

# Balance of Payments Report

---

## 2020



Czech National Bank — Balance of Payments Report — 2020

# Contents

|  |           |
|--|-----------|
| <b>I. SUMMARY</b>  | <b>3</b>  |
| <b>II. CURRENT ACCOUNT</b>   | <b>4</b>  |
| II.1 GOODS AND SERVICES  | 5         |
| II.1.1 Goods   | 5         |
| II.1.2 Services  | 9         |
| II.2 PRIMARY INCOME  | 11        |
| II.3 SECONDARY INCOME  | 13        |
| <b>III. CAPITAL ACCOUNT</b>  | <b>15</b> |
| <b>IV. FINANCIAL ACCOUNT</b>   | <b>16</b> |
| IV.1 DIRECT INVESTMENT   | 16        |
| IV.2 PORTFOLIO INVESTMENT  | 18        |
| IV.3 FINANCIAL DERIVATIVES   | 20        |
| IV.4 OTHER INVESTMENT  | 20        |
| IV.5 RESERVE ASSETS  | 21        |
| <b>V. THE INVESTMENT POSITION OF THE CZECH REPUBLIC</b>  | <b>22</b> |
| <b>VI. EXTERNAL DEBT OF THE CZECH REPUBLIC</b>   | <b>25</b> |
| <b>VII. THEMATIC ANALYSES</b>  | <b>26</b> |
| VII.1 CZECH MEMBERSHIP OF THE EU FROM THE PERSPECTIVE OF BALANCE OF PAYMENTS STATISTICS  | 26        |
| VII.2 THE CZECH REPUBLIC'S CURRENT ACCOUNT DURING THE CORONAVIRUS PANDEMIC IN THE EUROPEAN CONTEXT: A VIEW USING THE SYNTHETIC VARIABLE METHOD | 32        |
| <b>VIII. STATISTICAL ANNEX: THE BALANCE OF PAYMENTS IN 2016–2020</b>   | <b>38</b> |
| <b>ABBREVIATIONS</b>   | <b>39</b> |

This publication offers an analysis of the evolution of the main items of the Czech Republic's balance of payments in the past year, supplemented with short analytical articles focusing on the balance of payments and international trade. As we use preliminary balance of payments data subject to revisions, the data from previous years may differ in different issues of this publication. The electronic version, including the previous issues, can be downloaded from the CNB website <https://www.cnb.cz/en/monetary-policy/>

#### Editors and authors:

The publication is produced by the External Economic Relations Division of the CNB's Monetary Department and is freely distributable. Authors: Oxana Babecká (editor), Martin Kábrt and Vladimír Žďárský. In this issue, you can also read contributions from Jan Brůha and Jana Vaníčková.

**Cut-off date for data:** 30 April 2021

**Publication date:** 1 June 2021

## I. SUMMARY

**In the pandemic year 2020, the current account recorded the highest surplus in the history of the Czech Republic, both in absolute terms and relative to GDP.** Multiple items contributed to this result. The main contributor to the record-high level of the current account was a reduction of the deficit on primary income as a result of a massive drop in the outflow of income on direct investment of non-residents in the Czech Republic. This was primarily connected with lower profitability of enterprises under foreign control and economic uncertainty, which – together with the CNB's recommendations to the banking sector – led to lower dividend payments. The goods balance, which ended in a record surplus, also contributed to the overall surplus. Administrative closures and other pandemic measures only hit industry to a greater extent during the course of the spring months; for the rest of the year, we were witness to a robust recovery of this export-oriented sector. Price developments were the key contributor to the higher surplus. Prices of industrial goods increased and prices of raw fuels – of which the Czech economy is a net importer – dropped. Trade in services again ended in a surplus in 2020, as a sharp drop in the travel surplus was to a significant extent offset by a higher balance on computing and information services, for which the shift of activities from a physical to a digital environment represented a growth opportunity. The balance on secondary income remained in a slight deficit in 2020.

**With record credits and debits, the capital account recorded the highest surplus since 2015.** It was caused by high growth in the utilisation of funds from the EU budget and a sharp drop in net payments for emission allowances.

**A considerable net outflow of capital connected with the surplus on the current and capital accounts was evident on the financial account last year.** It had the form of a net outflow of capital from the Czech Republic, primarily as part of other investment, and to a lesser extent also the CNB's reserve assets. The total net outflow of capital was moderated by a net inflow of direct and portfolio investment. The net inflow of direct investment is predetermined to a considerable degree by the volumes of direct investment realised in the past by non-residents in the Czech Republic and by residents abroad; the ensuing reinvested earnings comprise most of the net inflow of investment. Last year was primarily characterised by a significant withdrawal of capital both by residents from abroad and non-residents from the Czech Republic. The overall development of the portfolio investment balance was primarily influenced by a significant increase in the scope of the banking sector's optimisation operations, decreasing the base for the calculation of payments to the Resolution Fund. On the contrary, the sharp increase in government sector debt was not, due to the ability of domestic banks to finance this deficit, significantly reflected in an increase in external debt.

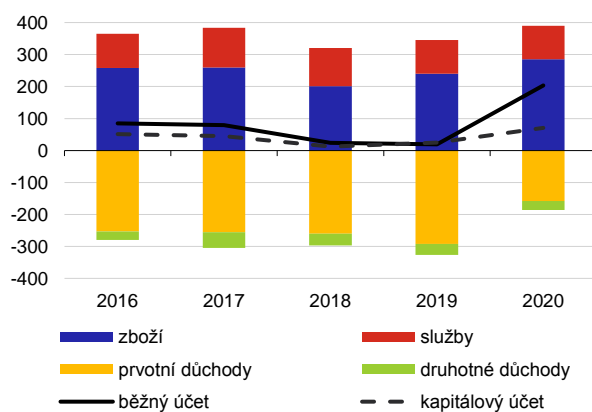
## II. CURRENT ACCOUNT

The current account ended 2020 in the highest surplus ever recorded in the modern history of the Czech Republic. The value of last year's surplus more than doubled the previous record high of 2016. The current account balance – a surplus for the seventh year in a row – increased by CZK 184.4 billion year on year to CZK 203.5 billion (see Chart 1).<sup>1</sup> Relative to GDP, the current account increased from 0.3% to 3.6% (see Chart 2). A sharp reduction of the primary income deficit, based primarily on a lower volume of dividends from direct investment paid to non-residents, contributed the most to the record growth. Trade in goods also had an important influence. Since exports decreased less than imports in the pandemic year, the trade surplus rose to an all-time high. Price developments played a significant role in this, especially lower prices of imported oil and natural gas. By contrast, credits on services trade dropped to a similar extent as debits, so the services surplus remained stable year on year. Though inbound travel was hit harder by the pandemic than outbound tourism, the impact on the overall balance was largely evened out by a higher balance on business, telecommunication and information services.

Over the long term, the success of domestic foreign-owned businesses has led to a high surplus in the balance of goods and services, but also to a considerable outflow of profits belonging to non-residents. The opposite effects of these factors explained the relatively balanced current account in previous years. In 2020, the volume of net exports was preserved, while dividends paid to non-residents dropped significantly. The resulting sharp increase in the current account surplus is only temporary, however. The receding pandemic will lead not only to a return to the former profitability of enterprises under foreign control, but probably also to the payment of dividends deferred during the period of economic uncertainty in 2020.

**Chart 1: Current account and capital account**

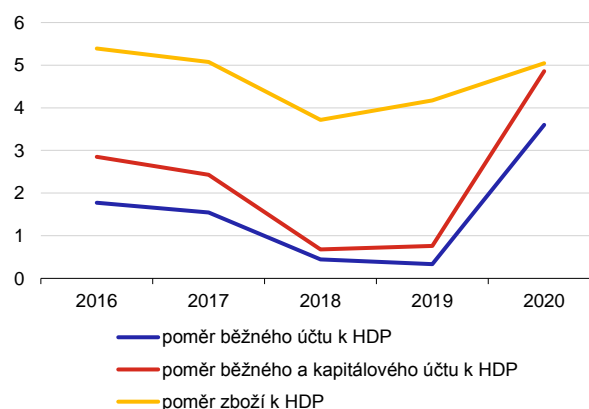
(in CZK billions)



Source: CNB

**Chart 2: Ratios of current account, capital account and goods to GDP**

(% of GDP)



Source: CNB, CZSO, CNB calculations

<sup>1</sup> The original estimate discussed in the 2019 Balance of Payments Report pointed to a slightly negative balance of the current account in 2019. It follows from the later refinement of the statistical data that the current account ended 2019 in a slight surplus. Similarly, the 2020 data used in this publication represent the first statistical estimate and will be refined in further revisions.

## II.1 GOODS AND SERVICES

**The balance of goods and services reached the highest surplus in history in 2020, its increase ensuing from developments in goods trade.** The overall goods and services trade surplus reached CZK 389.8 billion, with the goods surplus making up about two-thirds. In year-on-year terms, the surplus in goods and services increased by CZK 44 billion, the goods surplus increased by 45.3 billion, while the services surplus dropped slightly by CZK 1.3 billion. Meanwhile, the foreign trade turnover in goods and services dropped by 6.3% year on year as a result of the COVID-19 pandemic and related government closures and measures. The increase in the overall surplus resulted from a more significant drop in imports than in exports (by 1.6 pp), mainly as a consequence of improving terms of trade.

### II.1.1 Goods

**During last year, the balance of goods was influenced by an uneven impact of the pandemic developments on exports and imports.** The trade surplus in goods in the first half of the year first dropped to its eight-year minimum, while the subsequent developments in the second half of the year more than offset this loss and 2020 ended with a record surplus of CZK 285.2 billion. The year-on-year decrease in the surplus in the first half of the year was primarily related to the first wave of the COVID-19 pandemic, during which the blanket closures, especially in manufacturing, led to a year-on-year decline in exports of 26% in the period from March to May, while the drop in imports was 7 pp lower. The second half of the year, on the other hand, was characterised by a robust recovery in exports, while the dynamics of imports remained more subdued due to lower (dollar) prices and volume of imported raw fuels. The total year-on-year increase in the balance of goods amounted to CZK 45.3 billion in 2020.

**The record-high goods surplus was related to developments in export and import prices. In real terms, the balance actually decreased slightly year-on-year.**<sup>2</sup> A sharp drop in prices in the group of fuels and lubricants, which has a much larger share in imports than in exports, contributed most to the increase in the overall surplus at current prices. A simultaneous rise in prices in the key export group of machinery and transport equipment partially offset a real year-on-year decrease in the balance of this group. Moreover, in these and other groups with significant trade volumes, there was a positive year-on-year change in the terms of trade, which also contributed to a higher balance.<sup>3</sup> Although considerable exchange rate movements were recorded in 2020, the weaker koruna was not behind the price effects on the trade balance. This is because most export and import contracts are concluded in foreign currencies (usually the euro) and for longer periods of time. Thus, the weaker exchange rate in koruna terms led to a comparable increase in the price of exports and imports without a greater effect on the overall terms of trade. The balance in real terms, however, was likely influenced by the exchange rate, because depreciation lowers domestic demand for imports that are more expensive in koruna terms.<sup>4</sup>

---

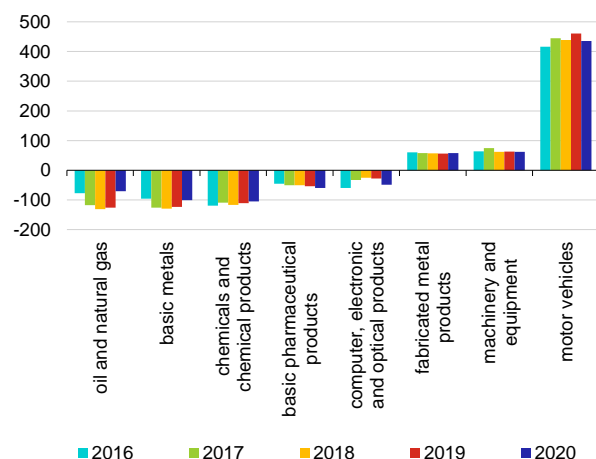
2 The breakdown into price and real factors is based on statistics on the international trade in goods and the export and import price index. The balance of payments statistics are based on current prices and do not allow this segmentation.

3 The export price index for mineral fuels dropped less than the import price index for the same group. Similarly, the export price index for machinery and transport equipment increased more in year-on-year terms than the import price index for machinery. This was also true of the other categories of manufactured goods.

4 As a result of frontloading by importers, the existence of longer-term contracts and partial exchange rate hedging by companies, an increase in import prices can be delayed. Demand for some imports, moreover, does not react flexibly to price changes (e.g. fuels).

**Chart 3: Major commodity categories by surplus/deficit**

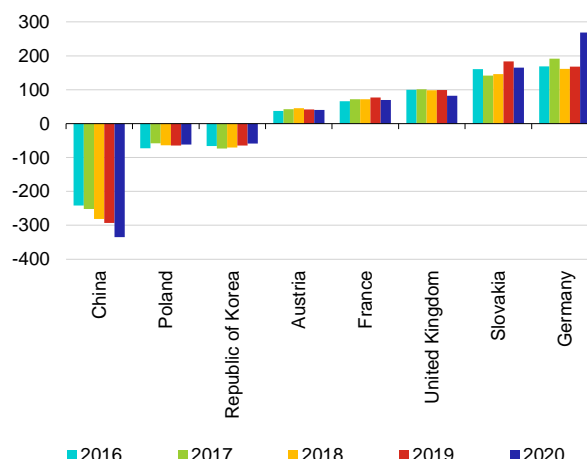
(CZ-CPA product classification; CZK billions)



Source: CZSO

**Chart 4: Trade in goods with the largest partners by surplus/deficit**

(territorial structure; CZK billions)



Source: CZSO

Turning to the product classification,<sup>5</sup> the biggest contributor to the overall goods trade surplus was the motor vehicle surplus, though it decreased year on year. The trade surplus in motor vehicles reached CZK 435 billion after a year-on-year decrease of CZK 25 billion (see Chart 3). Other groups that recorded a lower trade balance in a year-on-year comparison include computers, electronics and optical devices (CZK -21 billion), electrical equipment (-20 billion) and textiles (-7 billion). The overall increase in trade surplus is explained by a significant decrease in the traditionally deep deficit on oil and natural gas (of CZK 56 billion) and base metals (of 23 billion). Such deficit is typical for an economy with highly limited raw material resources of its own.

The trade surplus in goods and its year-on-year increase ensued from mutual trade with the EU, while trade with non-EU countries recorded a deep and increasing deficit. The surplus in goods trade with EU countries exceeded CZK 682 billion and expanded by almost CZK 44 billion year on year. The highest surplus was as usual recorded in trade with Germany (almost CZK 294 billion, Chart 4). With a year-on-year increase of almost CZK 65 billion, it also contributed the most to the overall increase in the surplus on goods. Large trade surpluses were also recorded with Slovakia and France, though they were smaller year on year. These three countries are also the Czech Republic's three most important trading partners among the euro area countries. By contrast, trade with non-EU states recorded a deficit of CZK 479 billion, an increase of more than CZK 5 billion. Trade with China accounted for the largest part (almost CZK 390 billion) of this deficit. In year-on-year terms, the deficit with China increased by more than CZK 46 billion and thus was the biggest factor offsetting the increase in the overall surplus. Significantly higher imports of electronics and medical materials from China contributed most to this. The deficit with the Korean Republic and Japan, by contrast, decreased slightly.

The dynamics of goods exports in the course of the year were significantly affected by the pandemic developments and the associated impact on external demand. Exports exhibited a deep decline in Q1 and an even deeper one in Q2 as a result of the COVID-19 pandemic and the restrictions related to it in production and transport, and the decrease in both external demand and domestic supply.

<sup>5</sup> The analyses of the goods (product) and territorial structures are conducted on the basis of statistics on international trade in goods. The numerical values, therefore, need not always correspond to the summary goods trade statistics, which are presented in the methodologically slightly different balance of payments statistics.



In Q3 there was a recovery in external demand due to positive epidemic developments in Europe and a partial easing of restrictions. Domestic exports were moreover supported by delayed realisation of spring exports, so a relative year-on-year stability was achieved in Q3. Export dynamics kept their pace in the final quarter of the year, even reaching year-on-year growth of 11% despite the next wave of the pandemic and lower external demand<sup>6</sup>. This export resilience can be explained by the competitiveness of important Czech exporters supported by the weakened koruna, the increase in prices of key export categories and changes in the structure of external demand. The closing of services and the unavailability of culture, entertainment, sports and travelling probably led to a substitution of expenditure in favour of goods, especially durables.<sup>7</sup> Over the entire year, domestic exports decreased by a total of 4%.

**Motor vehicles represented more than one-quarter of the exports, though their share decreased year on year.** Motor vehicles (including car parts, excluding motorcycles) have long been the most important export product category. Their exports, however, dropped by almost 10% last year, while total exports recorded a considerably lower decrease. Thus, the share of motor vehicles in total exports dropped by 1.6 pp to 26.1% (see Chart 5). The lower export performance of the domestic automotive industry was primarily related to the first wave of the pandemic in the spring of 2020, during which production was interrupted for several weeks in all of the significant plants in this industry. The greatest drop was recorded in April 2020, when only one-fifth of the value of motor vehicles were exported compared to the same month of the previous year. In Q3, exports of cars almost recovered and in the final quarter of the year even posted a marked year-on-year increase supported by price effects. During the autumn wave of the pandemic, production in manufacturing did not stop, and on the contrary could benefit from the realisation of exports delayed during the spring closures, the favourable competitive position of domestic companies and the substitution of external demand from unavailable services to goods. It was not enough, however, to offset the spring decrease.

**Electronics moved to second place among the most important export categories, growing even in the pandemic year.** Computers, electronic and optical devices recorded a year-on-year increase of 5.5%. Thus, they became the most noticeable export driver and their share rose from 10.4% to 11.5% of total goods exports. Conversely, following a year-on-year decrease of 7.5%, machines and equipment became the third most important export product group, with its share falling from 11.2% to 10.8%. At the same time, after motor vehicles, this group contributed the most to the year-on-year decrease in overall exports. Coke and petroleum products, base metals and fabricated metal products also noticeably contributed to the decrease.

**The decisive share of goods exports traditionally headed to EU countries.**<sup>8</sup> Exports to the EU represented 79.6% of the total, and this share further increased by 0.3 pp. This was because exports to EU countries decreased considerably less than exports outside the union during the pandemic year. Germany, the Czech Republic's most important trading partner by a wide margin, contributed almost one-third to the total exports (31.6%). In addition, its share increased by 0.6 pp year on year. Two other important partners, Slovakia (9.2%) and Poland (6.5%), also saw their shares rise year on year. As regards non-EU countries, the largest exports were made to the United Kingdom (3.9%), Russia (2.4%) and the United States (2.3%). Declines in exports to Spain (CZK -34.8 billion), Germany (-30.8 billion) and the United Kingdom (-18.1 billion) contributed the most to the year-on-year drop in total exports. The

---

6 The GDP of the effective euro area recorded a year-on-year decrease of 4.1% in the 4th quarter.

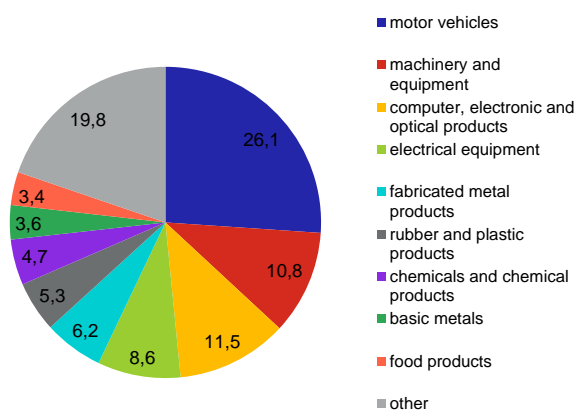
7 According to statistics on the cross-border movement of goods, which enable the most detailed structural segmentation, motor vehicles and parts, computers, telephones and other telecommunication devices are behind more than half the growth in Q4.

8 Only 27 countries excluding the United Kingdom are counted as EU Member States in the year-on-year comparisons.

decrease was dampened, however, by exports to Turkey (CZK +9.8 billion), the Netherlands (CZK +3.6 billion) and South Korea (CZK +1.4 billion).

**Chart 5: Commodity structure of goods exports in 2020**

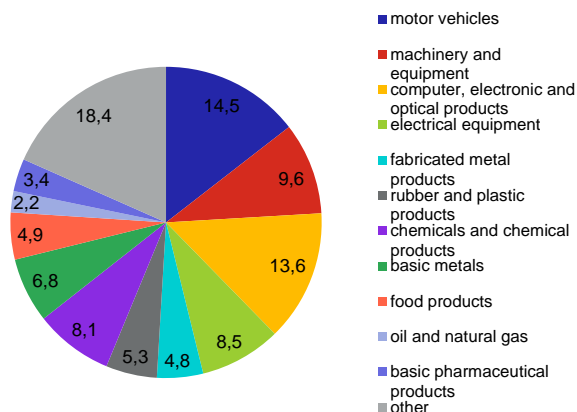
(CZ-CPA product classification; %)



Source: CZSO, CNB calculations

**Chart 6: Commodity structure of imports in 2020**

(CZ-CPA product classification; %)



Source: CZSO, CNB calculations

**The decrease in imports was primarily influenced during the course of the year by a decrease in fuel prices and weaker domestic demand as a result of the pandemic and the restrictive government measures.** Similarly to exports, imports recorded a steep drop in the first half of the year (-10.7%). Unlike exports, however, imports also decreased in Q3 (-4.1% year on year). Imports increased in the final three months of the year, but at a significantly lower rate than exports (3%, i.e. 8 pp slower). The weaker recovery was primarily related to a drop in prices of mineral fuels, especially oil, which is represented more in imports than in exports. The weaker exchange rate, which generally reduces domestic demand for imports, also could have played a role. A decrease in imports for investment use, related to a sharp year-on-year drop in the gross fixed capital formation in domestic enterprises, also contributed to the overall decrease in imports. Goods imports fell by 5.6% over the entire year.

**Naturally, changes in the structure of imports were also closely connected with the pandemic-related developments.** Motor vehicles were the most important import group as usual, though their share was lower than in the case of exports. Imports of motor vehicles (including parts, excluding motorcycles) contributed 14.5% to last year's overall imports (see Chart 6). In year-on-year terms, this share fell by 1.3 pp as a result of a sharp drop in imports of motor vehicles of 13.3%. Similarly to exports, the share of electronics increased significantly, with their import rising by 10.2% year-on-year and the share in total imports increasing from 11.7% to 13.6%. In addition to motor vehicles (CZK -74 billion), oil and natural gas (-56 billion) also contributed significantly to the overall year-on-year drop in imports, as did base metals (CZK -35 billion), machinery and equipment (CZK -30 billion) and coke and petroleum products (CZK -15 billion). The lower imports of fuels and commodities were primarily related to the decrease in their prices on the world markets during the course of the COVID-19 pandemic. The overall decline in imports was cushioned, on the other hand, not only by electronics (CZK +42 billion), but also electrical equipment (+13 billion) and pharmaceutical products (+8 billion). This was again likely due to pandemic developments, which supported domestic demand for medicines and devices enabling study and work from home.

**Goods imports from the EU remained predominant, though in contrast to exports this share has dropped in recent years.** As in the previous three years, the share of imports from the EU in overall imports decreased by 1 pp. Thus, it has dropped from 67% to 63.6% since 2017. Last year, this was again primarily related to a significant increase in imports from China. While total imports decreased by 5.6% year-on-year, imports from China increased by 12% and the share of our second most important trade



partner in total imports therefore rose by 2 pp to 13%. Germany remained the most important importer by a significant margin (24.5%), but its share fell by 1.3% last year. At the same time, imports from Germany contributed most significantly to the overall year-on-year decrease in imports (CZK -96 billion); Russia (CZK -48 billion) had the second-largest effect. Chinese imports, on the other hand, offset these developments to a considerable extent (CZK +46 billion).

In a year characterised by the pandemic, imports and exports of goods slightly increased their product diversification but further strengthened the already considerable territorial concentration. Moreover, the long-standing and expanding imbalance with key trade partners has deepened sharply. The surplus and deficit in the international trade in goods is thus increasingly concentrated in a small group of territories.<sup>9</sup>

### II.1.2 Services

**The impact of the pandemic on the services sector was felt especially hard. Trade in services decreased more than the flows of goods but continued to contribute significantly to the overall trade balance.** After a considerable year-on-year decrease in both credits and debits, trade in services represented just about one-seventh of the overall foreign trade turnover.<sup>10</sup> The trade surplus in services, however, recorded broad year-on-year stability. At almost CZK 105 billion, it accounted for more than one-quarter of the overall balance of goods and services. The evolution of the overall surplus was connected with a slightly sharper decrease in imports than exports (2.2 pp).

**After the spring slump, services credits did not recover by the end of the year, unlike goods exports. Travel played a dominant role in this development.** A slight year-on-year increase in services credits in Q1 (1.8%) was followed by a record drop of almost 20% in Q2 and only a slightly weaker decrease in Q3 (19%) and Q4 (16%). After six years of growth, services credits for the year as a whole decreased by 13.4%. Travel, previously the most significant export group, bore the brunt of this result. Credits on incoming tourism decreased by one-half by comparison with the previous year (to CZK 84.2 billion) due to the pandemic restrictions.<sup>11</sup> Thus, services in the area of transportation (148.9 billion) became the greatest export component in 2020, recording a relatively slight decrease of 7.3% despite air transport being hit hard by the pandemic. This was because its weight in exports is small in comparison with road freight transport, whose decrease was relatively smaller (6.6%). The pandemic probably did not have a great effect on credits arising from “other” business services (including, for instance, accounting, auditing, legal and consulting services), which also ended in only a slight decrease. Unlike most of the other categories, telecommunication and information services, especially in the area of computers, did not interrupt their long-term growth in 2020 and dampened the overall decrease services exports with a year-on-year increase in credits of 15% to CZK 21.6 billion.

**EU countries accounted for most of the credits (58%), though their share decreased (by 2 pp).** Germany remained the most significant trading partner, but its share decreased by 1.6 pp to 17.5%. It was followed by the USA, Slovakia and the United Kingdom. However, services exports to these countries also

<sup>9</sup> In 2020, the trade surplus with Germany exceeded the overall surplus of foreign trade with goods. Conversely, the deficit with China was one-half larger than the overall surplus.

<sup>10</sup> This share decreased from 15.7% in 2019 to 14.4% in 2020.

<sup>11</sup> The greatest drop can be observed in private trips (-54%). The decrease in business trips, which have a lower volume, was smaller (-36%), because the pandemic did not have an obvious influence on the acquisition of goods and services by cross-border and seasonal workers (+3%), which comprised approximately half of all the income from business trips in previous years. Other business trips, on the contrary, plummeted by 84%.

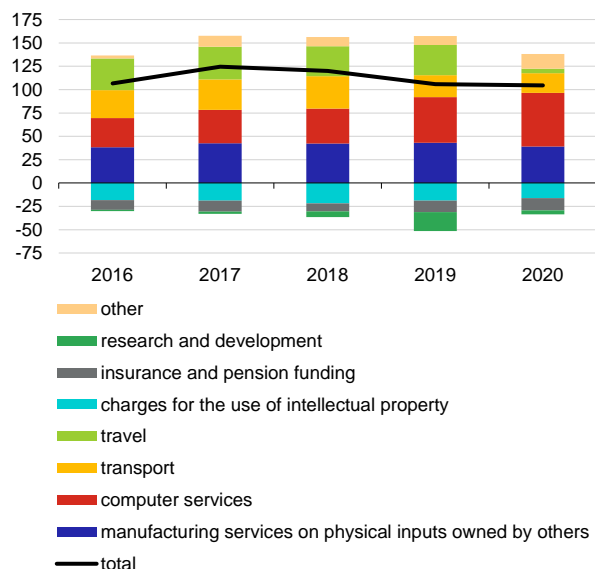
dropped more sharply than total services exports. The shares of these countries therefore decreased and territorial diversification of credits further strengthened.

**Services debits developed similarly to credits during the course of the year.** A deep year-on-year drop during the first wave of the pandemic was not followed by a recovery. On the contrary, services credits continued to fall in the second half of the year. After six years of growth, they decreased by 15.6% in 2020. As in the case of credits, travel was hit the hardest. Tourism of Czech residents abroad decreased less significantly than incoming tourism, but even so, the year-on-year decrease exceeded 41% and debits on travel (CZK 79.4 billion) reached the lowest level since 2007. Like in the case of credits, “other” business activities (especially expert and consulting services) and transport (especially road transport) were the most significant components of total services debits. A substantial year-on-year fall in expenditure on research and development was primarily related to base effects related to unusually large debits in 2019 associated with the development of electromobility.<sup>12</sup> Telecommunication services play a smaller role in debits than in credits, but like credits, they increased robustly in the pandemic year and thus offset part of the overall decrease.

**The territorial diversification of debits also increased.** Almost two-thirds of services debits (64%) were attributable to EU countries, which is 3 pp less than in 2019. The shares of many significant trading partners stagnated or decreased, most markedly in the case of Germany, whose share dropped from 25.5% to 23.2% (especially in connection with the fall in debits related to research and development). China’s share, on the other hand, increased considerably by 1.5 pp (especially owing to transportation services). With a share of 6.7%, China thus became the second most significant exporter of services to the Czech Republic ahead of the United Kingdom and Slovakia.

**Chart 7: Balance of services**

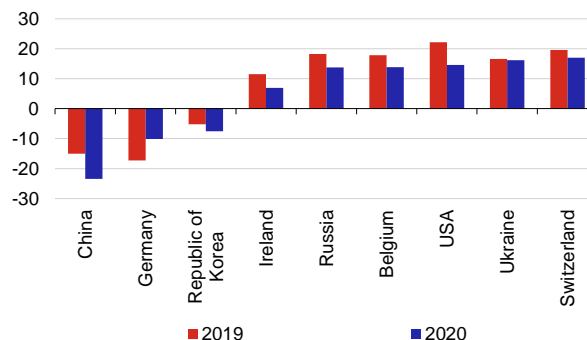
(in CZK billions)



Source: CNB, CNB calculations

**Chart 8: Trade in services with the largest partners by surplus/deficit**

(in CZK billions)



Source: CNB

<sup>12</sup> It is, however, likely that the high debits of the automotive industry related to services in this area will increase again after the pandemic subsides.

**As in previous years, the trade surplus in computer services (almost CZK 56 billion) and the surplus in manufacturing services<sup>13</sup> (totalling CZK 39 billion) contributed to the overall surplus.** The balance of transport services also ended in a considerable surplus. Unlike in previous years, travel only contributed slightly to the overall balance. Even so, the overall surplus remained at a level similar to 2019, due mainly to a lower year-on-year deficit on research and development services (see Chart 7). The largest debits recorded in 2020 were related to the use of intellectual property and insurance services.

**Similarly to previous years, the trade surplus with non-EU members primarily contributed to the overall services surplus.** The largest trade surpluses were recorded with Switzerland (CZK 17 billion), Ukraine (CZK 16.1 billion) and the USA (CZK 14.6 billion). On the other hand, the largest deficits were recorded with China (CZK -23.5 billion) and Germany (CZK -10.2 billion; see Chart 8). While the balance with Germany showed the greatest year-on-year increase (the deficit decreased by CZK 7.2 billion), the balance with China posted the largest year-on-year decline (the deficit increased by CZK 8.4 billion).

Both credits and debits in services trade are more diversified territorially and less dependent on EU markets than exports and imports of goods. Moreover, most of the services trade surplus is usually created in non-EU markets. Before the COVID-19 pandemic, the surplus was also diversified in sectoral terms. The pandemic shock illustrated the advantages of a lower concentration for resilience to changes in the external environment. The restrictions related to the pandemic brought about a significant negative shock to credits and debits in services trade, but the total surplus remained broadly unchanged. The drop in the travel surplus was to an extent offset by the higher balance in computer and information services, for which the shift of activities from a physical to a digital environment represented an opportunity for growth.

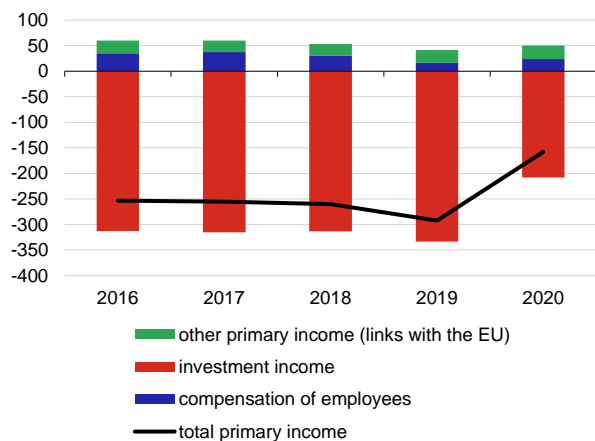
## II.2 PRIMARY INCOME

**The deficit on primary income fell by almost one-half as a result of a decrease in returns on investment of non-residents in the Czech Republic.** Primary income records the wages and capital income of residents from abroad and the income of non-residents from domestic labour and investment. The primary income balance has long been in a deep deficit as a result of the high income of non-residents from domestic investment. In 2020, the total deficit amounted to CZK 157.8 billion and, as in previous years, was due mainly to direct investment income. In year-on-year terms, however, the deficit dropped by almost CZK 135 billion. The key contributor was a lower outflow of dividends abroad, related to the economic uncertainty during the pandemic year and lower expected profits of non-financial businesses under foreign control. In the banking sector, the delayed payout of dividends was also based on CNB recommendations. Lower income on portfolio and other investment of non-residents, connected with a decrease in CNB interest rates, also contributed to a higher primary income balance, but to a lesser extent. A year-on-year increase in compensation of domestic employees from abroad also contributed to the higher balance. Primary income credits decreased by 6.3% overall, while debits dropped by 25.7%. However, a revision to primary income to be published next March may significantly affect the growth in credits and debits as well as the total deficit, due mainly to a revision to direct investment income based on the CNB's regular annual survey of foreign direct investment stocks in the Czech Republic.

13 i.e. services associated with the processing of goods

Chart 9: Primary income

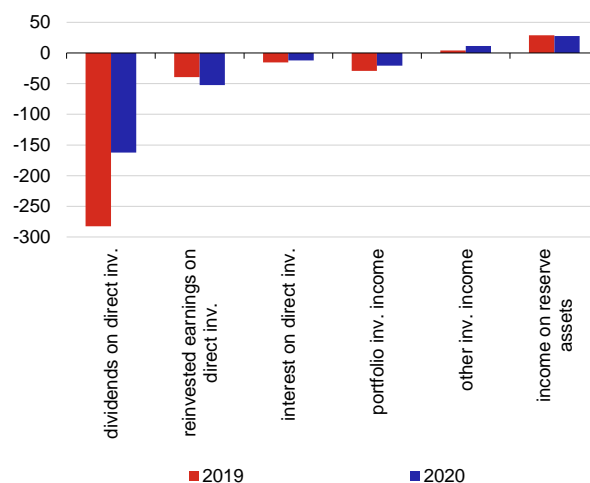
(in CZK billions)



Source: CNB

Chart 10: Component balances under investment income

(in CZK billions)



Source: CNB

**The direct investment income deficit recorded the lowest value since 2008.** It exceeded CZK 226 billion and as usual was higher than the total primary income deficit. However, it decreased by more than CZK 111 billion year on year. The most significant part of direct investment income was again a net outflow of dividends (CZK -162.2 billion). Due to the considerably greater volume of investment of non-residents in the Czech Republic than of residents abroad, the deficit was predominantly connected with the payment of dividends to non-residents. Lower dividend payments to non-residents also explain the decline in the net outflow of dividends of more than CZK 120 billion compared to 2019. Turning to a sectoral breakdown, the manufacturing sector, and the manufacture of motor vehicles in particular, was predominant in the overall outflow of dividends.<sup>14</sup> By territory, the largest part (almost 92%) of the payment of dividends from direct investment headed to the EU27 region, especially to Luxembourg, the Netherlands and Germany (see Table 1). While the deficit on dividends decreased considerably year on year, the estimated deficit on reinvested earnings (of more than CZK 52 billion) increased by almost CZK 13 billion. These developments, based on preliminary data, seem to reflect a persisting attractiveness of some economic activities in the Czech Republic associated with real investment and reinvested funds from extraordinary income on transactions made in the given year. Income on interest (from debt instruments), the third partial balance of direct investment income, also ended in a slight deficit.

**Portfolio investment income also recorded a deficit. By contrast, other investment income and income from reserve assets ended in surpluses.** The portfolio investment income deficit exceeded CZK 20 billion, down by almost CZK 9 billion year on year. The deficit was due mainly to interest on debt securities paid to foreign investors. The decrease in the deficit was attributable chiefly to a year-on-year drop in income of foreign investors from shares in domestic investment funds. By contrast, other investment income ended in a surplus (of over CZK 11 billion). Income on reserve assets also recorded a fairly large surplus (of almost CZK 28 billion).

—

14 The formerly most significant component of financial and insurance activities played a lesser role in 2020 in connection with the CNB recommendations to the bank sector to delay the payment of dividends from 2019 profits.

**Table 1: Structure of FDI dividend outflows in the Czech Republic in 2020**

(in %)

| SECTORAL BREAKDOWN   |             | TERRITORIAL BREAKDOWN |             |
|--|-------------|-----------------------|-------------|
| Total  | 100.0       | Total                 | 100.0       |
| <b>Manufacturing total</b>                                     | <b>46.6</b> | <b>EU(27) total</b>   | <b>91.7</b> |
| motor vehicles (excl. motorcycles), trailers and semi-trailers | 19.8        | Luxembourg            | 35.3        |
| oil, chemical, pharmaceutical, rubber and plastic products     | 9.2         | Netherlands           | 21.8        |
| <b>Services total</b>  | <b>46.5</b> | Germany               | 15.2        |
| financial and insurance activities                             | 20.4        | Austria               | 7.3         |
| information and communication services                         | 11.4        | United Kingdom        | 3.6         |
| wholesale and retail trade; repairs of motor vehicles          | 10.0        | Switzerland           | 3.6         |

Source: CNB, CNB calculations

**As usual, the total primary income deficit was partly moderated by a surplus in compensation of employees and a surplus in other primary income.** The surplus in compensation of employees, comprising mainly wages of cross-border and posted workers, amounted to almost CZK 24 billion, and increased by more than CZK 7 billion year on year due to growth on the credit side. Income from Germany and Austria increased the most. By contrast, the surplus in other primary income, consisting primarily of EU grants for the support of agriculture and rural development, reached a similar amount as in previous years (CZK 26.5 billion).

The primary income balance is affected mainly by a long-running high share of foreign ownership in the domestic economy. The direct investment income deficit is thus a key item of primary income. Lower profitability in the pandemic year of 2020 led to a marked but only temporary decrease in this deficit. The deficit has long been partly moderated by surpluses in compensation of employees and transfers from the EU.

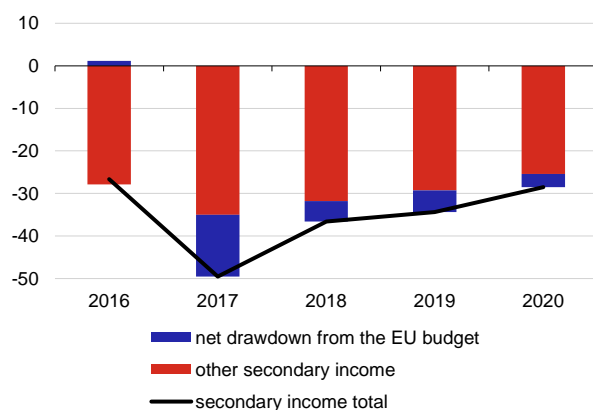
### II.3 SECONDARY INCOME

**The secondary income balance recorded a deficit for the fifth consecutive year, which eased slightly compared to the previous year.** Secondary income (previously current transfers) records unilateral transactions between residents and non-residents, i.e. those in which recipients do not provide payers with a quid pro quo (e.g. development aid, remittances and gifts). The secondary income deficit reached CZK 28.5 billion, representing a year-on-year decrease of almost CZK 6 billion (see Chart 11). Growth of credits, debits and the overall balance was primarily influenced by financial relations with the EU.

**The net drawdown of income from the EU budget, reported under secondary income, again recorded a low deficit.** Receipts from the EU, including above all non-investment subsidies from EU structural funds, increased, as did payments to the EU budget derived from VAT and GNI (gross national income). As in 2019, the net position vis-à-vis the EU thus recorded a small deficit (CZK 3.1 billion; see Table 2).

Chart 11: Secondary income

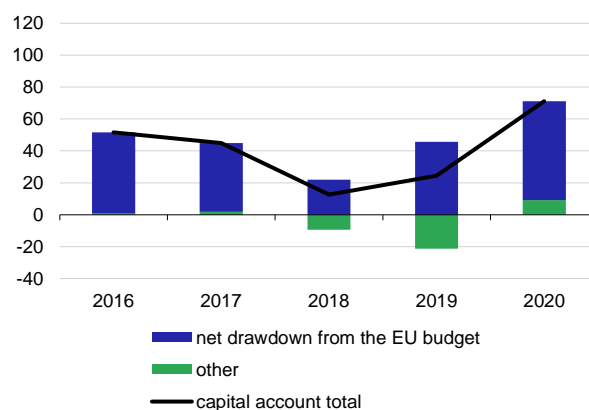
(in CZK billions)



Source: CNB, CNB calculations

Chart 12: Capital account

(in CZK billions)



Source: CNB, CNB calculations

The overall secondary income deficit was mainly attributable to a deficit in income not connected with the EU budget, related mainly to income of other (non-government) sectors. This exceeded CZK 25 billion and decreased year on year. It was due mainly to a deficit on social benefits amounting to almost CZK 12 billion. This item primarily includes social insurance contributions of cross-border employees. Its deficit is a natural consequence of the positive balance on compensation of employees within primary income.<sup>15</sup>

Table 2: Czech Republic's transfers with the EU in 2020

(in CZK billions)

| Name                                  | 2020         |             |             | difference 2020-2019 |             |             |
|---------------------------------------|--------------|-------------|-------------|----------------------|-------------|-------------|
|                                       | credits      | debits      | balance     | credits              | debits      | balance     |
| <b>Other primary income</b>           | <b>33.1</b>  | <b>6.6</b>  | <b>26.5</b> | <b>0.6</b>           | <b>-0.8</b> | <b>1.4</b>  |
| Taxes on production and on imports    | 0.0          | 6.6         | -6.6        | 0.0                  | -0.8        | 0.8         |
| Subsidies on production               | 0.4          | 0.0         | 0.4         | 0.0                  | 0.0         | 0.0         |
| Other subsidies on production         | 32.7         | 0.0         | 32.7        | 0.7                  | 0.0         | 0.7         |
| <b>Secondary income</b>               | <b>52.1</b>  | <b>55.2</b> | <b>-3.1</b> | <b>11.2</b>          | <b>9.2</b>  | <b>2.0</b>  |
| Current international cooperation     | 52.1         | 1.6         | 50.5        | 11.2                 | -0.4        | 11.6        |
| EU's own VAT- and GNI-based resources | 0.0          | 53.6        | -53.6       | 0.0                  | 9.6         | -9.6        |
| <b>Capital transfers</b>              | <b>62.1</b>  | <b>0.0</b>  | <b>62.1</b> | <b>16.3</b>          | <b>0.0</b>  | <b>16.4</b> |
| Investment subsidies                  | 62.1         | 0.0         | 62.1        | 16.3                 | 0.0         | 16.4        |
| <b>TOTAL</b>                          | <b>147.3</b> | <b>61.8</b> | <b>85.5</b> | <b>28.2</b>          | <b>8.4</b>  | <b>19.8</b> |

Source: CNB, CNB calculations

The secondary income balance is affected chiefly by a gradually increasing deficit in private transfers and fluctuations in financial relationships between the Czech Republic and the EU (fluctuations in credits amid slightly increasing debits).

<sup>15</sup> Domestic residents receive more in wages from abroad than non-residents earn in the Czech Republic. At the same time, however, they also pay more to the public social security system in the country where they work.



### III. CAPITAL ACCOUNT

**With record credits and debits, the capital account posted the highest surplus since 2015.** As in previous years, the capital account was mostly affected by drawdown of funds from the EU<sup>16</sup> budget and emission allowance trading. The overall surplus reached CZK 71.2 billion and almost tripled year on year (see Chart 12).

**Net income from the EU budget remained the largest item of the overall capital account balance.** It reached CZK 62.1 billion, which represents the largest volume of investment subsidies since 2015.

**In recent years, the role of non-produced non-financial assets associated mainly with emission allowance trading has increased significantly.** In 2018 and 2019, the balance on non-produced non-financial assets recorded a deficit, which partially offset the impact of the net drawdown from EU funds. In 2020, however, there was a sharp drop in net payments for emission allowances. As a result, balance of non-produced non-financial assets further increased the overall capital account balance.

Investment subsidies from the EU budget have the most significant effect on the capital account balance. Some one-off operations, such as write-offs of external debt and payments ensuing from international arbitration decisions, are also recorded on the capital account. In recent years, the importance of activities related to trading in emission allowances has been increasing rapidly.

---

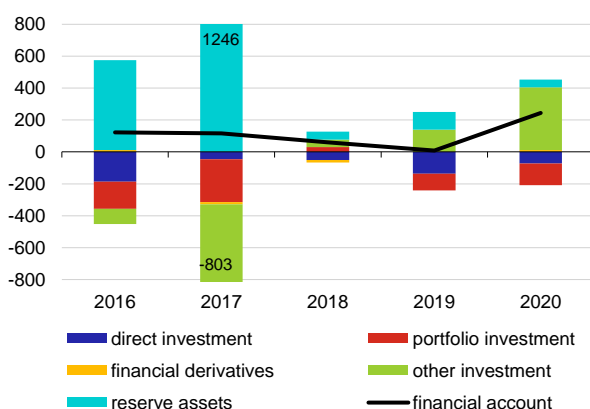
16 The representation of the financial relations between the Czech Republic and the EU in the balance of payments statistics is described in detail in a thematic article in section VII.1 of this publication.

## IV. FINANCIAL ACCOUNT

The financial account recorded a significant net outflow of capital of CZK 243.9 billion last year (see Chart 13), around 4.3% of GDP (see Chart 14). This was primarily caused by a net outflow of capital as part of other investment, and to a lesser extent also by growth in the CNB's reserve assets and to a small extent by the settlement of transactions in financial derivatives. The total net outflow of capital was moderated by a net inflow of capital under direct and portfolio investment.

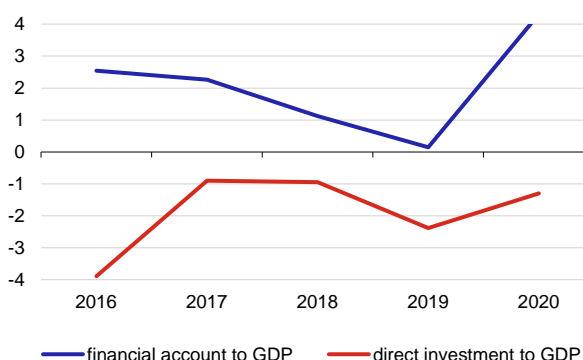
**Chart 13: Financial account**

(in CZK billions)



**Chart 14: Ratio of financial account and direct investment to GDP**

(in %)



Note: A positive value represents a net outflow, a negative value a net inflow, or their ratio to GDP.

Source: CNB, CZSO, CNB calculations

### IV.1 DIRECT INVESTMENT

**A net inflow of direct investment to the Czech Republic continued, reaching CZK 73.1 billion. The estimated balance of reinvested earnings made up CZK 52.2 billion of this inflow.<sup>17</sup>** The positive balance on reinvested earnings reflected the formerly implemented and considerably higher investment of non-residents in the Czech Republic than that of residents abroad.<sup>18</sup> In addition, the net inflow of capital was further influenced by the net inflow of debt capital in the amount of CZK 70.2 billion. A significant amount of this inflow was probably connected with the optimisation of holdings of financial assets in accounts of multinational companies in the Czech Republic and abroad. By contrast, investment in equity capital (participating interests other than reinvestment), a net outflow of capital was predominant, reaching CZK 49.3 billion. This involved above all a decrease in the value of equity capital in the Czech Republic held by non-residents (see Chart 15).

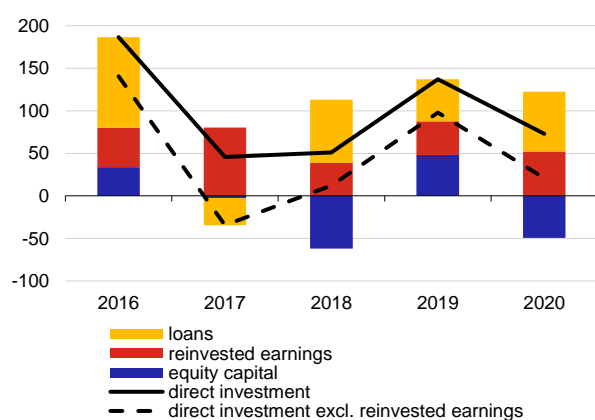
**Reinvested earnings accounted for almost 87% of total investment on the side of capital inflows to the Czech Republic (CZK 144.9 billion; see Chart 16).** An inflow of other (debt) capital amounted to slightly more than 40% of the inflow. By contrast, investment in equity capital in the Czech Republic (CZK -43.3 billion) reduced the total inflow by almost 30%.

<sup>17</sup> The definitive figure for 2020 based on statistical statements will be available in March 2022.

<sup>18</sup> The value of non-residents' investment in the Czech Republic was almost three times the size of residents' investment abroad at the end of 2019.

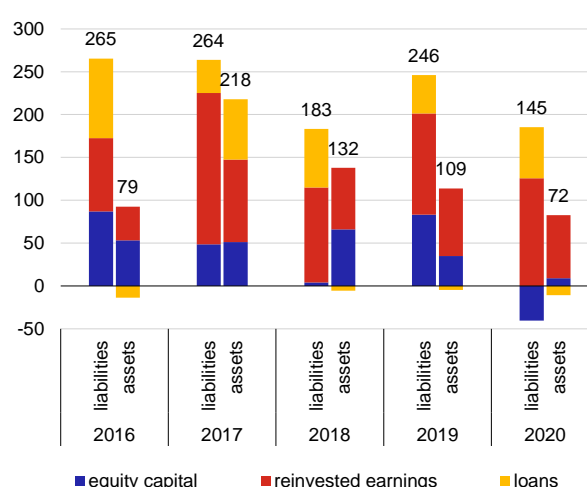
**Chart 15: Structure of direct investment balance** **Chart 16: Direct investment structure**

(in CZK billions)



Source: CNB, CNB calculations

(in CZK billions)

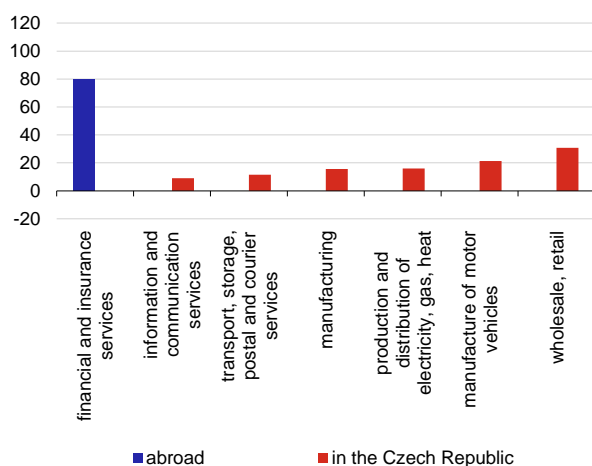


Source: CNB, CNB calculations

**Reinvested earnings were also predominant in the outflow of direct investment abroad (CZK 71.8 billion), slightly exceeding the overall volume of residents' investment abroad.** Investment in equity capital abroad (assets) amounted to almost CZK 9 billion, while residents withdrew debt capital from abroad (liabilities) to the tune of almost CZK 11 billion.

**Chart 17: Largest direct investment flows by sector in 2020**

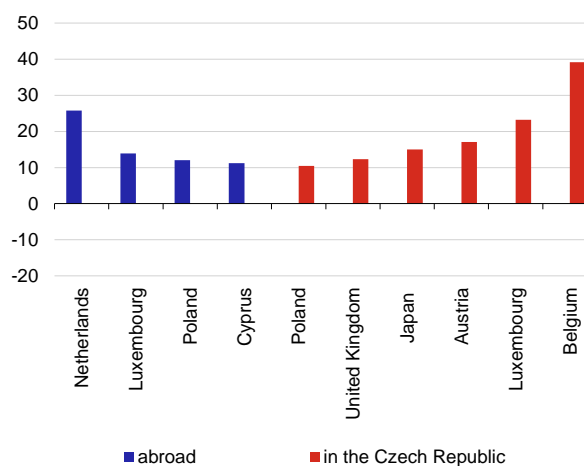
(directional principle; NACE classification; CZK billions)



Source: CNB, CNB calculations

**Chart 18: Largest direct investment flows by country in 2020**

(directional principle; immediate investor principle; CZK billions)



Source: CNB, CNB calculations

**As regards the sectoral structure of direct investment (see Chart 17), investment in services prevailed significantly with a share in the total inflow of almost 80%.** From the perspective of the individual sectors, by far the largest proportion of the funds, more than 45%, was placed in financial and insurance services. At around 21%, wholesale trade had the second largest share in the capital inflow. In industry, investment in the manufacture of motor vehicles was predominant with a total share of

almost 15%.<sup>19</sup> Significant amounts of direct investment also went to the production and distribution of electricity, gas and water, accounting for roughly 11%. **With regard to outflow**, investment in financial services slightly exceeded the overall capital outflow volume. On the other hand, there was a decrease in the volume of invested funds in the area of wholesale trade.

**As in recent years, EU countries dominated from the perspective of territorial structure.** In 2020, most direct investment (by country of the immediate investor) was channelled to the Czech Republic from Belgium, Luxembourg, Austria and Japan (totalling almost 65%). Czech investment abroad headed to the Netherlands, Luxembourg, Poland and Cyprus (totalling almost 86%).

The developments in the direct investment balance in individual years are linked to the volumes of direct investment realised in the past by non-residents in the Czech Republic and by residents abroad. The ensuing reinvested earnings account for the bulk of today's investment flows. However, they are not true cross-border capital flows. The inflow of new foreign direct investment to the Czech Republic has been constrained mainly by the reduction in the maximum value of investment incentives below the level in the other V4 countries in recent years. The more limited labour availability and slightly higher wages compared to the other V4 countries, which usually compete with the Czech Republic for investment, also play a role. The total net direct investment inflow has further been affected by fairly significantly increasing financial strength of domestic investors in recent years, which is reflected in a growing volume of acquisitions abroad and also in purchases of domestic firms from non-residents. These factors will continue to limit the net inflow of direct investment in the future. In 2020, an exceptionally high inflow of debt capital was evident on the liabilities side. It was influenced heavily by several transfers of funds by multinational companies to the Czech Republic, in some cases in a scope significantly exceeding their economic activity in the Czech Republic.

## IV.2 PORTFOLIO INVESTMENT

**The net inflow of portfolio investment reached CZK 135.7 billion in 2020.** The main factor was an increase in the holdings of domestic bonds by non-residents, with small increases in the holdings of domestic shares by non-residents also contributing to a marginal extent. The total net inflow of capital within portfolio investment was moderated by residents' investment abroad, which was channelled predominantly into equity securities, although the holding of bonds also increased to a considerably smaller degree. On the liabilities side, the optimisation of bank sector operations leading temporarily to an increase in the holdings of domestic short-term bank bonds by non-residents played the most important role. The second, far less important factor was a slight increase in the holdings of domestic government bonds by non-residents.

**With regard to assets, there was a reversal in the investment behaviour of residents: after two years of gradually decreasing their holdings of foreign securities, a relatively significant net purchase was observed, totalling CZK 50.8 billion.** The capital flows were probably influenced by a change in the interest rate differential of the major currencies against the Czech koruna, which decreased significantly during the year (especially against the euro). On the asset side, this probably contributed to a renewed minor interest (after two years) in holding foreign debt securities. Their holdings increased by CZK 9.7 billion. A significant decrease in interest rates in advanced countries, including the Czech Republic, led to a relatively sharp increase in residents' interest in holding foreign shares. The net purchases of shares reached CZK 41.1 billion in 2020. From a sectoral perspective, a

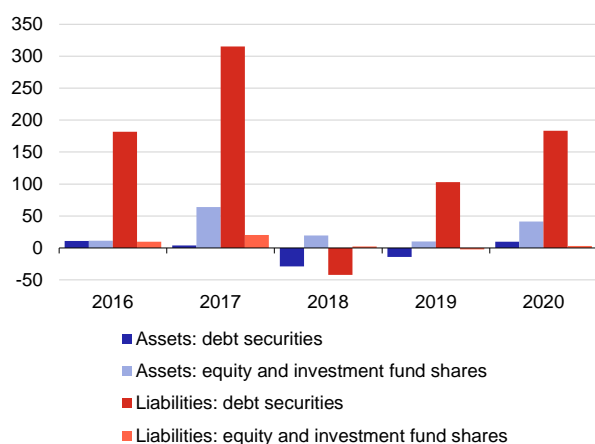
<sup>19</sup> Meanwhile, the volume of investment in the manufacture of motor vehicles was higher than the total volume of investment in manufacturing, owing to disinvestment.

very slight decrease in bond holdings and a negligible decrease in shares continued to be observed in the banking sector. Interest in cross-border investment was predominantly concentrated in other sectors (business) and was only apparent from Q2 onwards (see Chart 19).

**The liabilities side (which recorded a net inflow of capital totalling CZK 186.5 billion) was dominated by higher growth in non-residents' holdings of domestic bank and, to a considerably lesser degree, government bonds.** The marked net growth in holdings of bank bonds was connected solely with an extraordinarily large December optimisation of the base for payments to the Resolution Fund. This operation temporarily increased the value of non-residents' short-term bond holdings by CZK 382 billion (with a simultaneous decrease in short-term deposits from abroad). Other developments included relatively extensive repayments of formerly issued banking sector bonds, enabled by the large surpluses on the current and capital accounts in 2020. Growth in non-residents' holdings of government bonds of CZK 33.7 billion also contributed to the inflow of capital, in addition to the aforementioned optimisation operation. This was due solely to an increase in the volume of koruna issues, which was moreover concentrated in the first half of the year; in the second half of 2020, on the contrary, non-residents' holdings of government bonds decreased rapidly.

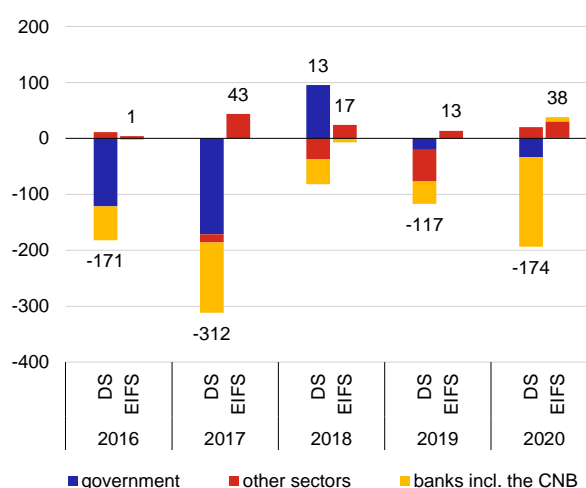
**Chart 19: Portfolio investment balance structure**

(in CZK billions)



**Chart 20: Portfolio investment balance by sector**

(in CZK billions)



Note: DS – debt securities, EIFS – equity and investment fund shares (equity securities). Positive values represent a net outflow, negative values represent a net inflow.

Source: CNB, CNB calculations

Interest rate differentials of the koruna against the euro and the dollar are crucial for the evolution of **portfolio investment** flows on the **asset** side. The level of domestic rates itself also has an effect that reflects in residents' interest in equity investment (shares) abroad. The flows of capital placed by non-residents in domestic **equity securities** are significantly dampened by the very limited offer of liquid domestic stocks. The overall developments in the portfolio investment balance are further significantly influenced by changes in the size of the banking sector's optimisation operations connected with payments to the Resolution Fund in individual years. Last year, a major influence of the current and capital account surpluses on the balance of portfolio investment (an outflow of capital through the banking sector) was observed for the first time. By contrast, a sharp increase in government debt had no marked effect on external debt, as domestic banks were able to finance this deficit.

### IV.3 FINANCIAL DERIVATIVES

Transactions related to the settlement of financial derivatives trading led to a net outflow of capital from the Czech Republic totalling CZK 12.2 billion in 2020.<sup>20</sup> By the standards of this item, this was a relatively significant year-on-year increase. Such an extent of the net capital outflow is very unusual for this item.<sup>21</sup>

### IV.4 OTHER INVESTMENT

A net outflow of other investment amounting to CZK 392.7 billion was linked mainly with a decrease in the volume of non-residents' deposits in commercial banks at the end of the year. This involved the aforementioned optimisation of bank operations temporarily replacing deposits with short-term bonds. A moderate net outflow of capital was recorded in the government sector and other sectors as well last year. The central bank was the only sector that recorded a slight temporary increase in short-term liabilities.

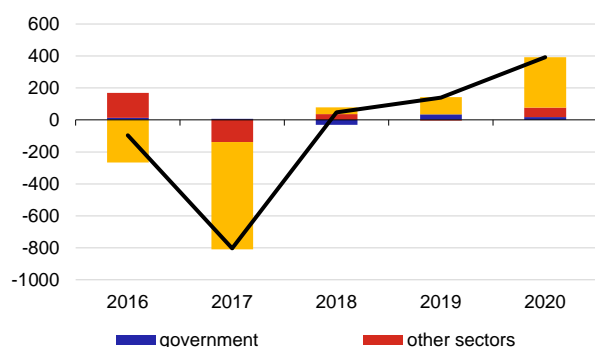
The **government sector** exhibited a decrease in the volume of foreign loans of CZK 18.7 billion. This was connected with the repayment of predominantly short-term and, to a considerably lesser extent, long-term foreign loans.<sup>22</sup>

The **central bank** recorded a very small net capital outflow of CZK 2.2 billion.

**Other sectors** recorded a net outflow of capital abroad of CZK 59.3 billion. This was due predominantly to net provision of trade credits (an increase in assets and a decrease in liabilities). A smaller part was linked to an increase in deposits abroad.

**Chart 21: Other investment balance by sector**

(in CZK billions)

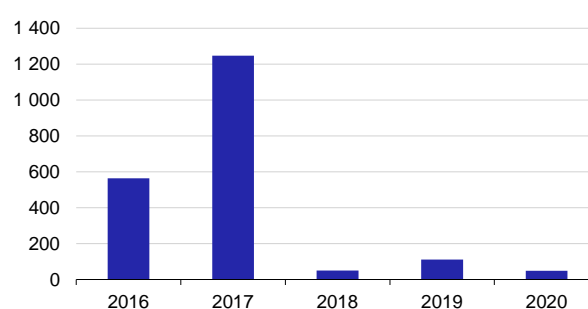


Note: Positive (negative) values represent a net outflow (inflow).

Source: CNB, CNB calculations

**Chart 22: Change in reserve assets**

(in CZK billions)



Source: CNB, CNB calculations

20 Primarily the settlement of derivatives transactions in the banking sector connected primarily with exchange rate hedging.

21 It only occurred once, in 2016.

22 The loans repaid were fully replaced by the increase in non-residents' holdings of koruna government bonds (within portfolio investment).



The **banking sector** recorded a net capital outflow of CZK 316.8 billion. This was due chiefly to changes in deposits involving above all a decline in non-residents' deposits, especially short-term ones, with domestic banks. The change concerned mainly foreign currency transactions, whereas the decrease in non-residents' short-term koruna deposits represented less than CZK 33 billion. There were no significant changes in the domain of loans.

Most of the operations in other investment in 2020 can, similarly to 2019, be designated as technical (trade credits, deposits with the CNB) or expense optimisation (replacement of loans by bonds by the government, optimisation of the base for payments to the Resolution Fund by banks).

## IV.5 RESERVE ASSETS

**The increase in reserve assets amounted to CZK 47.8 billion and reflected a positive balance of the Czech Republic's transactions with the EU, while income on reserve assets was negative (see Chart 22) and decreased the CNB's reserves.** In the case of income from the EU, it is purchased on the basis of an earlier agreement between the Czech government and the CNB aiming to prevent an impact on the supply of, and demand for, foreign currency and, in turn, the exchange rate of the koruna.<sup>23</sup>

The increase in reserve assets owing to transactions with the EU is based on the agreement between the Czech government and the CNB aiming to prevent an impact on the koruna exchange rate due to temporary net income from the EU. The marked fluctuations in the extent of the outflow in reserve assets are connected with the highly uneven drawdown of funds (cumulating at the end of the individual budgetary periods). In the new seven-year programme for 2021–2027, the net drawdown of EU funds is expected to fall markedly to around CZK 20 billion a year on average.<sup>24</sup> Due to the COVID-19 pandemic, however, net aid from the EU is to be temporarily increased. Income on the CNB's international reserves is usually an additional source of growth in reserve assets. This income reflects above all changes in interest rates on the reserve currencies relative to their share in the CNB's reserves (EUR, USD, CAD, AUD, SEK, JPY, GBP) and dividend income on equity holdings. Due to the sharp drop in interest rates in the world at the beginning of last year, the long-standing negative ECB rates and efforts to maintain a very conservative structure of reserves, the income on the reserves was negative last year.

<sup>23</sup> Leaving this income on the market would generate appreciation pressures on the koruna, possibly pushing it above the level reflecting the competitiveness of the Czech economy. In the past, these operations were used e.g. to eliminate the influence of government income from sales of state assets to non-residents.

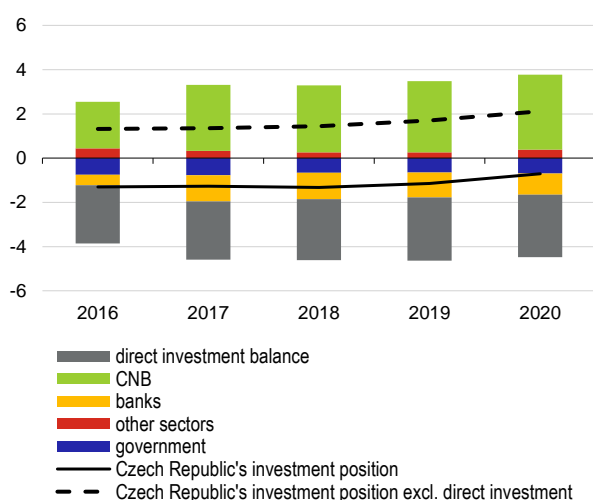
<sup>24</sup> Owing to a decline in the volume of subsidies (due to the United Kingdom, a net payer, leaving the EU) and a rise in Czech contributions (due to convergence of Czech GDP to the EU average).

## V. THE INVESTMENT POSITION OF THE CZECH REPUBLIC<sup>25</sup>

The Czech Republic's investment position stood at CZK -709.6 billion, i.e. -12.6% of GDP, as of 31 December 2020 (see Charts 23 and 24).<sup>26</sup> The negative investment position continues to reflect the Czech Republic's high indebtedness in the area of direct investment, which is generally regarded as much less risky than indebtedness connected with the use of debt instruments. Abstracting from direct investment, the Czech Republic has a significant net creditor position totalling CZK 2.1 trillion.

**Chart 23: Czech Republic's investment position and breakdown by debtor**

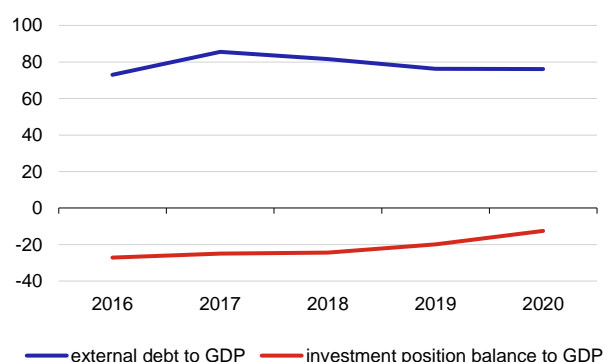
(CZK trillions ; end of period balance)



Source: CNB, CNB calculations

**Chart 24: External debt and investment position relative to GDP**

(% of GDP)



Source: CNB, CNB calculations

The change in the investment position in 2020 can be assessed as the largest-ever decrease in external indebtedness in a single year, even though it was largely caused by one-off factors. Last year the Czech economy generated a record surplus on the current and capital accounts, which were connected with a sharp drop in non-residents' investment income<sup>27</sup>, growth in the trade surplus and a significant increase in the capital account surplus. It is, however, important to point out that a considerable amount of this surplus was caused by temporary or one-off effects. Revaluation of assets and also partly exchange rate effects (especially the weakening of the koruna against the euro<sup>28</sup>) also

25 In addition to a yearly view of the external balance of the Czech Republic, a look at the Czech Republic's investment position is also useful from the point of view of longer-term risks. The investment position reflects the total value of residents' financial assets in the form of receivables from non-residents and the value of residents' liabilities to non-residents as of a given date. The difference between the values of these assets and liabilities is the country's net international (investment) position. Besides reflecting all past financial flows between residents and non-residents, it covers exchange rate effects and effects linked with other changes in assets and liabilities reflecting changes in their value over time (revaluation).

26 For the purposes of an MIP (Macroeconomic Imbalance Procedure) assessment, values of up to -35% of GDP are considered safe.

27 mainly on account of the CNB's administrative decision to postpone the payment of dividends for 2019 in the banking sector to future years and owing to decreases in the CNB's monetary policy rates, which lowered the volume of the banking sector's profits from deposits with the CNB by tens of billions of korunas in 2020

28 amid a different currency structure of assets (almost exclusively foreign currency) and liabilities (predominantly koruna)

contributed to the decrease in the debtor position in 2020. The Czech Republic's net debtor position fell by CZK 437 billion in 2020. All sectors of the economy except for the government contributed to the decrease in the net debtor position.

**As regards the individual investment positions, a decrease in the banking sector's net debtor position, which dropped by about CZK 170 billion to CZK 0.96 trillion, was the most significant.**

Within the overall position, liabilities to non-residents declined in particular, especially in foreign currencies. Non-residents' short-term koruna deposits at domestic banks also decreased slightly (by about CZK 30 billion). The continuing relatively large negative international position of the banking sector is not primarily due to a need for external financing of the Czech Republic's external deficit, but it reflects above all the different functioning of monetary policy in the Czech Republic compared with the euro area. The negative position was created in 2014–2017 in connection with the exchange rate commitment (especially in its final period). Almost 70% of it are koruna deposits of non-residents with domestic banks (placed largely by the foreign parent companies of domestic banks and by their affiliates under the pressure of long-standing negative deposit rates in the euro area and in expectation of exchange rate gains from koruna appreciation).

**The most significant debtor position within direct investment was virtually unchanged in 2020 (down by almost CZK 20 billion to CZK 2.83 trillion).**

As these data are still subject to revision and revisions tend to be the largest in the area of direct investment, this development can for now be evaluated as continuing stagnation. The highly negative position on direct investment is mainly a result of the massive direct investment inflow from abroad between 1998 and 2008 and the related value of reinvested earnings in the subsequent years. As a consequence, the volume of non-residents' investment in the Czech Republic is more than two-and-a-half times the volume of residents' investment abroad. In recent years, however, the increase in the negative investment position has slowed significantly. The slowdown was due to growth in the financial strength of domestic entities reflected in their higher investment abroad as well as a decrease in the attractiveness of the Czech Republic in comparison with the other V4 countries (primarily due to the constraints on investment incentives from the EU, higher wages in the Czech Republic compared to the other V4 countries and the lack of available labour in the Czech Republic). Nevertheless, owing to its still large weight, this position is the cause of the Czech Republic's negative overall investment position.

**Unlike the two above-mentioned positions, the debtor position of the government increased slightly. The debt picked up by about CZK 37 billion to CZK 0.69 trillion.**

Foreign financing, however, accounted for just around 10% of the overall growth in government debt last year. During the year, non-residents' holdings of government debt increased relatively quickly, but this was followed by a relatively sharp decrease that lasted from August until the end of the year. At the beginning of this year, however, non-residents' interest in domestic government debt resumed. We consider the decrease in the second half of last year to be temporary, connected with technical factors or expectations of higher yields. Domestic (koruna) bond issues contributed to the growth in the government's external debt, whereas the volume of foreign-currency bonds and loans declined slightly.

**The second most important change in the partial investment positions in 2020 (following the banking sector) was a rise in the CNB's creditor position of more than CZK 150 billion.**

Real improvement in the position, however, represented less than one-third. The Czech Republic's balance on operations with the EU fostered a higher position<sup>29</sup>, while real income on foreign exchange reserves was slightly negative and thus led to a worsening of the position. The major part of the improvement in the CNB's position was caused by revaluation of assets, while exchange rate gains (predominantly from the weakening of the koruna against the euro) contributed to a lesser extent. The CNB's creditor

<sup>29</sup> On the basis of a formerly-adopted decision, the CNB eliminates operations towards the EU in its reserve balance without influencing the development of the exchange rate.

position was a sizeable CZK 3.38 trillion at the end of 2020. By international comparison, it reached extraordinary values – taking into account the size of the economy – during the exchange rate commitment, and especially in the last six months before it ended in April 2017.

**The creditor position of the other sectors increased relatively significantly in 2020, up by more than CZK 125 billion to CZK 0.39 trillion.** By comparison with the peaks observed in 2017 Q2, however, the cumulative creditor position of the other sectors was still about CZK 100 billion lower. The higher creditor position last year was primarily reflected in an increase in foreign assets. Portfolio investment represented roughly two-thirds of this increase. The majority of it went to holdings of shares, while only a small part to bonds. Thus, it mainly reflected efforts to place free funds in assets ensuring positive returns amid the extremely loose monetary policies of central banks in advanced countries.

The Czech Republic's greatest-ever improvement in the investment position in 2020 should not be overestimated. It was significantly aided by some one-off effects, the marked drop in prices of raw materials on world markets connected with the global crisis and the positive impact of revaluation of assets and liabilities and some influences that will probably even worsen the investment position in the future (the temporary weakening of the koruna against the euro will likely subside with the end of the pandemic, the delayed payment of dividends for 2019 in the banking sector will be released in the future and the convergence of monetary policy rates in the Czech Republic to those abroad will also probably be temporary). Faster growth in domestic rates than in foreign ones will worsen the Czech Republic's investment position again.

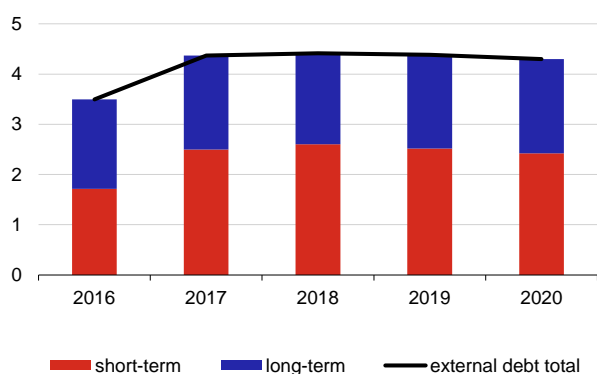
## VI. EXTERNAL DEBT OF THE CZECH REPUBLIC

At the end of 2020, the Czech Republic's gross external debt was CZK 4.3 trillion, or 76.1% of GDP (see Chart 24). Compared with 2019, it was CZK 83 billion lower. Short-term debt accounted for 56.4% of the total debt, falling by CZK 94 billion compared with 2019. By contrast, long-term debt rose marginally. Other sectors, whose overall debt during 2020 decreased slightly (by CZK 6 billion to CZK 1.83 trillion) contributed most significantly (more than 42%) to the total debt. By contrast, the debt of the financial sector fell significantly last year (by more than CZK 120 billion to CZK 1.57 trillion). Government debt increased by CZK 40 billion to CZK 0.73 trillion and the CNB's debt rose by CZK 4 billion to CZK 0.17 trillion). While short-term debt is predominant in the financial sector and the CNB, long-term debt is the most significant in the government sector.

However, it should be stressed that gross external debt is not an ideal indicator for more advanced economies with significant integration in the international division of labour. High debt can merely reflect a high degree of participation. Furthermore, one should bear in mind that besides payables there are also receivables, and that it is important to consider their structure and availability. In the Czech case, the CNB's international reserves alone covered almost 83% of all external debt liabilities of all domestic entities as of 31 December 2020. The banking and business sectors also have sizeable assets. In the Czech Republic, moreover, the current level of gross debt is significantly affected (by almost one-third) by the massive inflow of foreign capital during the exchange rate commitment period (especially in 2016 and 2017). The CNB purchased these funds into its reserves, where they still remain. The koruna funds acquired by non-residents through sales of these assets were placed in government bonds or deposits with the banking sector. They are still located there to a great extent, and thus are reflected in the present amount of the external liabilities of the financial sector and the government.

**Chart 25: External debt**

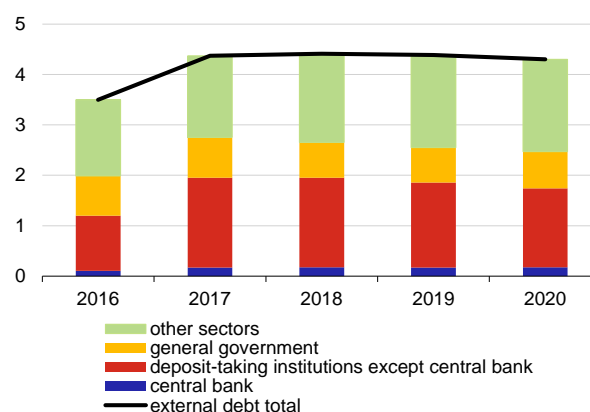
(CZK trillions; end of period balance)



Source: CNB, CNB calculations

**Chart 26: External debt by debtor**

(CZK trillions; end of period balance)



Source: CNB, CNB calculations

## VII. THEMATIC ANALYSES

### VII.1 CZECH MEMBERSHIP OF THE EU FROM THE PERSPECTIVE OF BALANCE OF PAYMENTS STATISTICS<sup>30</sup>

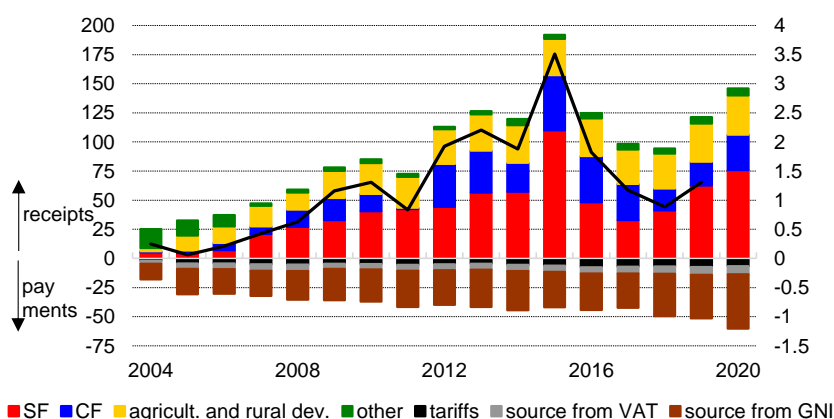
The financial flows between the Czech Republic and the EU are an important part of the balance of payments. The volume of these transactions is set to increase even further with the approved EU stimulus package for post-pandemic recovery. While the traditional perspective sorts the mutual financial flows according to EU policies, in balance of payments statistics they are structured according to the economic nature of the transaction. In the current account, receipts from the EU primarily include programmes for the support of agriculture and non-investment subsidies from structural funds; subsidies of an investment character, meanwhile, are reported in the capital account. Member States' payments into the EU budget are to a larger extent monitored as part of secondary income (payments based on GNI and VAT), and to a lesser extent primary income of the current account (collected customs duties). As a consequence of the principle of double-entry bookkeeping, all the current flows and capital transfers to the EU have their counterparts in the financial account.

#### Financial flows between the Czech Republic and the EU

So far, the Czech Republic has been a net recipient of resources from the EU. The net position of the Czech Republic vis-à-vis the EU budget, which is regularly published by the Ministry of Finance of the Czech Republic (MF CR), totalled almost CZK 900 billion between our EU entry and the end of 2020.<sup>31</sup> Income from the EU for the given period amounted to 1.6 trillion, while payments to the EU reached 0.7 trillion. This corresponds to roughly 2.3% (receipts) and 1% (payments) of the gross disposable income of the Czech Republic for the same period.

**Chart VII.1.1: Breakdown of receipts from and payments into the EU budget by EU policy**

(left-hand scale – CZK billions, right-hand scale – net position as % of disposable income)



Source: Ministry of Finance of the Czech Republic, own calculations

**Receipts from the EU budget are linked to European policies.** The most important items are grants and subsidies from European Structural and Investment Funds (ESIF), formerly divided among

<sup>30</sup> Authors: Martin Kábrt and Jana Vaníčková (both CNB). The views presented here are those of the authors and do not necessarily reflect the official position of the Czech National Bank. The authors would like to thank Petr Král, Rudolf Olšovský, Luboš Komárek and Pavla Netušilová (all CNB) for their valuable comments and remarks.

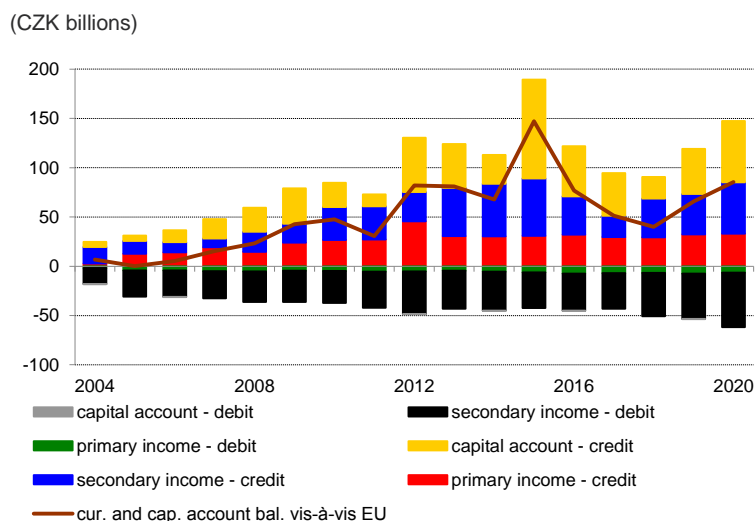
<sup>31</sup> The Czech Republic also received financial support from the EU budget before 2004 as part of several pre-accession programmes. The goal of the most extensive programme, Phare (a total of EUR 1.03 billion utilised by the Czech Republic), was to help states fulfil the conditions for EU accession, including institutional preparations. The programme also financed investment projects aimed at economic and social cohesion. The Ispa programme (EUR 244.3 million) focused on the support of investment projects in the area of the environment and infrastructure, while Sapard (EUR 66.1 million) provided financing for the development of agriculture and rural development. Part of the pre-accession financial support was drawn down in the first years of EU membership (CRR, 2019).



structural funds (SF), cohesion funds (CF) and the support of rural development.<sup>32</sup> Another significant part is comprised of the support of agriculture financed from the European Agricultural Guarantee Fund. The remaining European programmes usually represent less than 5% of the whole (Chart VII.1.1). Unlike national budgets, which are prepared and approved every year, the EU budget is planned in a Multiannual Financial Framework (MFF) for seven years in advance. The current MFF runs from 2021 until 2027.

**The contributions of Member States to the EU budget are based on their gross national income (GNI) and to a lesser extent also on VAT.**<sup>33</sup> The GNI-based calculation method takes into account not only the economic prosperity of the country, but also the share of its residents in the wealth created. GNI adjusts GDP for resources that, while created in the Czech Republic, do not belong to residents.<sup>34</sup> These are primarily the profits created in enterprises under foreign control. Thus, from the perspective of the income of Czech residents, the Czech Republic is approximately 6% poorer than from the perspective of the economic performance of the country, and can therefore pay less into the EU budget.<sup>35</sup> The significantly lower contributions on the basis of VAT are proportionate to consumption, so states with a higher share of consumption in GDP generally pay more. The Czech Republic is close to the EU average in this respect.

**Chart VII.1.2: Current flows and capital transfers between the Czech Republic and EU institutions**



Source: CNB

**Other payments into the EU budget are known as “traditional own resources”.** These comprise almost exclusively of customs duties collected by national authorities on goods imported from non-EU countries. Since these tariffs are imposed at the point where goods enter the EU, a disproportionately large amount is collected in countries with large sea ports, especially Belgium and the Netherlands.<sup>36</sup> For the Czech Republic, which does not have a land border with any country outside the EU and goods

<sup>32</sup> The Cohesion Fund is aimed at the development of less economically advanced Member States. These include states whose gross national income per capita is lower than 90% of the EU average.

<sup>33</sup> The receipts from and payments into the EU budget that are part of primary income also influence GNI. The calculation of national contributions to the EU budget (as part of secondary income) thus depends partly on the amount of net credits in primary income.

<sup>34</sup> Similarly, GNI also takes into consideration the income of Czech residents from their foreign investment, though this is considerably lower. The Czech Republic's net international investment position has been significantly negative over the long term.

<sup>35</sup> From 2021, the Czech Republic's payments into the EU budget should continue to grow as a result of the increase in the MFF, the relative rise in the country's prosperity within the EU and Brexit.

<sup>36</sup> This is advantageous for these countries, since they only have to pay 80% of the collected customs duties to the EU budget, while they can keep the remainder as a reward for collecting the tax. The actual expenses for the collection, however, are estimated to be considerably lower (IFS, 2016).

arrive here, and therefore to the EU, only by air, the collected duties represent roughly one-tenth of the overall payments to the EU budget, which ranks slightly above the EU-27 average (EC, 2020).

### Financial relations with the EU through the lens of the balance of payments accounts

**The balance of payments statistics do not differentiate financial flows according to EU policies, but according to the economic nature of the transaction.** The trade in goods and services between Czech residents and EU institutions is negligible. Financial flows between the Czech Republic and the EU therefore only influence the balance of primary and secondary income of the current account. The capital account includes unilateral transfers of an investment nature, while the financial account records changes in the accounts of the Czech Ministry of Finance and the European Commission at the CNB. Chart VII.1.2 depicts the same flows as Chart VII.1.1, though from the perspective of the balance of payments.

**The current account captures part of the receipts from the EU budget and almost all the payments to it.** On the credit side, primary income includes European subsidies directly connected with production, especially agriculture support. The debit side of primary income includes the import customs duties collected by Czech authorities and sent to the European Commission (a “traditional” resource of the EU). These are, however, far smaller in scope than agricultural subsidies. Therefore, the Czech Republic’s balance of primary income with the EU is traditionally positive. Secondary income includes unilateral current transfers unrelated to production. On the credit side, this primarily includes non-investment subsidies, e.g. from the EU structural funds or the EEA and Norway Grants. Payments to the EU budget on the basis of GNI and VAT comprise the predominant debit item of secondary income. Secondary income receipts and payments are broadly comparable, so the balance can be positive or negative. The balance was negative in a total of 11 out of 17 years of our EU membership.

**The capital account primarily records investment subsidies from the EU’s structural and investment funds.** Debit items appear on the capital account only rarely and on a small scale, so the capital account balance vis-à-vis the EU is significantly positive over the long term. Table VII.1.1 shows the most significant current financial flows and capital transfers between the Czech Republic and the EU budget and their connection to EU policies.

**Table VII.1.1: Current payments and capital transfers between the Czech Republic and EU institutions**

| Balance of payments account | Account item      | Transaction example (credit/debit)                                  | EU policy (typical examples)  |
|-----------------------------|-------------------|---|---|
| Current account             | Primary income    | Import duties collected by Member States (–)                        | “Traditional” own resources of the EU   |
|                             |                   | Subsidy on production from the EU budget (+)                        | Agricultural policy   |
|                             |                   | Other subsidies on production from the EU budget (+)                | Agricultural policy   |
|                             | Secondary income  | Payments to the EU budget derived from GNI and VAT (–)              | EU resources  |
|                             |                   | Other transfers between government institutions and EU bodies (+/–) | EU structural funds, EEA and Norway grants – subsidies of a <i>current</i> nature |
| Capital account             | Capital transfers | Investment subsidies from the EU budget (+)                         | EU Structural and Cohesion Funds, subsidies of an <i>investment</i> nature        |

**All the flows recorded on the current and capital accounts have counterparts in the financial account as a result of the double-entry principle of the balance of payments.** Records on the financial account show how the current or capital transaction was financed. In the case of flows between the Czech government and EU institutions, the payments take place through the accounts of the Czech Ministry of Finance maintained at the CNB, i.e. in the accounts of clients at the CNB. The Czech

Republic's position as a net beneficiary from the EU budget is reflected on the financial account as an increase in the official international reserves, which represents a net outflow of capital, i.e. net lending to foreign countries.

**Table VII.1.2: Financial transactions between the Czech Republic and EU institutions**

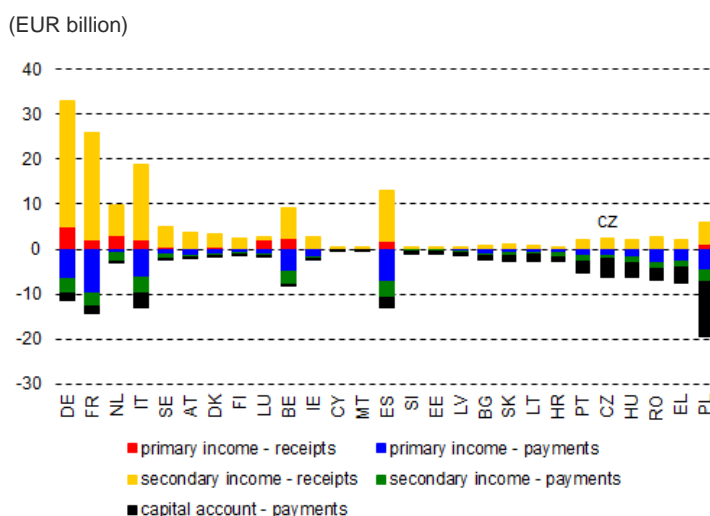
| Balance of payments account | Transaction type                             | Transaction examples (net acquisition of financial assets/net increase in liabilities)  |
|-----------------------------|--|---|
| Financial account           | Paired items of current and capital accounts | As a result of the double-entry bookkeeping in the balance of payments, all the current and capital account items have their counterparts in the financial account. For example, the Czech government's payments to the EU budget on the basis of GNI and VAT are usually reflected in the financial account as a decrease in the assets (of clients) of the CNB. (+/-) |
|                             | Items paired only in the financial account   | Capital investment in EU institutions (particularly ECB, EIB)   |

**Some transactions with EU institutions are only paired in the financial account because they are not grounded in current account flows or unilateral capital transfers (reflected in the capital account).** These are primarily contributions from Member States to the subscribed capital of European institutions. For example, after Brexit, the subscribed capital of the ECB remained unchanged, while the liabilities allocated to the Bank of England were divided among the other members of the European System of Central Banks. They then had to increase their capital contribution. Given that from the perspective of the balance of payments, such a transaction replaces one foreign financial asset with another (an international reserve asset in the form of a foreign currency deposit is exchanged for equity participation), the credit and debit part of the transaction is only paired in the financial account. Since the Czech Republic is not a member of the euro area yet, so far the relevant allocation key has only given it a relatively small share in the capital of the ECB. The Czech Republic has a higher relative participation in, for example, the European Investment Bank.

### International comparison

It is possible to look at the financial relations of Member States with the EU the other way around, i.e. from the perspective of EU institutions. Chart VII.1.3 shows current transactions and capital transfers between EU institutions and individual Member States in 2020. Customs duties and payments to the EU budget derived from GNI and VAT naturally appear here on the credit side, while the support of agriculture, current and investment subsidies is on the debit side. In the chart, Member States are sorted according to the total balance vis-à-vis the EU budget. The Czech position of a net recipient is clear from the chart, similarly to all the other new Member States. This is due to lower payments to the EU budget, related to the relatively lower economic prosperity, as well as a higher allocation of resources from the EU budget, primarily connected with investment subsidies as part of EU cohesion policy.

**Chart VII.1.3: Current flows and capital transfers with Member States from the perspective of EU institutions in 2020**



Source: Eurostat, own processing

## Developments following the COVID-19 pandemic

Over the coming years, the financial flows of Member States vis-à-vis the EU will simultaneously be influenced by the already adopted Multiannual Financial Framework and the National Recovery Plan for the economies of Member States following the COVID-19 pandemic. The most important European recovery package, known as the Recovery and Resilience Facility<sup>37</sup>, was adopted in February 2021 and will comprise funds also for the Czech Republic, which are expected to reach CZK 171 billion (Ministry of Industry and Trade, 2021). These funds aim not only at reviving the economy following the downturn during the pandemic, but also at a long-term green and digital transformation.<sup>38</sup> Further support was approved for the Czech Republic through favourable loans from the SURE instrument<sup>39</sup>, which aims to ease the financing of temporary employment support schemes in extraordinary situations. In the case of the Czech Republic, it will represent, as approved so far, EUR 2 billion (EC, 2021). The European Commission raises funds for these loans to Member States through the issue of “social bonds” on capital markets, in which it guarantees investors the use of the resources for socially beneficial goals.

The European instruments for post-pandemic renewal also represent a new phenomenon for statistical recording. The most important Recovery and Resilience Facility will include traditional grants, which will as usual be represented as secondary income or capital transfers in the balance of payments depending on the nature of the programme. In addition, however, this Facility will also contain favourable loans, which will be a new phenomenon from the perspective of the balance of payments, moreover with an effect on the country's foreign indebtedness. Specific methodological guidelines for the statistical recording of the new programmes in the balance of payments and international investment position are still being formulated in Eurostat working groups.

## Bibliography

Centrum pro regionální rozvoj ČR (2019), “Projekty předvstupní pomoci”, <https://www.crr.cz/kontaktujite-nas/projekty-predvstupni-pomoci/>.

Eurostat (2002), “Balance of payments of the EU institutions”, Products Statistical working papers, <https://ec.europa.eu/eurostat/en/web/products-statistical-working-papers/-/ks-ao-02-002>.

Eurostat (2012) COMMISSION REGULATION (EU) No. 555/2012 of 22 June 2012, amending Regulation (EC) No 184/2005 of the European Parliament and of the Council on Community statistics concerning balance of payments, international trade in services and foreign direct investment, as regards the update of data requirements and definitions, <https://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2012:166:0022:0066:EN:PDF>.

European Commission (2020), “EU expenditure and revenue 2014–2020”, [https://ec.europa.eu/budget/graphs/revenue\\_expenditure.html](https://ec.europa.eu/budget/graphs/revenue_expenditure.html).

European Commission (2021), “The European instrument for temporary Support to mitigate Unemployment Risks in an Emergency (SURE)”, <https://ec.europa.eu/info/business-economy->

37 Regulation (EU) 2021/241 of the European Parliament and of the Council of 12 February 2021 establishing the Recovery and Resilience Facility.

38 As of 21 May 2021, 23 out of 27 EU Member States submitted their National Recovery Plan to the European Commission.

39 Council Regulation (EU) 2020/672 of 19 May 2020 on the establishment of a European instrument for temporary Support to mitigate Unemployment Risks in an Emergency (SURE) following the COVID-19 outbreak.

euro/economic-and-fiscal-policy-coordination/financial-assistance-eu/funding-mechanisms-and-facilities/sure\_en.

IFS (2016), “The budget of the European Union: a guide”, IFS Briefing Note BN181, <https://www.ifs.org.uk/uploads/publications/bns/BN181.pdf>.

Sixth Edition of the IMF’s Balance of Payments and International Investment Position Manual (BPM6). <https://www.imf.org/external/pubs/ft/bop/2013/bopman6.htm>.

Mandel, M.; Durčáková, J. Mezinárodní finance a devizový trh. Management Press.

Ministry of Finance of the Czech Republic (2020), “ČR schválila evropský program půjček za 100 mld. EUR, pomůže zaplatit kurzarbeit”, Press Release, <https://www.mfcr.cz/cs/aktualne/tiskove-zpravy/2020/cr-schvalila-evropsky-program-pujcek-za-38541>.

Ministry of Industry and Trade of the Czech Republic (2021), “Příprava Národního plánu obnovy vrcholí”, Press Release, <https://www.mpo.cz/cz/rozcestnik/pro-media/tiskove-zpravy/priprava-narodniho-planu-obnovy-vrcholi---259990/>.

Government of the Czech Republic (2021), “Příprava Národního plánu obnovy ČR”, Press Release, <https://www.vlada.cz/cz/evropske-zalezitosti/aktualne/priprava-narodniho-planu-obnovy-cr-186743/>.

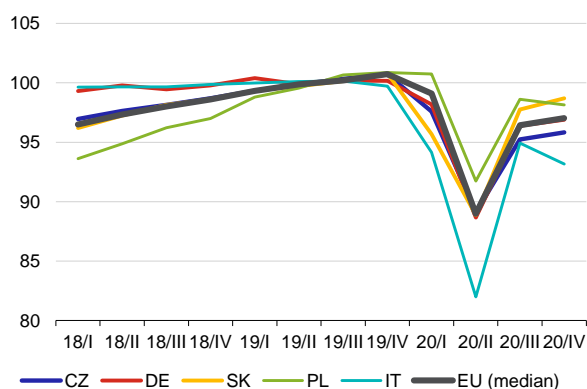
## VII.2 THE CZECH REPUBLIC'S CURRENT ACCOUNT DURING THE CORONAVIRUS PANDEMIC IN THE EUROPEAN CONTEXT: A VIEW USING THE SYNTHETIC VARIABLE METHOD <sup>40</sup>

*The objective of the article is to evaluate the development of the current account of the Czech Republic and its main components during the coronavirus pandemic and to show how different the situation in our country was from the other EU countries. First, the development of the Czech current account during 2020 is briefly compared to other countries. The synthetic variable method is then applied, identifying the countries whose characteristics are most comparable to the Czech economy. That helps to determine whether the movements on the current account differ from European economies with similar characteristics. An empirical analysis confirms that the domestic developments were not exceptional in the European context. Thus, it can be concluded that the transmission of the pandemic shock to the Czech external balance proceeded in a manner similar to other European economies.*

**The onset of the coronavirus pandemic in 2020 meant a strong shock across countries.** The administrative measures to prevent the spread of the pandemic caused a drop in production and consumption, as many economic activities were rendered impossible. Unlike in the recent international financial and economic crisis, various sectors of the economy were affected in varying degrees. The trade connections and financial ties between economies resulted in this pandemic shock spreading across economies. The complex links between national economic systems mean that the resulting effect of the coronavirus pandemic on the balances of the individual current account items is hard to estimate *ex ante*.

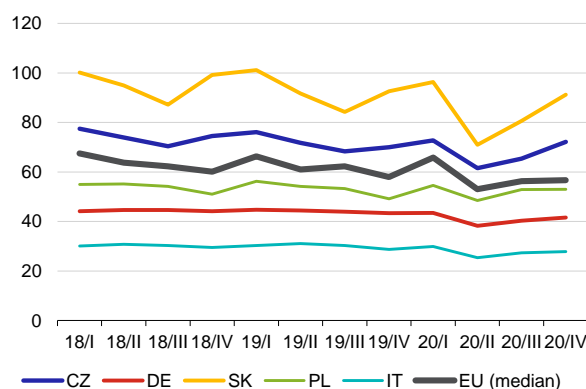
**Chart VII.2.1: Real GDP**

(index, 2019 average = 100)



**Chart VII.2.2: Economic openness**

(% of GDP)



Note on the legends of Charts VII.2.1–14: CZ – Czech Republic, DE – Germany, SK – Slovakia, PL – Poland, IT – Italy.

Source: Eurostat, CNB calculations

Source: Eurostat, CNB calculations

**The decline in economic activity in Europe and in other territories was reflected in the dynamics of foreign trade in goods and services.** The government's administrative anti-epidemic measures, the adverse impact of the crisis on economic sentiment and the decline in demand in the rest of the world were manifested in a noticeable decline in the economic activity of the EU27 countries, where real GDP decreased in Q2 2020 by about 10% on average compared to the 2019 average (see Chart VII.2.1). In

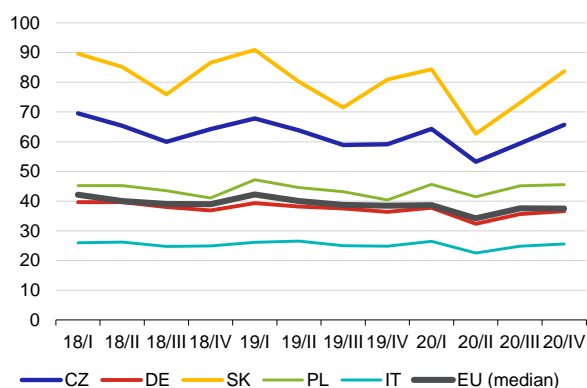
<sup>40</sup> Authors: Oxana Babecká Kucharčuková and Jan Brůha. The views presented here are those of the authors and do not necessarily reflect the official position of the Czech National Bank.



light of the high elasticity of international trade<sup>41</sup>, there was a drop in the degree of openness of all economies (between 5 and 10 pp, see Chart VII.2.2) and a decline in international trade in both services and goods. This drop was primarily apparent in the first half of 2020.<sup>42</sup> In the second half of 2020, a double-track trend in industry and services could be observed in European countries, with a significant revival in goods trade (Charts VII.2.3 and VII.2.4). On the other hand, a similar revival did not occur for trade in services and in most countries a downward trend in the share of trade in services in GDP was observed. This downward trend applies to both travel and other services (see Charts VII.2.5–VII.2.8), with a decrease in international travel and transport being the predominant factor underlying the decline in the services balance turnovers.

**Chart VII.2.3: Goods exports**

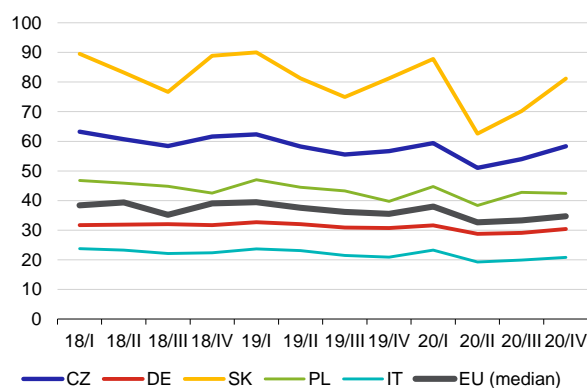
(% of GDP)



Source: Eurostat, CNB calculations

**Chart VII.2.4: Goods imports**

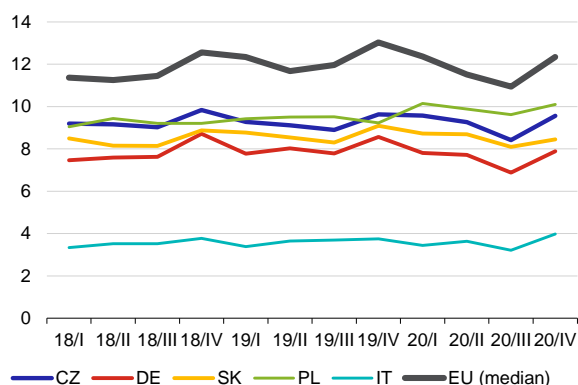
(% of GDP)



Source: Eurostat, CNB calculations

**Chart VII.2.5 Exports of services excluding travel**

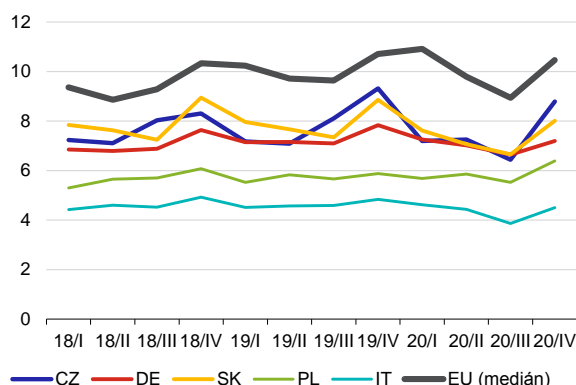
(% of GDP)



Source: Eurostat, CNB calculations

**Chart VII.2.6: Imports of services excluding travel**

(% of GDP)



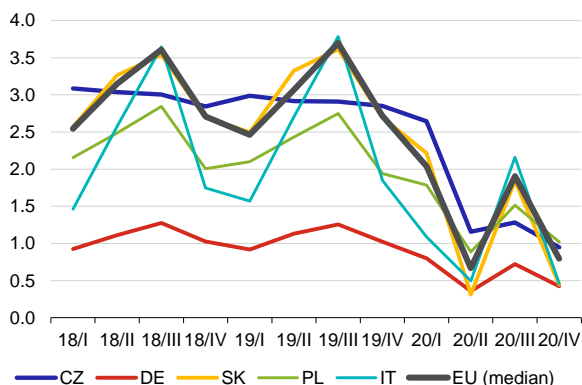
Source: Eurostat, CNB calculations

41 As Babecká and Brůha (2018) show, the elasticity of international trade with regard to economic activity is still higher than 1, in spite of the slight decline in the past decade.

42 Babecká and Brůha (2020) analyze the drop in international trade in goods during the course of the first months of the administrative measures.

**Chart VII.2.7 Exports of services in travel**

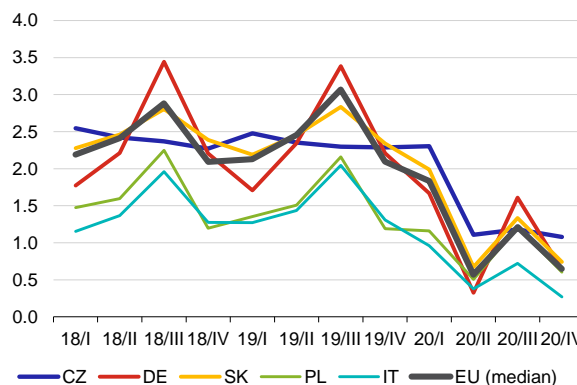
(% of GDP)



Source: Eurostat, CNB calculations

**Chart VII.2.8: Imports of services in travel**

(% of GDP)



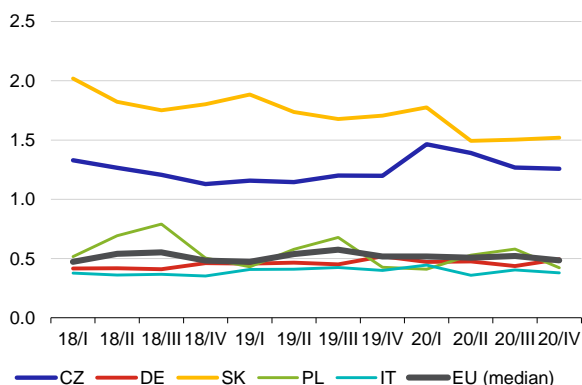
Source: Eurostat, CNB calculations

**The drop in primary income was roughly comparable with GDP dynamics in most EU countries.**

The credit and debit sides of the two most important items of primary income (i.e., compensation of employees and investment income) developed in line with economic activity in most countries. Thus, the ratio of these items to GDP remained broadly unchanged and the observed changes did not go beyond the usual volatility (Charts VII.2.9–VII.2.12). One of the few countries to which this statement does not fully apply is the Czech economy, which showed a decrease in the outflow of investment income. This outflow dropped more than economic activity. The decline in the outflow of investment income was due not only to a drop in profits posted by the financial and non-financial sectors, but also to the CNB's recommendation that dividends for the record year 2019 should not be paid out in 2020.

**Chart VII.2.9: Compensation of employees: credit**

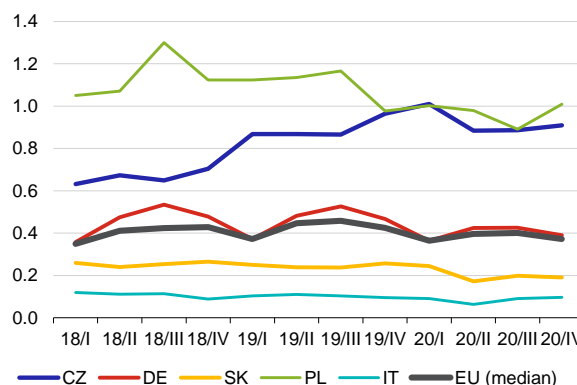
(% of GDP)



Source: Eurostat, CNB calculations

**Chart VII.2.10: Compensation of employees: debit**

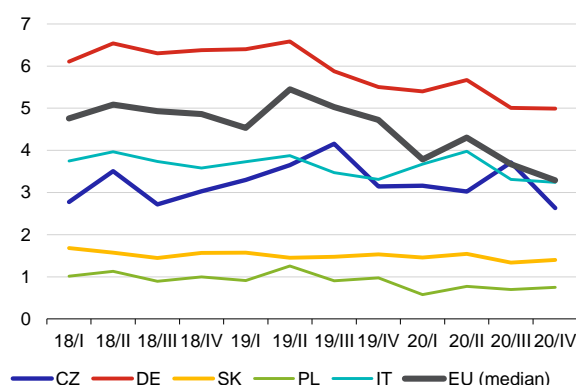
(% of GDP)



Source: Eurostat, CNB calculations

Chart VII.2.11: Investment income: credit

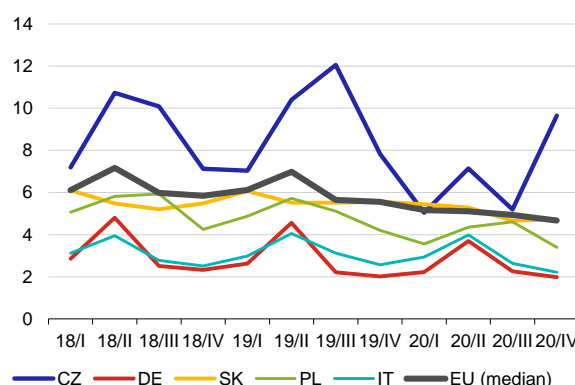
(% of GDP)



Source: Eurostat, CNB calculations

Chart VII.2.12: Investment income: debit

(% of GDP)



Source: Eurostat, CNB calculations

**In the pandemic year 2020, the Czech economy showed a record-high current account surplus both in absolute terms and relative to GDP.** As in other European countries, the anti-pandemic measures hit manufacturing to a larger extent only during the spring months of 2020 and this export-oriented sector recorded a robust recovery in the rest of the year. The recovery in imports was much lower, owing among other factors to a drop in the prices of mineral fuels, of which the Czech economy is a net importer. This resulted in positive net exports of goods. The services surplus was maintained in 2020, as a shortfall in the travel surplus was to an extent dampened by a higher balance on computer and information services. The positive goods and services balance coupled with a marked decline in the investment income outflow led to a record-high current account balance.

**There are many differences between EU countries in how the coronavirus pandemic affected their current accounts.** Although exports and imports of goods and services fell significantly in all the countries, the effect on the resulting balances differed across the individual countries. For export-oriented economies, such as the Czech Republic and Germany, the change in the goods balance is negative, while for many other European countries it is positive. The change in the primary income balance is similarly diverse, especially investment income. Unsurprisingly, the V4 countries (the Czech Republic, Hungary, Poland and Slovakia) have reported an investment income deficit due to an inflow of foreign direct investment over the past decades. However, the deficit decreased in these countries during the coronavirus pandemic, due to decreases on both sides of the balance, which generally led to an increase in the ratio of the current account to GDP. The opposite took place in advanced economies such as Germany and France, which have shown a long-running investment income surplus. The surplus declined in 2020 (both in absolute terms and relative to GDP).

**So, how specific are the dynamics of the Czech current account in the European context? The synthetic variable method is helpful in answering this question.** The synthetic variable method is a modern econometric method that can be used to compare economic units, e.g., countries or regions, over time or in the application of different economic policy measures.<sup>43</sup> On the basis of the

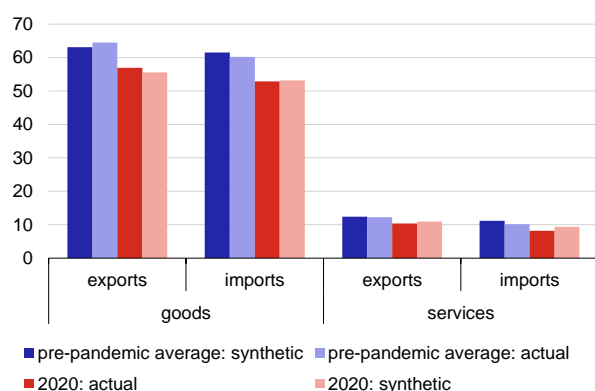
43 Curious readers can learn more about this method in a review article by Abadie (2021). This method was applied successfully in the past on a wide range of interesting issues, such as the economic expenses of the unification of Germany (Abadie et al. 2015), the adoption of a common currency (Žúdel and Melioris, 2016), the introduction of the CNB's foreign exchange commitment (Opatrný, 2017, or Brůha and Tonner, 2018), the effectiveness of anti-epidemic measures (Huber, 2020) and many more.

pre-pandemic characteristics of the EU economies<sup>44</sup>, the method identifies which countries are similar to the Czech Republic in the sense that the observed data for the Czech economy are close to a weighted average of these countries. On the basis of these weights, we subsequently construct a “synthetic” current account of the Czech Republic for the pandemic year of 2020. If such a “synthetic” current account is close to the actually observed current account (in terms of structure and size), the effects of the pandemic on the external position of the Czech Republic can be considered similar to the effects on other similar European countries. If the actual and “synthetic” current accounts differ significantly, the transmission of the pandemic shock to the Czech economy was significantly different from the other countries, which could have a potential impact on the Czech Republic's external balance.

**Using pre-pandemic data and the synthetic variable method, we have identified countries that can be used to replicate the Czech Republic's current account.** We have collected a set of economic pre-pandemic indicators<sup>45</sup> which include the GDP structure by expenditure and sector, GDP per capita (relative to the EU median), the current account structure and the structure of goods exports (in SITC breakdown). Based on these data, the weights of the individual countries that synthesise the Czech economy were estimated. The countries with the greatest weight include Germany, Italy, Poland and Slovakia. These countries combined account for more than 95% of the resulting synthetic indicator, with Slovakia representing more than one-half.

**Chart VII.2.13: Results of the synthetic variable method: goods and services balance**

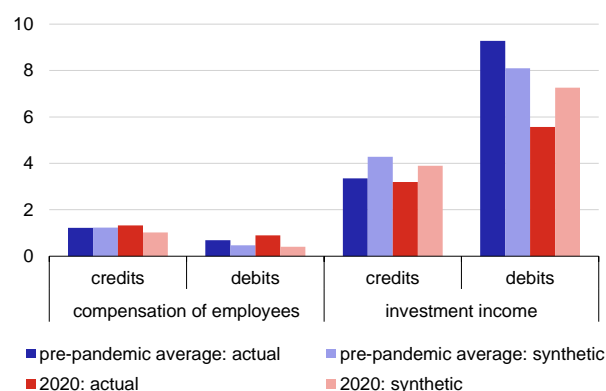
(% of GDP)



Source: Eurostat, calculations

**Chart VII.2.14: Results of the synthetic variable method: income items**

(% of GDP)



Source: Eurostat, CNB calculations

**The results of the synthetic variable method precisely replicate the developments in exports and imports of goods and services in the pre-pandemic period.** The fact that the replication of the observed historical data is highly accurate, which is evident from Charts VII.2.13 and VII.2.14, means that the method can be used to compare actual data in 2020 with their synthetic counterpart. If we compare the ratio of trade to GDP in 2020, real and synthetic, both values are also very similar. This means that the effects of the pandemic on Czech international trade were similar to those in

44 Without the United Kingdom and Croatia. In the case of Croatia, the time series contains too much missing data, and therefore we exclude it from the analysis.

45 We consider annual averages for 2017–2019. We apply three-year averages in order to adjust for any one-off influences in 2019.

structurally similar economies. From this perspective, the Czech Republic's trade dynamics in 2020 were therefore not exceptional.

**The situation is slightly different for primary income.** Compensation of employees is relatively accurately replicated by the synthetic indicator in the pre-pandemic period. In 2020, the synthetic variable method shows somewhat smaller turnovers of employee compensation than actually observed, though the differences are quantitatively insignificant. As far as investment income is concerned, based on the synthetic variable method, we would expect a somewhat higher outflow for this item in 2020. As stated above, the decline in the investment income outflow was due not only to purely macroeconomic factors (a drop in corporate profitability in the pandemic year and a decrease in yields on koruna instruments), but also to the CNB's recommendation that bank dividends for 2019 should not be paid. The discrepancy between the actual and synthetic investment income outflow may therefore indicate that the CNB's recommendation was effective. Despite the discrepancy, the resulting investment income balances in 2020 (actual and synthetic) are similar. For primary income, therefore, it is also possible to summarise that the transmission of the pandemic shock to the current account items was qualitatively similar as in other countries, albeit partly influenced by the central bank's recommendation.

**The synthetic variable method was applied to the current account of the Czech economy in this article.** On the basis of the results of the analyses and data for the pandemic year of 2020, we can conclude that the transmission of the pandemic shock to the Czech external balance was very similar to that in other EU countries. This applies primarily to trade in goods and services and, on a qualitative level, also to primary income.

### Bibliography:

- Abadie, A. (2021): Using Synthetic Controls: Feasibility, Data Requirements, and Methodological Aspects. Forthcoming in *Journal of Economic Literature*, available at <https://economics.mit.edu/files/17847>
- Abadie, A., A. Diamond, J. Hainmueller (2015). Comparative politics and the synthetic control method. *American Journal of Political Science* 59(2), pp 495–510
- Babecká, O., Brůha, J. (2018). International trade developments with a focus on the EU. *Global Economic Outlook*, October, 2018.
- Babecká, O., Brůha, J. (2020). A tale of two crises: An early comparison of foreign trade and economic activity in EU countries. *Global Economic Outlook*, September 2020.
- Brůha, J., J. Tonner (2018). An Exchange Rate Floor as an Instrument of Monetary Policy: An Ex-Post Assessment of the Czech Experience, *Czech Journal of Economics and Finance* 68(6), pp 537–549, December.
- Opatrný, M. (2017). Quantifying the Effects of the CNB's Exchange Rate Commitment: A Synthetic Control Method Approach," *Czech Journal of Economics and Finance* 67(6), pp 539–577, October.
- Žúdel, B., L. Melioris (2016): Five years in a balloon: Estimating the effects of euro adoption in Slovakia using the synthetic control method. *OECD Economics Department Working Papers* 1317.

## VIII. STATISTICAL ANNEX: THE BALANCE OF PAYMENTS IN 2016–2020

| CZK billions  | 2016   | 2017   | 2018   | 2019   | prel. 2020 |
|---|--------|--------|--------|--------|------------|
| <b>A. Current account</b>                               | 85.2   | 79.1   | 24.1   | 19.2   | 203.5      |
| <b>Goods</b>  | 258.5  | 259.3  | 200.9  | 239.8  | 285.2      |
| <i>Exports</i>  | 3199.1 | 3402.0 | 3497.4 | 3579.1 | 3436.1     |
| <i>Imports</i>  | 2940.6 | 3142.7 | 3296.5 | 3339.2 | 3150.9     |
| <b>Services</b>   | 106.6  | 124.6  | 120.0  | 106.0  | 104.6      |
| <i>Manufacturing and repair services</i>                | 31.8   | 40.7   | 41.3   | 47.3   | 45.8       |
| <i>Transport</i>  | 29.9   | 32.6   | 34.8   | 23.3   | 21.2       |
| <i>Travel</i>   | 34.0   | 34.9   | 32.1   | 32.4   | 4.8        |
| <i>Other services</i>                                   | 10.9   | 16.5   | 11.8   | 3.0    | 32.9       |
| <i>Total credits</i>                                    | 595.4  | 636.4  | 665.5  | 698.3  | 604.4      |
| <i>Total debits</i>                                     | 488.9  | 511.8  | 545.6  | 592.3  | 499.8      |
| <b>Primary income</b>                                   | -253.2 | -255.3 | -260.2 | -292.2 | -157.8     |
| <i>Compensation of employees</i>                        | 35.0   | 37.2   | 30.5   | 16.3   | 23.7       |
| <i>Investment income</i>                                | -312.9 | -315.2 | -313.3 | -333.6 | -207.9     |
| <i>Other primary income</i>                             | 24.6   | 22.7   | 22.6   | 25.1   | 26.5       |
| <i>Total credits</i>                                    | 202.8  | 271.7  | 258.8  | 304.9  | 285.7      |
| <i>Total debits</i>                                     | 456.0  | 527.0  | 519.0  | 597.1  | 443.4      |
| <b>Secondary income</b>                                 | -26.7  | -49.5  | -36.6  | -34.4  | -28.5      |
| <i>Credits</i>  | 72.6   | 60.4   | 81.0   | 91.4   | 107.4      |
| <i>Debits</i>   | 99.3   | 109.9  | 117.6  | 125.8  | 135.9      |
| <b>B. Capital account</b>                               | 51.7   | 44.9   | 12.7   | 24.5   | 71.2       |
| <i>Credits</i>  | 56.4   | 61.7   | 61.5   | 104.3  | 163.1      |
| <i>Debits</i>   | 4.7    | 16.8   | 48.9   | 79.8   | 91.9       |
| <b>C. Financial account</b>                             | 122.1  | 115.6  | 60.8   | 8.4    | 243.9      |
| <b>Direct investment</b>                                | -186.5 | -45.9  | -51.0  | -137.1 | -73.1      |
| <i>of which: net reinvested earnings</i>                | -46.0  | -80.2  | -38.9  | -39.4  | -52.2      |
| <i>abroad</i>   | 78.6   | 218.0  | 132.3  | 109.0  | 71.8       |
| <i>in the Czech Republic</i>                            | 265.2  | 263.8  | 183.3  | 246.2  | 144.9      |
| <i>0.0</i>  | 0.0    | 0.0    | 0.0    | 0.0    | 0.0        |
| <b>Portfolio investment</b>                             | -169.5 | -268.3 | 30.1   | -104.7 | -135.7     |
| <b>Assets</b>   | 21.9   | 67.5   | -9.8   | -4.1   | 50.8       |
| <i>Equity and IF shares (equity securities)</i>         | 11.2   | 63.8   | 19.3   | 10.2   | 41.1       |
| <i>Debt securities</i>                                  | 10.8   | 3.6    | -29.1  | -14.3  | 9.7        |
| <b>Liabilities</b>                                      | 191.5  | 335.7  | -40.0  | 100.6  | 186.5      |
| <i>Equity and IF shares (equity securities)</i>         | 9.7    | 20.3   | 2.4    | -2.4   | 3.0        |
| <i>Debt securities</i>                                  | 181.7  | 315.4  | -42.4  | 103.0  | 183.5      |
| <i>0.0</i>  | 0.0    | 0.0    | 0.0    | 0.0    | 0.0        |
| <b>Financial derivatives</b>                            | 11.3   | -14.2  | -15.3  | 1.0    | 12.2       |
| <i>0.0</i>  | 0.0    | 0.0    | 0.0    | 0.0    | 0.0        |
| <b>Other investment</b>                                 | -96.6  | -802.5 | 47.0   | 138.9  | 392.7      |
| <i>of which: government</i>                             | 13.7   | 7.7    | -31.2  | 34.6   | 18.7       |
| <i>corporations</i>                                     | 155.9  | -138.1 | 36.5   | -3.8   | 59.3       |
| <i>banks</i>  | -266.3 | -672.0 | 41.6   | 108.2  | 314.7      |
| <i>0.0</i>  | 0.0    | 0.0    | 0.0    | 0.0    | 0.0        |
| <b>Reserve assets</b>                                   | 563.5  | 1246.4 | 50.0   | 110.2  | 47.8       |
| <b>D. Balance from current and capital account</b>      | 136.8  | 124.0  | 36.8   | 43.6   | 274.7      |
| <b>Balance from fin. acc. (+ lending / - borrowing)</b> | 122.1  | 115.6  | 60.8   | 8.4    | 243.9      |
| <b>Errors and omissions</b>                             | -14.7  | -8.4   | 24.0   | -35.3  | -30.8      |



## ABBREVIATIONS

|        |   |
|--------|---|
| AUD    | Australian dollar   |
| BPM6   | Balance of Payments Manual, 6 <sup>th</sup> edition           |
| CAD    | Canadian dollar   |
| CapA   | capital account   |
| CA     | current account   |
| CNB    | Czech National Bank   |
| CZ     | Czech Republic  |
| CZ-CPA | classification of products                                    |
| CZK    | Czech koruna  |
| CZSO   | Czech Statistical Office                                      |
| DI     | direct investment   |
| DSGE   | dynamic stochastic general equilibrium                        |
| ECB    | European Central Bank   |
| EIB    | European Investment Bank                                      |
| ERM II | European Exchange Rate Mechanism                              |
| EU     | European Union  |
| EUR    | euro  |
| FA     | financial account   |
| FDI    | foreign direct investment                                     |
| GDP    | gross domestic product  |
| GNI    | gross national income   |
| GNP    | gross national product  |
| IF     | investment fund   |
| IFO    | Leibniz Institute for Economic Research, University of Munich |
| IMF    | International Monetary Fund                                   |
| JPY    | Japanese yen  |
| MIP    | Macroeconomic Imbalance Procedure                             |
| NACE   | classification of economic activities                         |
| pp     | percentage point(s)   |
| prel.  | preliminary outcome   |

|      |  |
|------|--|
| SEK  | Swedish krona                                |
| SITC | Standard International Trade Classification  |
| USA  | United States of America                     |
| USD  | US dollar                                    |
| V4   | Czech Republic, Hungary, Poland and Slovakia |
| VAT  | value added tax                              |