

## 5. Prices

Total price level in the economy was markedly higher year-on-year.

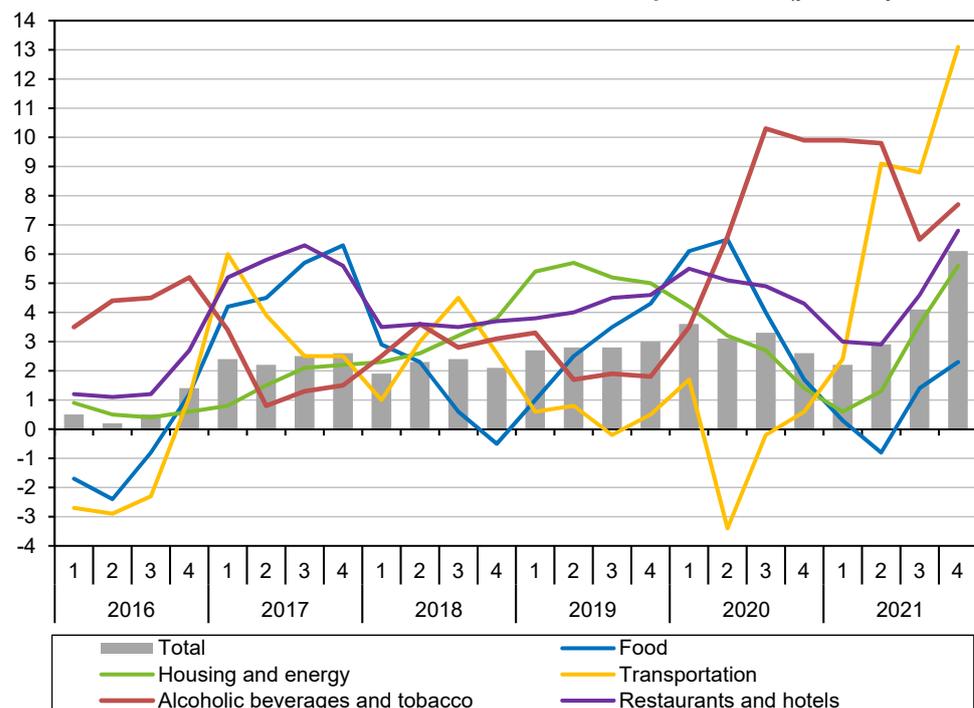
Total growth of the price level in the domestic economy according to the GDP deflator reached 4.1% in 2021. The price level of both consumption (3.4%) and capital goods (5.6%) grew. The terms of trade of the foreign trade achieved 100.1% last year. Year-on-year growth of the price level in total rose to 3.3% in Q4 2021. In that, the prices of consumer goods were raised by 4.0%, mainly due to the strengthening dynamics of the prices of household consumption (4.7%). Prices of capital goods increased by 6.0%. The terms of trade were negative (98.0%), especially due to the trade with goods (97.7%), where the sharp growth of import prices had an effect. The price level decreased by 0.6% compared to Q3 2021. Prices of consumption grew by 1.0% quarter-on-quarter, but prices of the capital goods went down by 0.1% and the terms of trade were negative (98.2%).

Consumer prices increased the strongest since year 2008 last year.

Consumer price index increased by 3.8% in total compared to year 2020. It represented the largest increase since year 2008. The development of prices of transportation, alcoholic beverages and tobacco and housing, water, energies and fuels (further housing and energies) contributed the most to this increase. The prices were however higher in nearly all divisions of the consumer basket (except for prices of post offices and telecommunication). The development of prices of clothing and footwear or household equipment and appliances, which were items affected by the counter pandemic measures in retail and at the same time by disruption of the international supplier chains, were reflected in the price growth more than usually especially in Q2. The growth of prices of some services also accelerated. The year-on-year growth of the consumer prices gained pace during the whole year 2021 and it reached 6.1% in Q4 (the most since Q3 2008). Increase of prices of transportation, housing and energies and alcoholic beverages and tobacco contributed the most. Housing and transportation were also the main factors in the sharp acceleration of the total year-on-year dynamics. The contribution of prices of clothing and footwear, recreation and culture, food and non-alcoholic beverages and food service and accommodation was however also very significant. Prices increased by 1.6% compared to Q3.

Year-on-year growth of the consumer prices accelerated during the year.

**Chart 11 Prices in the selected divisions of the consumer price index (year-on-year in %)**



Source: CZSO

Especially the imputed rent stood behind the significant increase of prices of housing and energies.

Prices of housing and energies increased by 2.8% in year 2021. Items of imputed rentals<sup>1</sup> (7.0%), prices of common maintenance and small repairs (5.6%) and other services associated with housing (4.0%) grew the most. Then rentals paid for the flat were raised by 2.4% last year. By contrast the prices of electricity, gas and fuels dropped by 3.2% last year. This was partially also assisted by the temporary waiver of VAT on energies, which was put in place towards the end of the year as a reaction on the sharp hike of prices of electricity on the world markets. In Q4 itself, the prices of housing and energies increased by 5.6% year-on-year and their growth swiftly accelerated compared to the preceding quarter. It mainly resulted from the sharp rise of imputed rentals (13.9%). Prices of common maintenance and repairs were by 9.6% higher, other services associated with housing by 4.7% and rentals paid for the flat by 3.7%. Prices of electricity, gas and fuels decreased by 4.9% year-on-year in Q4 and their decrease deepened thanks to the above mentioned VAT waiver.

Prices of purchases of transportation equipment as well as the cost of their operation grew strongly.

Prices of transport increased by 8.4% in total in year 2021. Strong growth of cost of operating a personal transport equipment (11.2%) contributed the most, reflecting the high jump of oil prices. Prices of purchase of vehicles (7.5%) rose also significantly. Their year-on-year increases accelerated already in year 2020, when the temporary suspension of foreign trade and industry occurred and also the weakening of the foreign exchange specifically in the Czech case, which raised the prices of import. Difficulties with shortage of components further deepened in the motor vehicle manufacturing and logistics last year, which pushed the prices of transportation equipment further up. Prices of transport services rose by 2.4% last year. The year-on-year growth of prices of transport sharply accelerated towards the end of the year and it attained 13.1% in Q4. At the same time, the cost of operating the personal transport equipment were by 20.9% higher in Q4 and prices of purchase of vehicles grew by 8.2%. Prices of transport services expanded by 5.2%.

Prices of tobacco further maintained a strong growth.

Prices of alcoholic beverages and tobacco were by 8.4% higher last year. The majority of this increase was ascribed to the prices of tobacco (13.1%), while the prices of alcoholic beverages grew slower (2.3%). In Q4, prices of alcoholic beverages and tobacco rose by 7.7% year-on-year. In that the prices of tobacco were by 11.9% higher and alcohol by 1.9%. Prices of food and non-alcoholic beverages increased by 0.8% and mainly prices of oils and fats contributed to this result (12.3%), bread and cereals (1.9%) and milk, cheese and eggs (1.1%) contributed to this result. By contrast, the prices of meat were by 1.8% lower. The growth of prices of food and non-alcoholic beverages however grew stronger towards the end of the year and it attained 2.3% in Q4. The year-on-year increase of bread and cereals accelerated 4.4%, milk, cheese and eggs to 3.9% and oils and fats to 21.2%. The decrease of prices of meat, which were by 1.8% lower in Q4, continued.

Prices in majority of consumer basket divisions were growing.

In the majority of other divisions of the consumer basket the price growth strengthened last year and to the large extent it concerned goods, which were affected by the disruption of the world transportation, alternatively items, which were impacted by the counter pandemic measures in retail and services. Prices of clothing and footwear were thus raised by 6.5%, furnishings, households equipment and maintenance by 3.5%, prices of recreation and culture by 3.0%, restaurants and hotels by 4.3% and miscellaneous goods and services by 3.5%. At the same time the acceleration of the price growth for these items eventuated especially in the second half of the year. In Q4, the year-on-year increase of the prices of clothing and footwear attained 12.6%, households equipment and maintenance 6.1%, recreation and culture 5.3%,

<sup>1</sup> Imputed rent expresses the cost of owner housing. Apart from the prices of housing themselves, it also consists of costs of construction and renovation and further fees. More at: <https://www.czso.cz/csu/czso/metodicka-poznamka-k-indexu-spotrebitelskych-cen-imputovane-najemne>



restaurants and hotels 6.8% and miscellaneous goods and services 4.5%. Only prices of post and telecommunication decreased by 0.6% last year and were falling during the whole year – in Q4 they were lower by 0.5%.

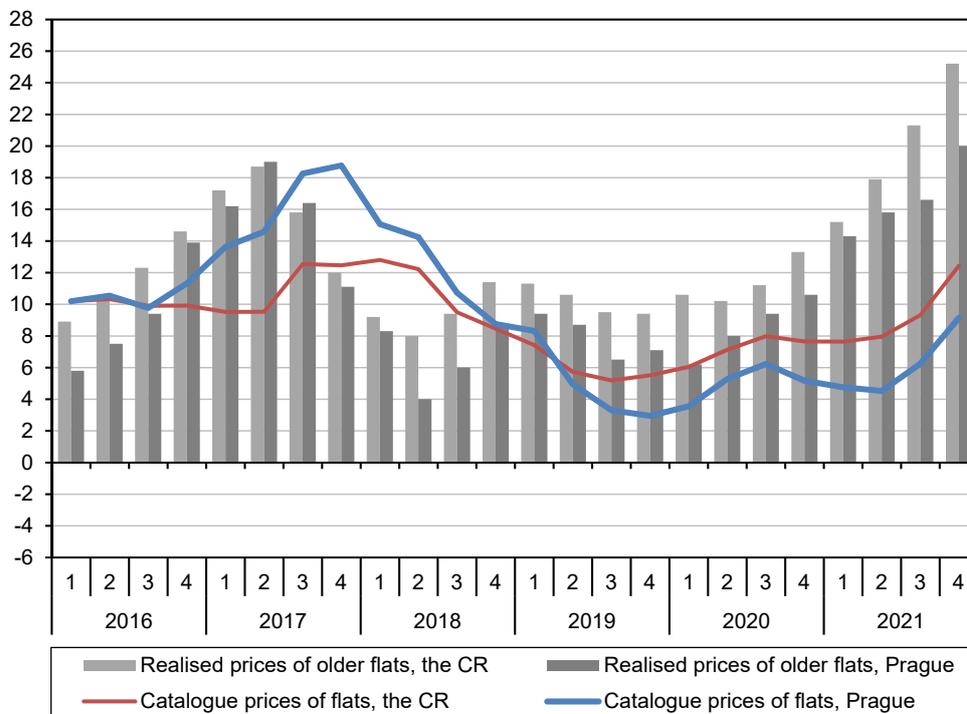
Year-on-year growth of the consumer prices was strengthening in the EU during the last year.

The harmonised index of consumer prices (HICP)<sup>2</sup> increased 2.9% in the EU in year 2021, the most since year 2008. The relatively significant increase was affected mainly by the strengthening of prices of transport (6.8%) and housing and energies (4.8%). HICP rose the most in Poland (5.2%), Hungary (5.2%) and Lithuania (4.6%). Newer EU members including the CR (3.3%) prevail in the list of countries with the above average HICP growth. Prices in Greece (0.6%), Malta (0.7%) and Portugal (0.9%) grew the least last year. Year-on-year growth of HICP strengthened in the EU throughout the whole year 2021 and it reached 4.9% in Q4. Mainly the sharply growing prices of transport and housing and energies influenced the acceleration. Prices in Lithuania (9.4%), Estonia (9.1%) and Poland (7.3%) went up the most. Malta (2.1%), Portugal (2.4%) and Finland (3.1%) recorded the smallest year-on-year increases in Q4.

Prices of flats grew by exceptionally fast paces.

Tension on the real estate market deepened further and with it also accelerated the growth of real estate prices in the whole CR. The surplus of free cash in households as well as the pressure on the securing more advantageous financing in the anticipation of further increase of interest rates supported the excess demand over supply. Year-on-year growth of the catalogue prices of flats in the CR reached 12.4% in the CR in Q4, which was the most since Q1 2018. Growth of catalogue prices of flats outside Prague strengthened to 16.5%, which was the most since the end of year 2008. Catalogue prices of flats grew by 9.1% in Prague year-on-year. The realised prices of older flats were by 25.2% higher in the CR in Q4 year-on-year. In that flats outside Prague were by 26.7% more costly, while the prices of flats in Prague went up by one fifth. Realised prices of new flats in Prague increased by 26.5% year-on-year in Q4.

**Chart 12 Real estate prices** (year-on-year change, in %)



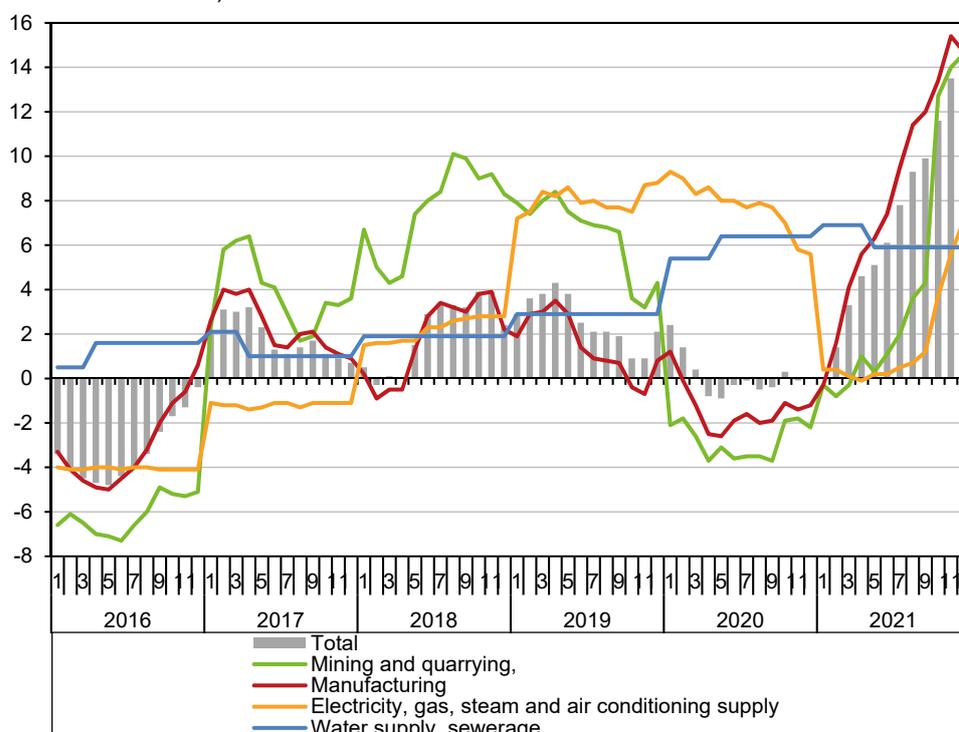
Source: CZSO

<sup>2</sup> HICP does not contain the imputed rent.

Prices of industrial producers grew by record pace last year.

Industrial producer prices increased by 7.1% in year 2021, which was the most since year 1995. The majority of this increase was affected by the prices of manufactured products, which went up by 8.4%. Increase of prices of basic metals and fabricated metal products (17.2%) and coke and refined petroleum products<sup>3</sup> mainly contributed. The strong increase of prices of chemicals and chemical products (31.8%) with development of prices of oil and the marked price increase also affected wood, paper and printing (13.4%). Prices of rubber and plastic products (4.6%), electrical equipment (4.6%), textiles, clothes and leather (4.4%), furniture and other manufactured products (3.6%) and machinery and equipment (3.1%) also grew robustly. Prices of basic pharmaceutical products (2.0%), food products, beverages and tobacco (0.8%) and computers, electronic and optical products (0.4%) went up moderately. Only prices of transport equipment were lower last year (-0.9%). Prices of electricity, gas, steam and air conditioning supply grew in total by 1.7%, mining and quarrying by 4.3% and water supply and associated services by 6.2% last year.

**Chart 13 Prices of main groups of industrial producers** (year-on-year change, in %, based on CPA classification)



Source: CZSO

Year-on-year increase of prices of industrial producers strengthened during the year 2021.

Similarly to consumer prices, the year-on-year growth of the prices industrial producers sharply accelerated during the year and reached 12.8% in Q4. The price growth accelerated in majority of divisions at the end of the year. Manufactured products were by 14.5% year-on-year more expensive and the strengthening of the dynamics was mainly supported by the development of various materials. The increase of prices of coke and refined petroleum products, chemicals and chemical products (51.4%), basic metals and fabricated metal products (26.5%) and wood, paper and printing (25.1%) was exceptionally high. Apart from the transport equipment (decrease by 1.4%) however the prices increased in all divisions of industrial production and the growth accelerate for majority of them, since they were to some extent affected by the difficulties with the disruption of global transportation and supply chains. Year-on-year increase of prices of electricity, gas, steam and air conditioning supply sharply

<sup>3</sup> Data are not given due to the protection of individual data.



accelerated to 5.5% in Q4. Growth of prices of mining and quarrying similarly strengthened to 13.8%. Prices of water supply and associated services were by 5.9% higher.

Industrial producer prices in the EU featured record growth.

Industrial producer prices increased in total by 12.4%<sup>4</sup> in the EU in 2021. It represents a completely record level of increase. Prices of electricity, gas, steam and air conditioning supply (31.9%) and mining and quarrying (30.3%) grew very strongly last year, but also the prices manufactured products (7.7%). The industrial producer prices grew the most in Ireland (55.8%), Denmark (25.2%) and Belgium (21.1%). Malta (1.9%) and further Slovakia (5.5%), Slovenia (6.1%) and the CR (7.1%) recorded the mildest increase. The year-on-year growth of the industrial producer prices accelerated during the year and it reached 23.9% in Q4. Prices grew the most in Ireland (92.6%), Denmark (50.3%) and Romania (38.4%). Malta (3.8%) followed by Slovenia (10.1%), Czechia (12.8%) and Slovakia (13.4%) again reported the lowest increase.

Extraordinarily raised prices of materials manifested in the price of construction works.

Increase of prices of construction works notably strengthened last year and in total reached 5.1%. Raised prices of materials and products consumed in construction (10.9%) shared in this considerably. Year-on-year growth of construction works index accelerated during the whole year 2021 and it attained 7.9% in Q4. At the same time, the prices of materials and products consumed in construction were by 17.0% higher year-on-year. Compared to Q3, the prices of construction works increased by 2.0% and prices of materials and products by 2.5%.

Increase of prices of market services slowed down last year.

Prices of market services increased by 1.3% in 2021. The increase was thus the mildest since year 2016 and involved the difficult situation in some branches. The development of prices of warehousing and support services for transportation, whose increase shrank to 1.1% last year the most contributed to the slow down. Prices of services in the area of computer programming and associated consultancy (2.9%), insurance, reinsurance and pension funding (0.6%) and real estate services (1.7%) for instance also grew at slower pace. Prices of architectural and engineering services and technical testing and analyses stagnated, prices of information services were lower (−2.9%). In contrast, the growth of prices of advertising and market research gained pace up to 1.6% last year and the increase of prices of employment services (6.1%) also strengthened.

The growth of prices of market services strengthened at the end of year 2021.

Year-on-year growth of prices of market services strengthened in the second half of year 2021 and reached 1.8% in Q4. Sharp hike of prices of advertising services and market research (6.6%), prices of employment services (9.8%), land transport and transport via pipelines (1.6%), services in the area of computer programming and related consultancy (2.0%) and real estate services (1.9%) the most contributed to the total increase. Prices of activities of head offices and management consultancy activities (2.7%), services in the area of rental and leasing activities (2.0%), postal and courier services (2.0%), warehousing and support activities for transportation (1.5%) and insurance, reinsurance and pension funding (1.0%) also contributed moderately. Especially the prices of telecommunication services (−0.7%) worked in the direction of decrease in Q4.

Mainly prices of plant production were growing strongly last year.

Prices of agricultural products increased by 6.9% in year 2021. Only prices of crop products were higher (12.4%). Prices of cereals went significantly up (16.3%, mainly under the influence of prices of wheat, which were higher by 19.3%) as did the prices of industrial crops (12.8%, in that the prices of oil seeds were raised by 14.8%, protein crops by 13.9% and sugar beet by 9.7%). Prices of forage plants increased by 1.1% and

<sup>4</sup> Excluding prices of water supply and waste management.

vegetables and horticultural products by 11.6%. In contrast, the prices of potatoes were notably lower (−12.6%) and also the prices of fruits (−5.0%). Prices of animals and animal products stagnated (−0.2%). Prices of animals were lower (−5.8%), especially pigs and piglets (−16.2%). On the contrary cattle was by 4.3% more expensive and poultry by 1.3%. Prices of animal products increased by 4.5% last year, in that milk by 4.7% and eggs by 2.1%.

Prices of both plant and animal production were higher year-on-year in Q4 2021.

Year-on-year growth of prices of agricultural products accelerated during the last year and it climbed up to 15.7% in Q4. At the same time the prices of crop products were by 21.5% higher. Year-on-year increase of prices of cereals gained pace up to 28.0%. Mainly the development of prices of wheat shared in this result (increase 29.4% in Q4), however prices of many other cereals behaved similarly (rye 24.0%, barley 21.2%, oats 9.9%, grain maize 40.8%). Prices of industrial crops increased by 21.6% year-on-year, in that oil seeds by 32.3%, protein crops by 23.1% and sugar beet by 10.4%. Prices of forage plants went up by 7.4% year-on-year and vegetables and horticultural products by 18.9%. Prices of potatoes got out of seven quarters lasting series of year-on-year decreases in Q4 (1.8%). Fruit was cheaper by 1.2% year-on-year. Prices of animals and animal products increased by 5.9% year-on-year. Prices of animals were by 1.6% higher. While the slump of prices of pigs and piglets moderated to 5.9%, the growth of prices of cattle accelerated to 10.8% and poultry to 3.2%. Prices of animal products were however by 9.0% higher, in that the prices of milk went up by 9.5% and eggs by 3.3%.

Prices of export grew in year 2021.

Import prices expanded by 5.8% in year 2021. Their dynamics thus considerably strengthened. Development of koruna foreign exchange (especially appreciation against euro) at the same time subdued the growth of prices of foreign trade<sup>5</sup>. Development of prices of export of mineral fuels (57.9%) and other materials<sup>6</sup> (45.2%) had a large share on this result. Prices of export of chemicals and related products also grew strongly (10.4%). Prices of semi-finished products<sup>7</sup> (9.1%) or food and live animals (4.6%) also grew substantially. Prices of beverages and tobacco (−3.2%) and miscellaneous manufactured articles (−0.5%) were lower last year. Year-on-year growth of prices of export strengthened during the year and reached 9.8% in Q4 2021. Prices of export of mineral fuels (119.2%) and other materials (55.6%) grew the most year-on-year. Prices of semi-finished products were by 16.2% higher, chemicals by 15.7% and food and live animals by 8.9%. Prices of export of machinery and transportation equipment (0.9%) and miscellaneous manufactured articles (0.9%) slightly grew. Only prices of beverages and tobacco decreased (−3.6%).

Prices of import were also considerably higher.

Import prices expanded by 6.1% in year 2021. Prices of import of mineral fuels (68.8%), other materials (24.5%), semi-finished products (9.0%) and chemicals (8.3%) grew the most. Prices of beverages and tobacco (0.4%) were also mildly higher. By contrast import prices of miscellaneous manufactured articles (−2.3%), food and live animals (−1.7%) and machinery and transportation equipment (−1.6%) decreased last year. Import prices increased by 12.2% in Q4 2021. Prices of import of mineral fuels then increased by 123.1% and other materials by 23.1% year-on-year. Prices of semi-finished products were higher by 14.6% and chemicals by 14.3%. Prices of food and live animals and beverages and tobacco grew slowly (similarly by 0.5%). In contrast, prices of import of miscellaneous manufactured articles (−1.4%) and machinery and transportation equipment (−0.1%) were lower year-on-year.

<sup>5</sup> According to the CNB data, the average koruna foreign attained 26.444 CZK/EUR in 2020. Last year it was 25.645 CZK/EUR. The koruna foreign exchange was also stronger against dollar. The average was 23.196 CZK/USD in 2020, 21.682 CZK/USD last year.

<sup>6</sup> SITC 2 – crude materials, inedible, except fuels.

<sup>7</sup> SITC 6 – manufactured goods classified chiefly by material.



Terms of trade were negative last year.

Terms of trade attained 99.7% in year 2021 (they were positive in year 2020). They were substantially negative in trade with mineral fuels (93.5%), beverages and tobacco (96.4%). On the contrary, the terms of trade were positive with other materials (116.6%), food and live animals (106.4%), machinery and transport equipment (102.8%), chemicals (101.9%), miscellaneous manufactured articles (101.8%) and semi-finished goods (100.1%). In Q4, the terms of trade were 97.9%. Negative terms of trade were in trade with beverages and tobacco (95.9%) and mineral fuels (98.3%). Terms of trade were positive for other materials (126.4%), food and live animals (108.4%), miscellaneous manufactured articles (102.3%), semi-finished goods (101.4%), chemicals (101.2%) and machinery and transportation equipment (101.0%).