

ANALYSIS

17 February 2014

External Trade Price Indices Development in Q3 2013 and in the Year 2013

Export prices in Q4 2013, compared to Q3 2013, increased by 2.4%, import prices grew by 1.5%, and terms of trade reached 100.9%. Compared year-on year (y-o-y) export prices in Q4 2013 increased by 2.9%, import prices grew by 1.0%, and terms of trade reached 101.9%. On average for the whole year 2013 exports prices increased by 1.2% and import prices fell by 0.2%, both compared to those for 2012, and terms of trade attained 101.4%.

Quarter-on-quarter (q-o-q) comparison:

Export prices in Q4 2013, compared to Q3 2013, increased by 2.4% (in Q3 2013 they decreased by 0.7%). In export prices, among the more important groups of goods, prices increased most in 'crude materials, inedible, except fuels' by 4.2%, 'miscellaneous manufactured articles' by 3.1%, and in 'machinery and transport equipment' by 2.4%. The only prices that fell were prices of 'animal and vegetable oils, fats and waxes' by 3.8%.

Import prices in Q4 2013, compared to Q3 2013, increased by 1.5% (in Q3 2013 they decreased by 0.8%). In import prices rather important price increases were recorded for 'manufactured goods classified chiefly by material' by 1.8%, 'machinery and transport equipment' by 1.7%, and for 'miscellaneous manufactured articles' by 1.5%. The only prices that fell were, similarly as in export prices, prices of 'animal and vegetable oils, fats and waxes' by 5.3%.

The **terms of trade figures** in Q4 2013, compared to Q3 2013, reached 100.9% (in Q3 2013 they were 100.1%). Rather important positive values of terms of trade were reached in 'crude materials, inedible, except fuels' (104.0%), 'miscellaneous manufactured articles' (101.6%), and in 'machinery and transport equipment' (100.7%). Among important groups of goods, lowest negative values of terms of trade were reached in 'mineral fuels, lubricants and related materials' (99.6%), and in 'chemicals and related products' (99.8%).

Information Services Unit – Headquarters

Are you interested in the latest data connected with inflation, GDP, population, wages and much more?

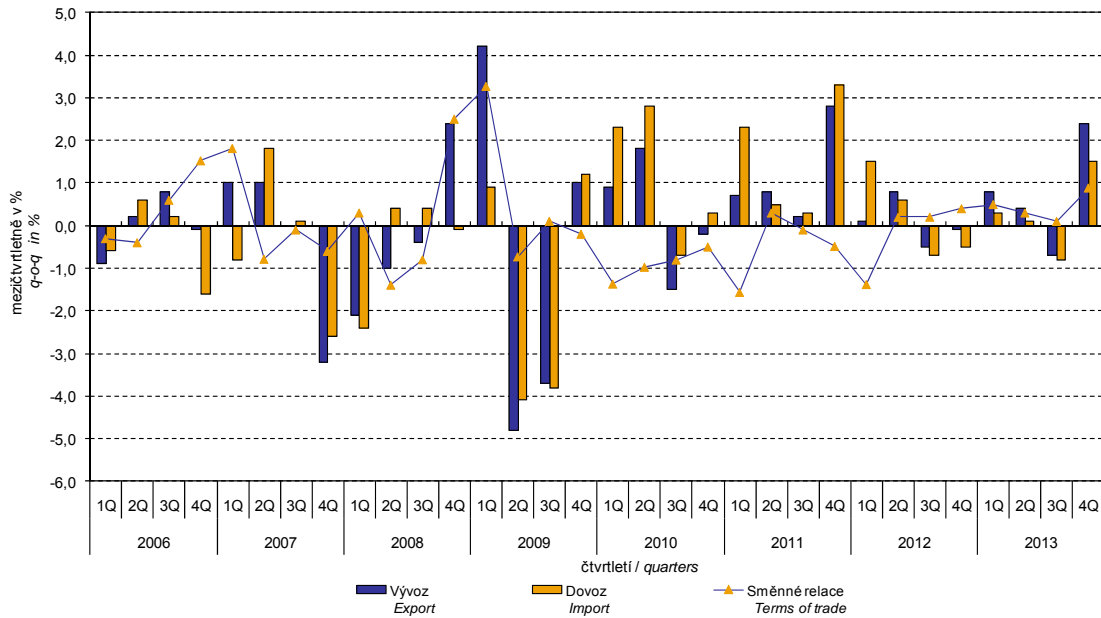
You can find them on pages of the Czech Statistical Office on the Internet: www.czso.cz

tel: +420 274 052 304, +420 274 052 425, e-mail: infoservis@czso.cz

ANALYSIS

Graf č. 1
Graph No. 1

Vývoj cen v zahraničním obchodě mezičtvrtletně
Price trends in external trade q-o-q



The external trade price development was also significantly affected by the CZK exchange rate to the major foreign currencies. The q-o-q exchange rate index includes two most important currencies from the Czech Republic's external trade point of view, i.e. EUR and USD. Q-o-q indices of the CZK exchange rate to these currencies were weighted by the weight, which pertains to those foreign currencies in the export price index and import price index, respectively.

Information Services Unit – Headquarters

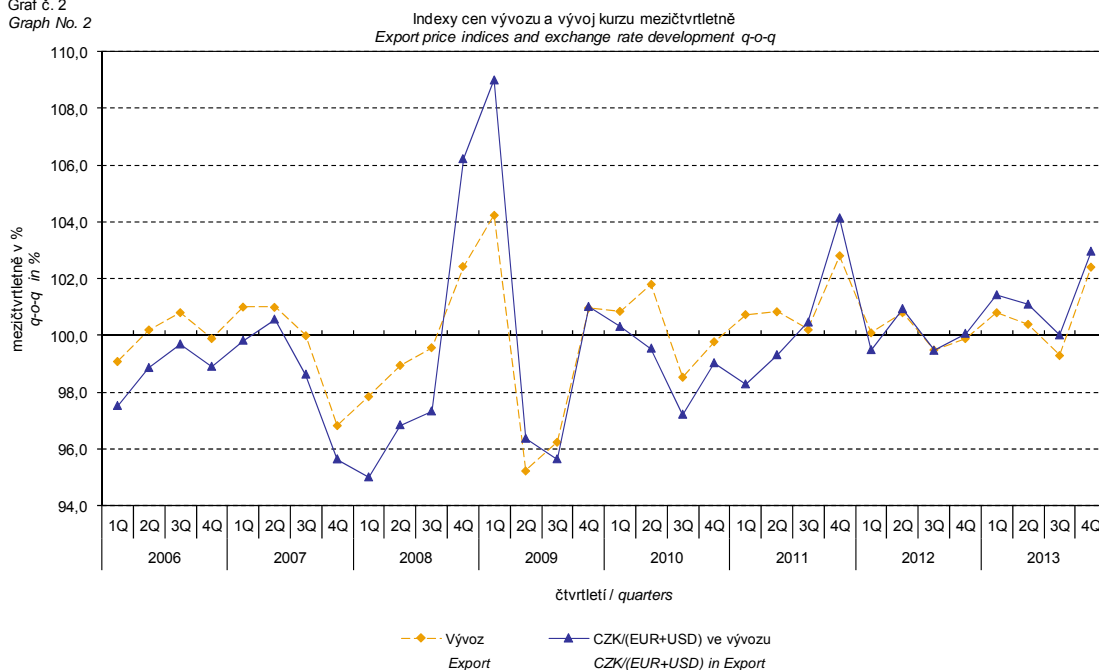
Are you interested in the latest data connected with inflation, GDP, population, wages and much more?

You can find them on pages of the Czech Statistical Office on the Internet: www.czso.cz

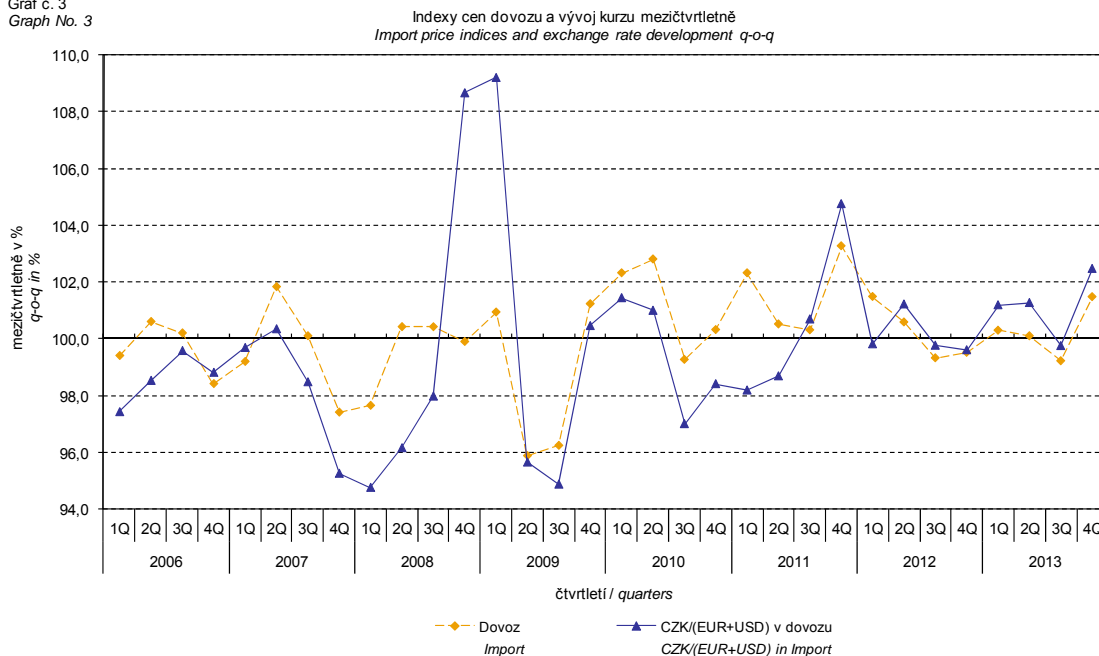
tel: +420 274 052 304, +420 274 052 425, e-mail: infoservis@czso.cz

ANALYSIS

Graf č. 2
Graph No. 2



Graf č. 3
Graph No. 3



It can be seen from Graphs Nos. 2 and 3 above that in both cases of imports and exports external trade prices have a strong relation to exchange rate impacts. Contracts with foreign entities are, as a rule, signed for a longer period of time and the longer the contract period is, the stronger the relation to exchange rates is.

Information Services Unit – Headquarters

Are you interested in the latest data connected with inflation, GDP, population, wages and much more?

You can find them on pages of the Czech Statistical Office on the Internet: www.czso.cz

tel: +420 274 052 304, +420 274 052 425, e-mail: infoservis@czso.cz

ANALYSIS

Year-on-year (y-o-y) comparison:

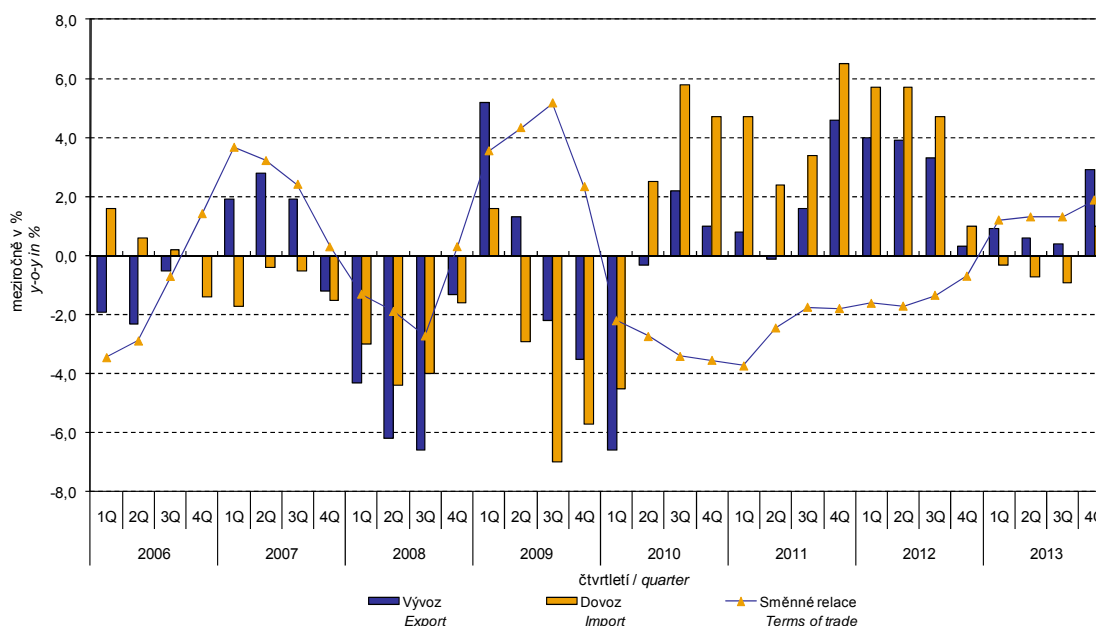
Export prices in **Q4 2013** increased by 2.9% (in Q3 2013 they rose by 0.4%). Among more important groups of goods, the highest growth was reported for prices of 'beverages and tobacco' by 20.8%, then of 'miscellaneous manufactured articles' by 4.2%, and of 'machinery and transport equipment' by 3.7%. On the contrary, prices of 'mineral fuels, lubricants and related materials' dropped by 0.8%, those of 'crude materials, inedible, except fuels' dropped by 0.5%.

Import prices in **Q4 2013** increased by 1.0% (in Q3 2013 they fell by 0.9%). A higher growth of prices among the more important groups was indicated for 'food and live animals' by 5.3%, 'miscellaneous manufactured articles' by 3.2%, and for 'machinery and transport equipment' by 2.4%. There were drops in prices observed in 'mineral fuels, lubricants and related materials' by 4.7%, 'crude materials, inedible, except fuels' by 1.7%, and in prices of 'chemicals and related products' by 0.7%.

Terms of trade in **Q4 2013** increased to reach the value of 101.9% (in Q3 2013 they were 101.3%) and thus stayed in positive values for the fourth quarter – see Graph No. 4 below. Significant positive values of terms of trade were recorded in 'mineral fuels, lubricants and related materials' (104.1%), 'machinery and transport equipment' (101.3%), and in 'crude materials, inedible, except fuels' (101.2%). Negative values of terms of trade were recorded solely for 'food and live animals' (95.0%).

Graf č. 4
Graph No. 4

Vývoj cen v zahraničním obchodě meziročně
Price trends in external trade y-o-y



Information Services Unit – Headquarters

Are you interested in the latest data connected with inflation, GDP, population, wages and much more?

You can find them on pages of the Czech Statistical Office on the Internet: www.czso.cz

tel: +420 274 052 304, +420 274 052 425, e-mail: infoservis@czso.cz

ANALYSIS

Price development in 2013

On average over the whole year 2013 export prices increased by 1.2% (in 2012 they rose by 2.9%). **Import prices** decreased by 0.2% (in 2012 they increased by 4.2%).

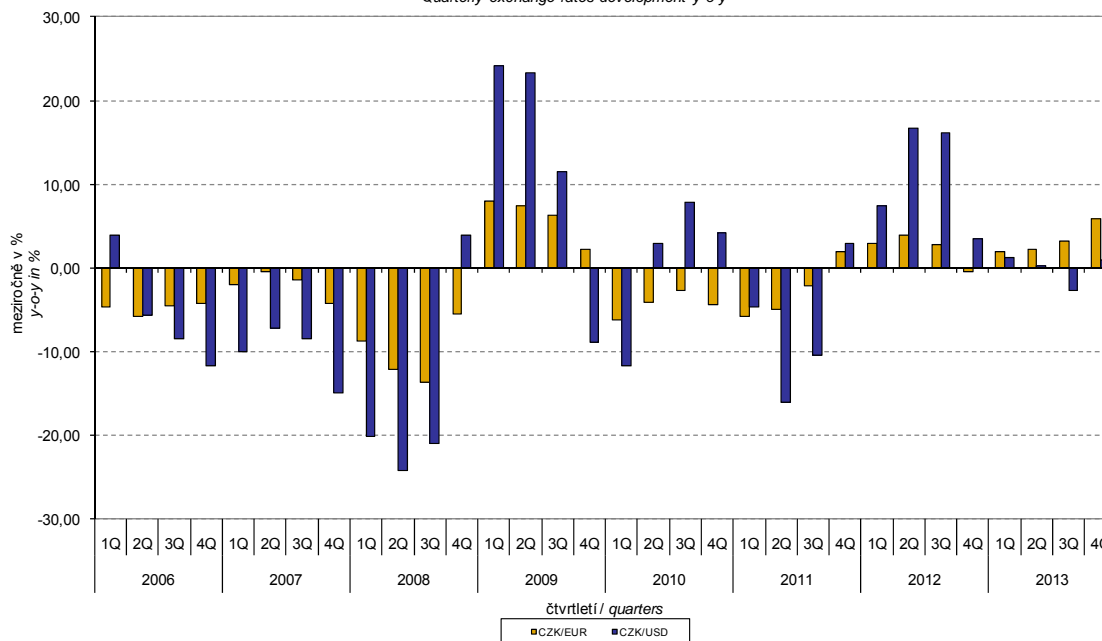
In **export prices** increases were noticed in groups of 'miscellaneous manufactured articles' by 2.5%, 'food and live animals' by 2.4%, 'machinery and transport equipment' by 2.0%, and of 'chemicals and related products' by 0.4%. , Among the more important groups prices dropped in 'mineral fuels, lubricants and related materials' by 3.6% and in 'crude materials, inedible, except fuels' by 1.7%.

In **import prices** important price decreases were recorded in 'mineral fuels, lubricants and related materials' by 6.0% (in 2012 they rose by 15.7%), 'crude materials, inedible, except fuels' by 5.8%, and in 'chemicals and related products' by 0.7%. Price increases were recorded for 'food and live animals' by 5.7%, 'miscellaneous manufactured articles' by 1.9%, and in 'machinery and transport equipment' by 1.0%.

Terms of trade reached in total in 2013 the value of 101.4% (they were 98.8% in 2012) and this means they reached a positive value after three years.

Graf č. 5
Graph No. 5

Vývoj čtvrtletních kurzů meziročně
Quarterly exchange rates development y-o-y



Information Services Unit – Headquarters

Are you interested in the latest data connected with inflation, GDP, population, wages and much more?

You can find them on pages of the Czech Statistical Office on the Internet: www.czso.cz

tel: +420 274 052 304, +420 274 052 425, e-mail: infoservis@czso.cz

ANALYSIS

External trade price indices adjusted y-o-y for exchange rate influence

The CZSO also carries out calculations of year-on-year external trade price indices adjusted for effects of exchange rate. The method is prices in foreign currencies reported in the current month are **converted** into Czech crowns by the **exchange rate** of the same month **of the last year**. Then they are used for the weighted mean calculation along with prices reported in CZK. The year-on-year adjusted price index is then calculated the way that this exchange rate adjusted base price index is related to the non-adjusted base price index of the same month of the last year. **Differences among adjusted and non-adjusted price indices may be substantial**. They can be clearly seen in Graphs Nos. 6 and 7 for November 2013 and December 2013, for instance.

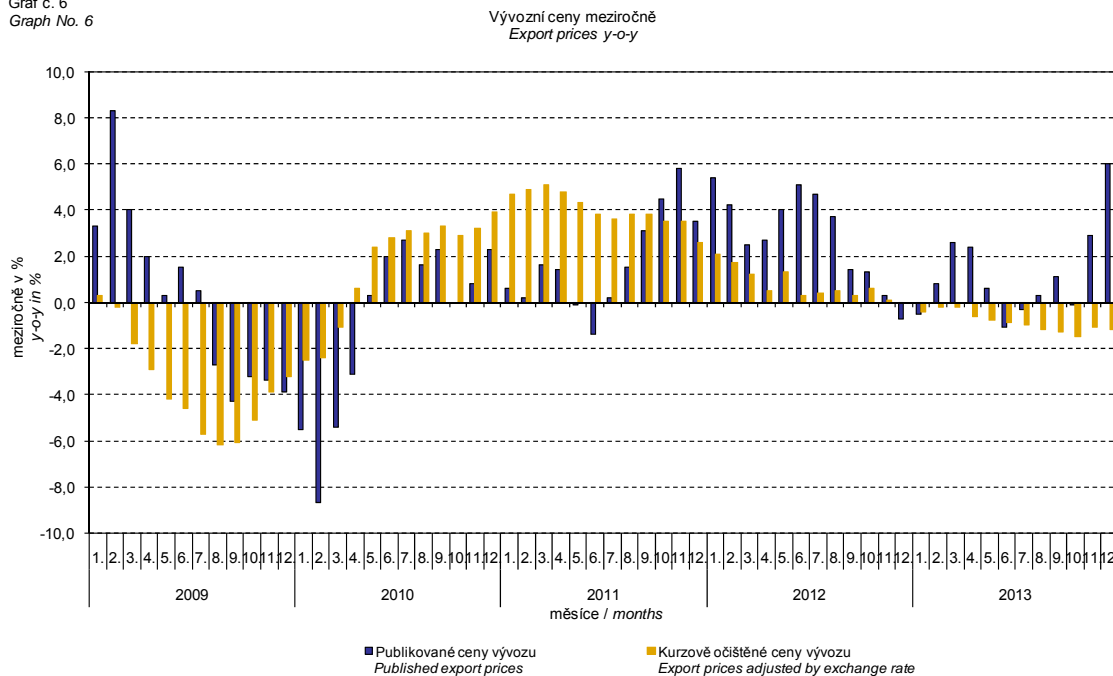
The method employed does not enable, for many practical reasons, to carry out 100% exchange rate adjustment because all trade transactions concluded in foreign currencies are not reported in foreign currencies. This share is up to 30%. It follows from the aforementioned, that **at the full exchange rate adjustment differences** in between the price indices published and the exchange rate adjusted price indices would **be even larger**.

The aforementioned exchange rate adjusted indices can be used to form the exchange rate adjusted breakdown of price indices increments. Table 1, page 10, gives the **published and exchange rate adjusted breakdowns of increments** of export and import price indices, expanded to the most important two-digit code groups of the SITC 7. These breakdowns illustrate, in a good manner, how many percentage points each of the groups “exchange rate contributed” to the index.

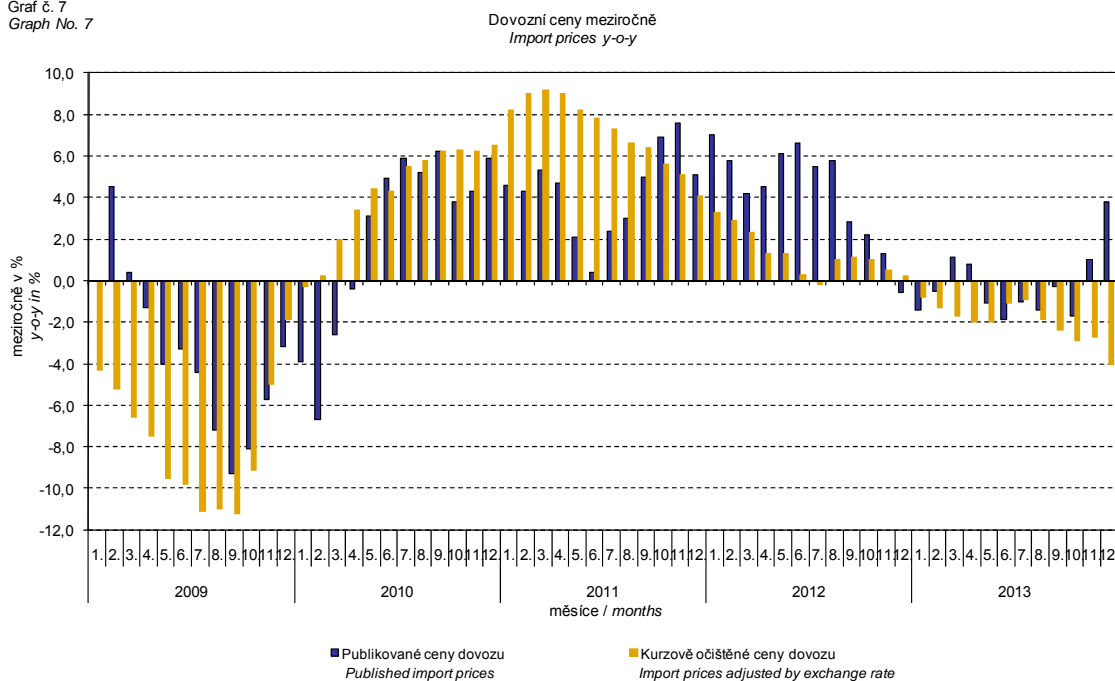
It holds in general that the effects of exchange rate decrease the value of price indices in external trade if CZK is strengthening to foreign currencies in total. Conversely, the effects of exchange rate push the price indices up if CZK is weakening to foreign currencies in total. It is obvious from following Graphs Nos. 6 and 7 how significant was the exchange rate impact on the value of export and import price indices.

ANALYSIS

Graf č. 6
Graph No. 6



Graf č. 7
Graph No. 7



Information Services Unit – Headquarters

Are you interested in the latest data connected with inflation, GDP, population, wages and much more?

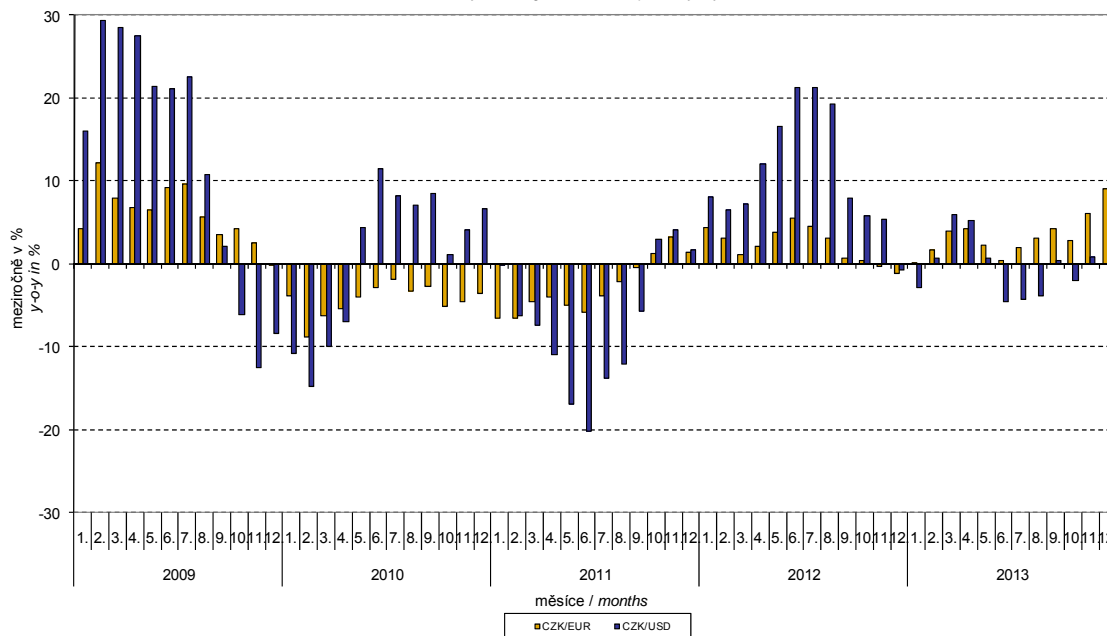
You can find them on pages of the Czech Statistical Office on the Internet: www.czso.cz

tel: +420 274 052 304, +420 274 052 425, e-mail: infoservis@czso.cz

ANALYSIS

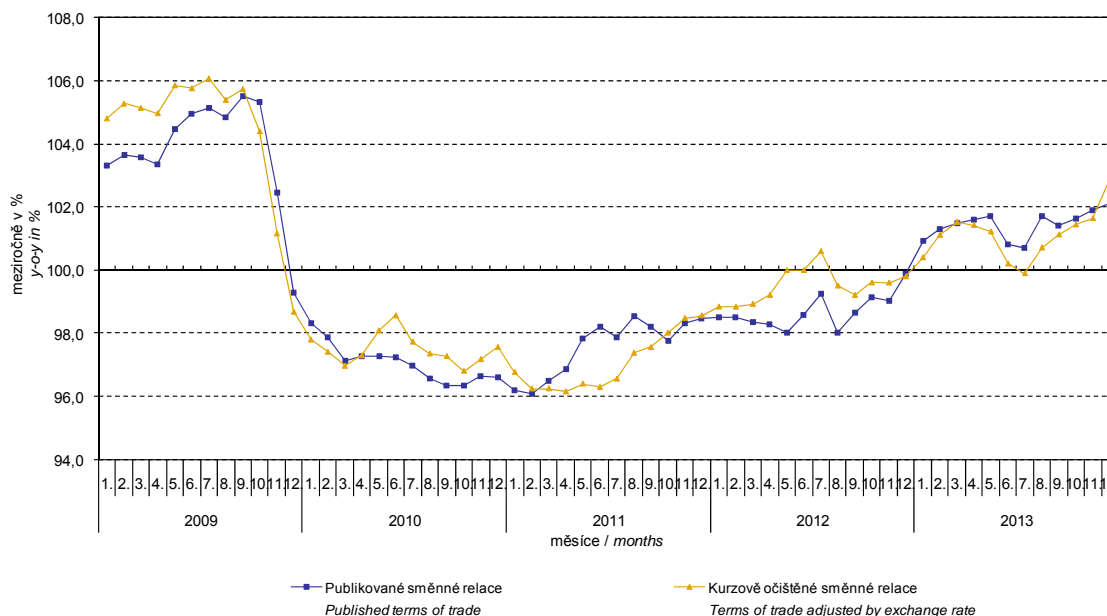
Graf č. 8
Graph No. 8

Vývoj měsíčních kurzů meziročně
Monthly exchange rates development y-o-y



Graf č. 9
Graph No. 9

Směnné relace meziročně
Terms of trade y-o-y



It can be seen from Graph No. 9 how the exchange rate influences the value of the year-on-year terms of trade.

Information Services Unit – Headquarters

Are you interested in the latest data connected with inflation, GDP, population, wages and much more?

You can find them on pages of the Czech Statistical Office on the Internet: www.czso.cz

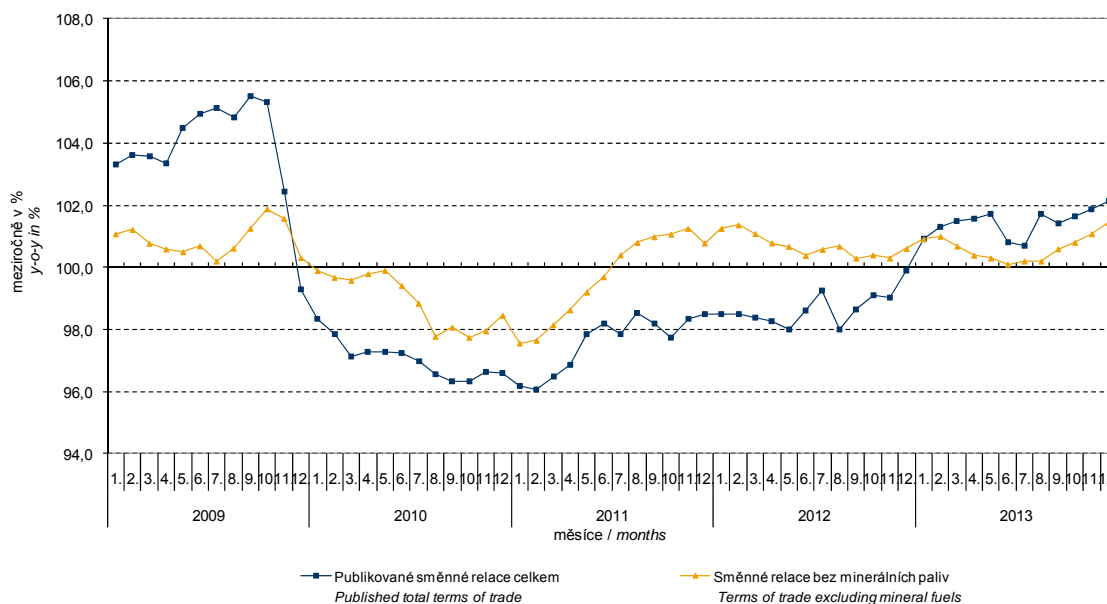
tel: +420 274 052 304, +420 274 052 425, e-mail: infoservis@czso.cz

ANALYSIS

Graph No. 10 demonstrates how the value of terms of trade would develop if the observed groups would not include that of 'mineral fuels, lubricants and related materials'.

Graf č. 10
Graph No. 10

Publikované směnné relace a směnné relace s vyloučením minerálních paliv meziročně
Published terms of trade and terms of trade excluding mineral fuels y-o-y



It can be observed in Graph No. 10 that 'mineral fuels, lubricants and related materials' began to decrease the overall value of y-o-y terms of trade since Q4 2009. In Q1 2013 the situation began to reverse and 'mineral fuels, lubricants and related materials' have had again an upward effect on the value of terms of trade. It is, of course, related to the world market price development, especially in crude oil. Import prices, which, compared to export prices, include a higher proportion of crude materials, respond in a more sensitive way 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.

Information Services Unit – Headquarters

Are you interested in the latest data connected with inflation, GDP, population, wages and much more?

You can find them on pages of the Czech Statistical Office on the Internet: www.czso.cz

tel: +420 274 052 304, +420 274 052 425, e-mail: infoservis@czso.cz

ANALYSIS

Tabulka 1: Rozklad přírůstků publikovaných a kurzově očištěných indexů cen vývozu a dovozu za prosinec 2013
Table 1: Breakdown of export and import price indices - published and exchange rate adjusted for December 2013

SITC	Název Name	Publikované Published				Očištěné Adjusted			
		Meziměsíční M-o-m	Meziroční Year-on-year			Meziměsíční M-o-m	Meziroční Year-on-year		
		12/2013	10/2013	11/2013	12/2013	12/2013	10/2013	11/2013	12/2013
Rozklad přírůstků indexů vývozních cen <i>Breakdown of export price indices</i>									
	Celkem <i>Total</i>	2,2	-0,1	2,9	6,0	0,7	-1,5	-1,1	-1,2
0	Potraviny a živá zvířata <i>Food and live animals</i>	0,1	-0,1	0,0	0,1	0,0	-0,1	-0,1	-0,1
1	Nápoje a tabák <i>Beverages and tobacco</i>	0,1	0,1	0,1	0,2	0,0	0,1	0,1	0,2
2	Suroviny nepoživatelné, s výjimkou paliv <i>Crude materials, inedible, except fuels</i>	0,1	-0,1	0,0	0,2	0,1	-0,2	-0,1	-0,1
3	Minerální paliva, maziva a příbuzné materiály <i>Mineral fuels, lubricants and related materials</i>	0,1	-0,2	0,0	0,2	0,1	-0,3	-0,2	-0,1
4	Živočišné a rostlinné oleje <i>Animal and vegetable oils, fats and waxes</i>	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
5	Chemikálie a příbuzné výrobky <i>Chemicals and related products</i>	0,2	-0,2	0,0	0,2	0,1	-0,3	-0,3	-0,6
6	Tržní výrobky tříděné hlavně podle materiálu <i>Manufactured goods classified chiefly by material</i>	0,3	-0,1	0,5	1,0	0,1	-0,3	-0,1	-0,1
7	Stroje a dopravní prostředky - z toho: <i>Machinery and transport equipment - thereof:</i>	1,1	0,4	1,8	3,3	0,3	-0,4	-0,4	-0,5
74	Stroje a zařízení všeobecně užívané v průmyslu, j.n. <i>General industrial machinery and equipment, n.e.s.</i>	0,2	-0,2	-0,2	-0,2	0,0	0,0	0,0	0,1
77	Elektrická zařízení, přístroje a spotřebiče, j.n. <i>Electrical machinery, apparatus and appliances, n.e.s.</i>	0,2	-0,1	-0,1	-0,1	0,1	0,0	-0,1	-0,1
78	Silniční vozidla <i>Road vehicles (including air-cushion vehicles)</i>	0,4	0,1	0,1	0,1	0,1	0,2	0,2	0,4
8	Průmyslové spotřební zboží <i>Miscellaneous manufactured articles</i>	0,2	0,1	0,5	0,8	0,0	0,0	0,0	0,1
Rozklad přírůstků indexů dovozních cen <i>Breakdown of import price indices</i>									
	Celkem <i>Total</i>	1,7	-1,7	1,0	3,8	0,4	-2,9	-2,7	-4,0
0	Potraviny a živá zvířata <i>Food and live animals</i>	0,2	0,2	0,2	0,4	0,2	0,1	0,1	0,2
1	Nápoje a tabák <i>Beverages and tobacco</i>	0,0	0,1	0,1	0,1	0,0	0,0	0,0	0,0
2	Suroviny nepoživatelné, s výjimkou paliv <i>Crude materials, inedible, except fuels</i>	0,0	-0,2	0,0	0,1	0,0	-0,2	-0,1	-0,1
3	Minerální paliva, maziva a příbuzné materiály <i>Mineral fuels, lubricants and related materials</i>	0,3	-1,2	-0,8	0,0	0,2	-1,1	-1,0	-1,3
4	Živočišné a rostlinné oleje <i>Animal and vegetable oils, fats and waxes</i>	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
5	Chemikálie a příbuzné výrobky <i>Chemicals and related products</i>	0,1	-0,2	0,0	0,1	0,0	-0,4	-0,5	-1,0
6	Tržní výrobky tříděné hlavně podle materiálu <i>Manufactured goods classified chiefly by material</i>	0,3	-0,2	0,3	0,7	0,0	-0,5	-0,4	-0,7
7	Stroje a dopravní prostředky - z toho: <i>Machinery and transport equipment - thereof:</i>	0,7	-0,3	0,9	2,0	0,0	-0,7	-0,7	-1,0
74	Stroje a zařízení všeobecně užívané v průmyslu, j.n. <i>General industrial machinery and equipment, n.e.s.</i>	0,1	0,2	0,3	0,4	0,0	0,1	0,1	0,1
75	Kancelářské stroje a zař. k automat. zpracování dat <i>Office machines and automatic data-processing machines</i>	0,1	-0,3	-0,2	0,0	0,1	-0,4	-0,5	-0,7
77	Elektrická zařízení, přístroje a spotřebiče, j.n. <i>Electrical machinery, apparatus and appliances, n.e.s.</i>	0,2	0,1	0,4	0,7	0,0	0,1	0,2	0,3
78	Silniční vozidla <i>Road vehicles (including air-cushion vehicles)</i>	0,1	0,0	0,2	0,4	0,0	-0,2	-0,2	-0,2
8	Průmyslové spotřební zboží <i>Miscellaneous manufactured articles</i>	0,1	0,1	0,3	0,4	0,0	-0,1	-0,1	-0,1

Information Services Unit – Headquarters

Are you interested in the latest data connected with inflation, GDP, population, wages and much more?

You can find them on pages of the Czech Statistical Office on the Internet: www.czso.cz

tel: +420 274 052 304, +420 274 052 425, e-mail: infoservis@czso.cz

ANALYSIS

Closing Table gives published external trade price indices **without adjustment**.

Tabulka 2: Indexy cen vývozu a dovozu ve 4. čtvrtletí 2013

Table 2: Export and import price indices in Q4 2013

SITC	Název Name	Stejně období předchozího roku = 100 Corresponding period of previous year = 100				
		3Q/2013	10/2013	11/2013	12/2013	4Q/2013
Indexy vývozních cen <i>Export price indices</i>						
	Celkem <i>Total</i>	100,4	99,9	102,9	106,0	102,9
0	Potraviny a živá zvířata <i>Food and live animals</i>	100,5	98,2	99,7	102,1	100,0
1	Nápoje a tabák <i>Beverages and tobacco</i>	108,8	114,6	120,3	127,5	120,8
2	Suroviny nepoživatelné, s výjimkou paliv <i>Crude materials, inedible, except fuels</i>	95,1	95,6	99,5	103,4	99,5
3	Minerální paliva, maziva a příbuzné materiály <i>Mineral fuels, lubricants and related materials</i>	96,0	93,7	99,5	104,6	99,2
4	Živočišné a rostlinné oleje <i>Animal and vegetable oils, fats and waxes</i>	98,9	90,5	95,2	97,3	94,3
5	Chemikálie a příbuzné výrobky <i>Chemicals and related products</i>	100,6	97,8	99,4	102,6	99,9
6	Tržní výrobky tříděné hlavně podle materiálu <i>Manufactured goods classified chiefly by material</i>	99,6	99,3	102,9	105,5	102,6
7	Stroje a dopravní prostředky <i>Machinery and transport equipment</i>	101,0	101,0	103,5	106,6	103,7
8	Průmyslové spotřební zboží <i>Miscellaneous manufactured articles</i>	101,9	101,2	104,2	107,1	104,2
Indexy dovozních cen <i>Import price indices</i>						
	Celkem <i>Total</i>	99,1	98,3	101,0	103,8	101,0
0	Potraviny a živá zvířata <i>Food and live animals</i>	107,0	104,1	104,0	107,7	105,3
1	Nápoje a tabák <i>Beverages and tobacco</i>	109,1	107,5	108,6	106,8	107,6
2	Suroviny nepoživatelné, s výjimkou paliv <i>Crude materials, inedible, except fuels</i>	92,7	93,9	98,8	102,6	98,3
3	Minerální paliva, maziva a příbuzné materiály <i>Mineral fuels, lubricants and related materials</i>	92,5	91,0	94,8	100,2	95,3
4	Živočišné a rostlinné oleje <i>Animal and vegetable oils, fats and waxes</i>	89,3	85,6	85,8	87,2	86,2
5	Chemikálie a příbuzné výrobky <i>Chemicals and related products</i>	99,0	97,8	99,2	101,0	99,3
6	Tržní výrobky tříděné hlavně podle materiálu <i>Manufactured goods classified chiefly by material</i>	99,9	98,9	101,9	104,1	101,7
7	Stroje a dopravní prostředky <i>Machinery and transport equipment</i>	100,0	99,4	102,5	105,3	102,4
8	Průmyslové spotřební zboží <i>Miscellaneous manufactured articles</i>	101,4	101,3	103,3	104,9	103,2

Developed by: Vladimír Klimeš, Prices Statistics Department

Director of the Department: Jiří Mrázek, telephone: (+420) 274 052 533

Information Services Unit – Headquarters

Are you interested in the latest data connected with inflation, GDP, population, wages and much more?

You can find them on pages of the Czech Statistical Office on the Internet: www.czso.cz

tel: +420 274 052 304, +420 274 052 425, e-mail: infoservis@czso.cz