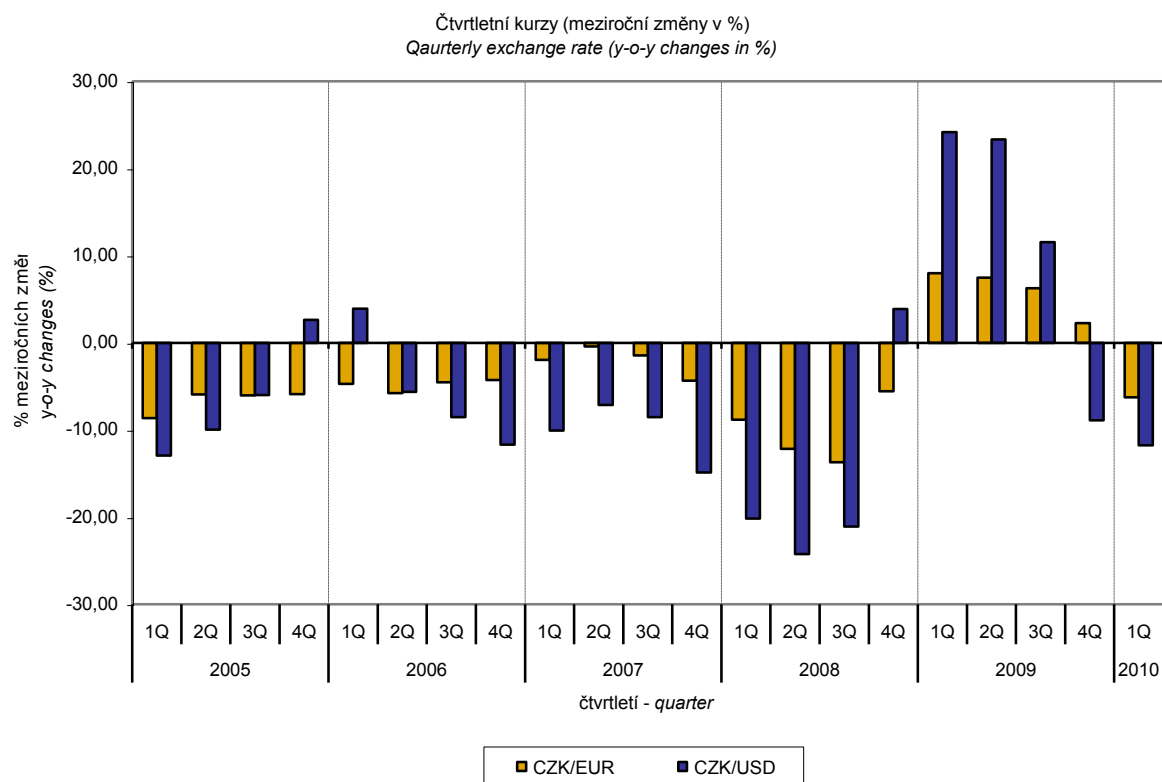
Import prices in Q1 2010 declined by 4.5% (in Q4 2009 by 5.7%). More marked drop was reported for prices in 'crude materials, inedible, except fuels' (by 17.5 %), 'miscellaneous manufactured articles' (by 6.5%) and 'machinery and transport equipment' (by 5.8%). Prices grew only in 'mineral fuels, lubricants and related materials' (by 10.2%).

Terms of trade decreased in **Q1 2010** at 97.8%, y-o-y, (i.e. down by 4.5 p.p. compared with Q4 2009) and recorded negative values after five months – see graph below. However, negative values were recorded only in 'mineral fuels, lubricants and related materials' (77.0%) and 'manufactured goods classified chiefly by material' (93.1%). The terms of trade figures in 'machinery and transport equipment' were 100.0%. Among more important groups positive values of the terms of trade were

recorded in 'crude materials, inedible, except fuels' (142.9%), 'chemicals and related products' (105.7%) and 'miscellaneous manufactured articles' (100.7%).

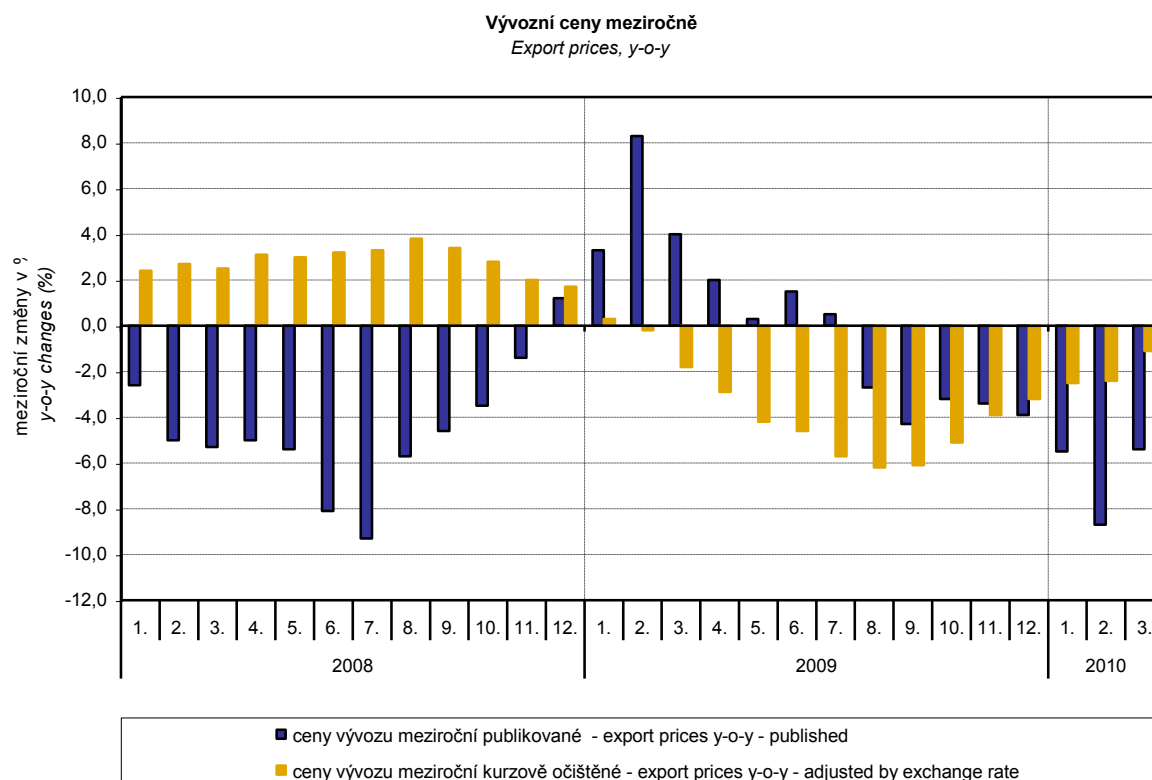


As it was shown above, external trade prices are exposed to many effects, among other things, also to the CZK exchange rate to foreign currencies. This influence is important and often even decisive mainly in m-o-m expression; however, it is very significant in the quarter-to-quarter comparison and markedly affects also the level of y-o-y external trade price indices. In Q1 2009 the CZK exchange rate to EUR and USD weakened markedly, y-o-y, which corresponds to high growth rate of external trade price indices. Although in Q2 2009 the CZK exchange rate remained weak, import prices showed no increase. This came mainly from high drop of crude oil prices, which became even more profound in Q3 2009 resulting into further decrease of export and import prices. In Q4 2009 this trend continued. In Q1 2010 the CZK exchange rate to both currencies strengthened and made prices go down. The development of quarterly exchange rates (y-o-y changes) is clear from the graph below.

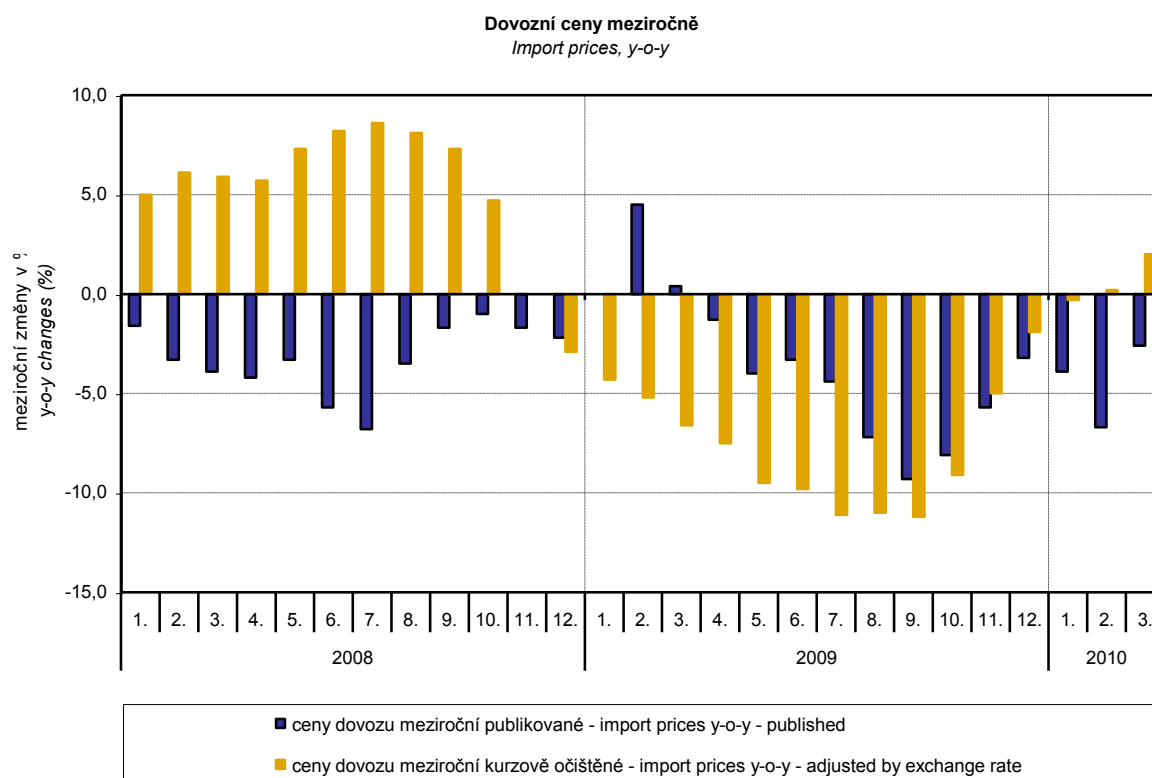


External trade price indices adjusted y-o-y by exchange rate

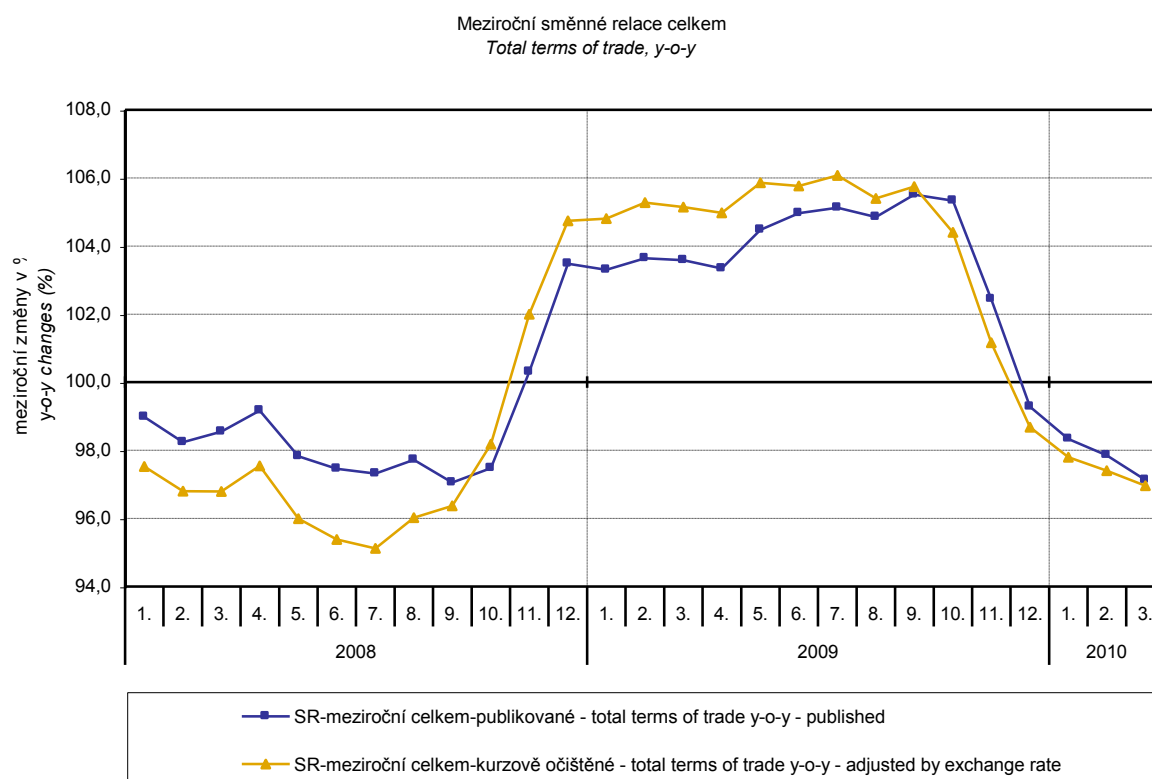
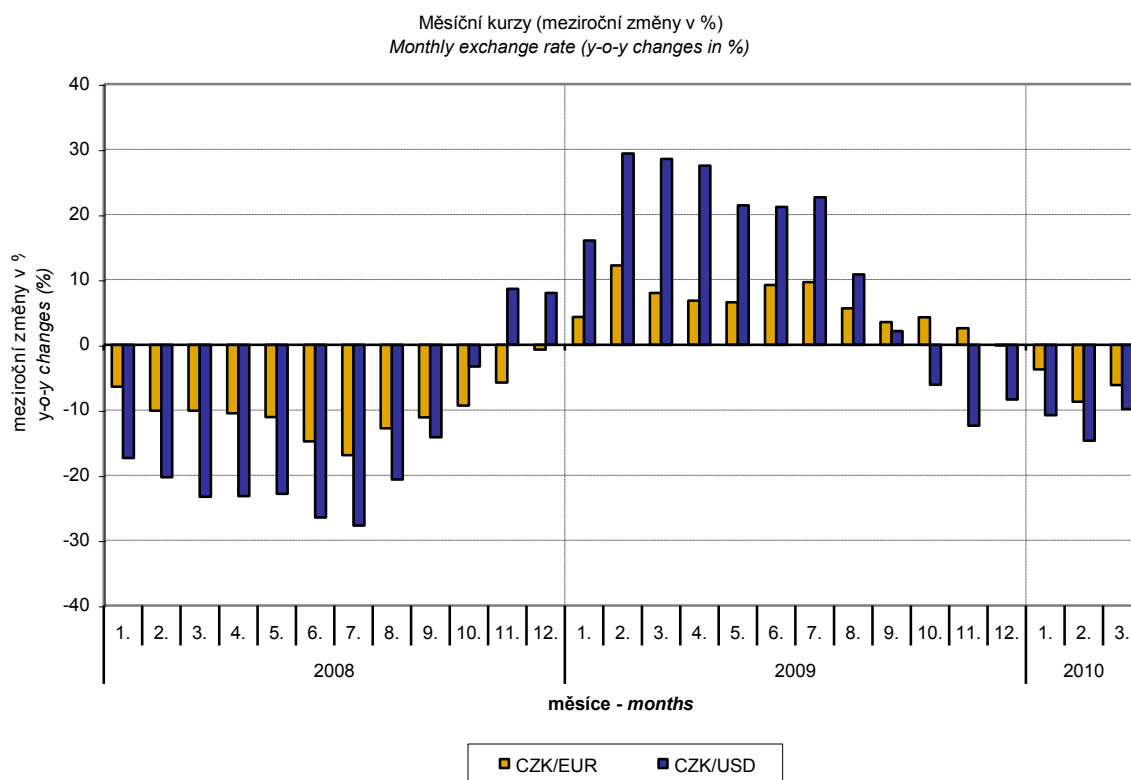
The CZSO makes experimental calculations of monthly external trade price indices adjusted for exchange rate influence. The method used does not allow due to many practical reasons to make a 100% exchange rate adjustment (i.e. **not all** observed deals made in foreign currencies are for the needs of calculations of external trade price indices also reported as such – this share, however, makes only about 30%). Nevertheless, it was verified that despite the increasing share of reporting in foreign currencies the currency basket remains basically constant. Thus, it can be stated that at the full exchange rate adjustment the differences between the published price indices and price indices that were adjusted would be even bigger.



It is clear from the graph that the exchange rate was important for export price indices. For the whole observed period from January 2008 it decreased their amount (CZK was mostly strengthening to foreign currencies). After elimination of the exchange rate influence, export prices would have been increasing in all months in 2008. In 2008, especially in July it is obvious how a strong exchange rate affected the export prices decrease. In Q1-Q3 2009 the situation reversed and weak CZK exchange rate caused an increase of export price indices, especially in Q1 2009. In mentioned quarters a weak CZK exchange rate increased export prices or reduced their decline. This trend survived in Q4 2009, except for December 2009, when the exchange rate pushed the export prices down. The situation from December 2009 persisted also in Q1 2010.

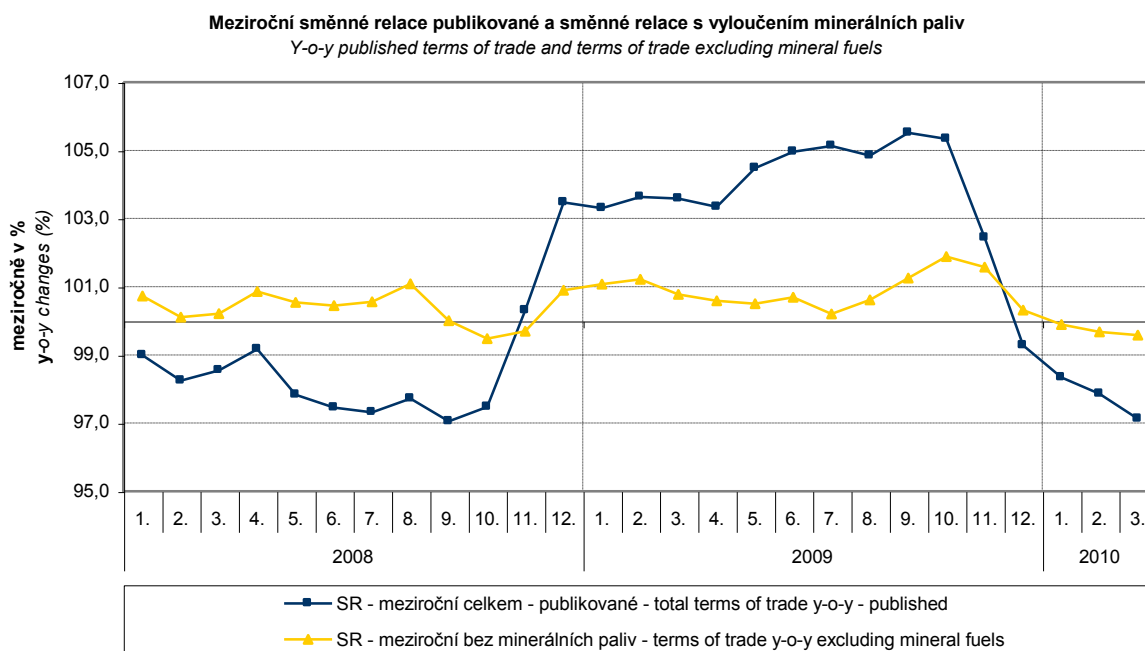


The graph above shows that the exchange rate markedly influenced also the import price indices. For the whole observed period until November 2008 it decreased their amount. After elimination of the exchange rate influence, import prices were increasing from January 2008 until October 2008 (they would not have changed in November 2008). Like in exports, there is an obvious strong exchange rate influence in June and July 2008 resulting into a marked drop of import prices. Conversely, in December 2008 the exchange rate influence increased the import price index, which came from weakening of CZK to USD. CZK moderately strengthened to EUR. In Q1-Q3 2009, this trend continued, a weak exchange rate of CZK increased the import price index or slowed down its decrease. In Q4 2009 the situation became just opposite when in November and December 2009 the CZK pushed the import price index down. This trend continued in Q1 2010. In February and March 2010 we can even observe a growth of adjusted index.



From the above graph it is clear that in the period from January 2008 to September 2008 the exchange rate pushed the y-o-y terms of trade values up and from October 2008 it pushed them down and from October 2009 the exchange rate pushed the terms of trade values up again. This happened due to the fact that in the currency basket there is higher proportion of USD in imports compared to exports. As it is obvious from the previous graph *Monthly Exchange Rates* in November and December 2008 CZK strengthened to EUR and, concurrently, weakened to USD. From January 2008 the terms of trade kept negative values, in November 2008 the terms of trade jumped to positive values and remained in positive values until November 2009. Due to stronger CZK in Q4 2009 the terms of trade values began to fall and went to negative values again.

How would the terms of trade value develop if the observed groups would not include 'mineral fuels, lubricants and related materials'?



As it is clear from the above graph, 'mineral fuels, lubricants and related materials' reduced the total value of y-o-y terms of trade in the period from January 2008 to October 2008. By contrast, from November 2008 to November 2009 'mineral fuels, lubricants and related materials' showed an upward effect on the terms of trade values. It is most obvious just in Q2 and Q3 2009. In Q4 2009 the situation began to reverse and in December 2009 'mineral fuels, lubricants and related materials' again had a downward effect on the terms of trade values. It is naturally related to the world market price development, especially to crude oil prices. Import prices, which compared to export prices, include higher proportion of crude materials, respond more sensitively to price turbulences and therefore when prices of crude materials go up, terms of trade, as a rule, go down and, conversely, when prices of crude materials fall, terms of trade grow.

The following table shows published external trade price indices without adjustment.

Import and Export Price Indices in Q1 2010

| Import and Export Price Indices in Q1 2010 | | | | | | |
|--|---|---|---------|----------|-------|-------|
| SITC code | Name | Corresponding period of previous year = 100 | | | | |
| | | 2009 | 2010 | | | |
| | | Q4 | January | February | March | Q1 |
| Export Price Index | | | | | | |
| | Total | 96.5 | 94.5 | 91.3 | 94.6 | 93.4 |
| 0 | Food and live animals | 93.8 | 95.9 | 93.5 | 95.1 | 94.8 |
| 1 | Beverages and tobacco | 97.0 | 93.7 | 94.4 | 96.3 | 94.8 |
| 2 | Crude materials. inedible. except fuels | 101.2 | 109.8 | 117.3 | 127.2 | 117.9 |
| 3 | Mineral fuels. lubricants and related materials | 88.2 | 85.4 | 81.6 | 88.1 | 84.9 |
| 4 | Animal and vegetable oils. fats and waxes | 93.4 | 101.4 | 98.2 | 100.2 | 99.9 |
| 5 | Chemicals and related products | 92.6 | 101.1 | 98.9 | 103.7 | 101.2 |
| 6 | Manufactured goods classified chiefly by material | 90.1 | 87.8 | 86.5 | 90.1 | 88.1 |
| 7 | Machinery and transport equipment | 99.9 | 96.3 | 91.9 | 94.6 | 94.2 |
| 8 | Miscellaneous manufactured articles | 100.4 | 96.6 | 92.2 | 93.9 | 94.2 |
| Import Price Index | | | | | | |
| | Total | 94.3 | 96.1 | 93.3 | 97.4 | 95.5 |
| 0 | Food and live animals | 94.2 | 93.7 | 92.6 | 96.9 | 94.4 |
| 1 | Beverages and tobacco | 98.6 | 95.5 | 91.5 | 94.6 | 93.9 |
| 2 | Crude materials. inedible. except fuels | 78.3 | 83.2 | 80.2 | 84.2 | 82.5 |
| 3 | Mineral fuels. lubricants and related materials | 83.9 | 107.2 | 105.2 | 118.9 | 110.2 |
| 4 | Animal and vegetable oils. fats and waxes | 89.5 | 86.8 | 82.5 | 88.6 | 85.9 |
| 5 | Chemicals and related products | 94.2 | 96.3 | 94.1 | 96.9 | 95.7 |
| 6 | Manufactured goods classified chiefly by material | 94.6 | 95.0 | 93.0 | 95.7 | 94.6 |
| 7 | Machinery and transport equipment | 97.8 | 95.5 | 91.9 | 95.4 | 94.2 |
| 8 | Miscellaneous manufactured articles | 98.2 | 95.2 | 91.6 | 93.7 | 93.5 |

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