

C ICT investment

Investments into ICT equipment and software

Investment into ICT equipment and software (hereafter **ICT investment**) is **defined** as the acquisition of equipment and computer software that is used in production for more than one year. ICT has **three components**: information technology equipment (computers and related hardware); communications equipment; and software.

Investment here shall mean the **gross fixed capital formation** (GFCF: P.51), which includes mainly acquisitions of fixed assets (P.511) and expenses for transition of non-produced assets into ownership (P.512). The definition of GFCF follows **The European System of Regional and National Accounts** (ESA 2010): <http://ec.europa.eu/eurostat/web/esa-2010>

According to **the ESA 2010**, the investments into computer and communication equipment became a part of a newly created item of non-financial assets as **ICT equipment (AN.1132)**.

Computer software and databases (AN.1173) involve according to the ESA 2010 two sub-items as follows: **Computer software (AN.11731)** involves computer programs, program descriptions and supporting materials for both systems & application SW and **Databases (AN.11732)** that include data files organized so as to enable cost-effective data access and use.

ICT equipment can be also **classified** to the groups of the **Classification of Products by Activity (CZ-CPA)** as follows: 26.2 Computers and peripheral equipment and 26.3 Communication equipment.

Detail description of **CZ-CPA** is available here (*only in Czech*): <https://www.czso.cz/csu/czso/klasifikace-produkce-cz-cpa->

Data on investments into ICT equipment and software are available by **institutional sectors** and **economic activities** of the monitored entities according to the CZ NACE classification.

Household consumption expenditures on ICT equipment and services

Data on ICT investment in this chapter are supplemented with data on the final consumption of households in the **national concept**, which includes expenditure of residents in Czechia and abroad spent on ICT dedicated to direct satisfaction of personal needs and wishes of individuals.

ICT is **classified** here to the **International standard of the Classification of Individual Consumption by Purpose (CZ-COICOP)** as follows:

- **ICT equipment**: 08.2 Telephone equipment and 09.1 Audio-visual and information processing equipment (Computers and consumer electronics).
- **ICT services**: 08.3 Telephone services that include primarily payments for calls via landline, mobile phone and payments for Internet connection.

*Note: Item **telecommunication** includes 08.2 Telephone equipment and 08.3 Telephone (ICT) services.*

Detail description of CZ- COICOP is available here (*only in Czech*): https://www.czso.cz/csu/czso/klasifikace_individualni_spořeba_cz_coicop-

The both data, the total ICT investment and final household consumption expenditure on ICT come from **the Annual National Accounts Statistics**. **Data for the 2020 are preliminary**. For more information, see: <http://apl.czso.cz/pll/rocenka/rocenka.indexnu?mylang=EN>

Data for the **international comparisons** come from the **Eurostat database** and refer to the reported or nearest available year.

For more information on ICT investment see (*only in Czech*): https://www.czso.cz/csu/czso/investice_v_ict

C ICT investment

Table C1 ICT investment in Czechia

CZK million

	2018	2019	2020
Total	233 830	268 874	284 305
ICT equipment	82 840	87 703	91 184
Software	150 990	181 171	193 121
Industry (CZ-NACE Section)			
Agriculture, forestry and fishing	2 197	3 099	1 145
Mining and quarrying	578	650	260
Manufacturing	58 101	65 166	70 964
Electricity, gas and water supply	6 035	7 257	6 418
Construction	4 416	6 572	7 163
Wholesale and retail trade	16 895	18 699	17 529
Transportation and storage	7 739	8 881	7 722
Accommodation and food service activities	2 030	2 768	3 180
Information and communication	68 858	80 261	87 862
Financial and insurance activities	27 208	33 026	35 533
Real estate activities	2 466	3 033	2 523
Professional, scientific and technical activities	14 651	15 654	22 774
Administrative and support service activities	2 919	4 298	3 905
Public administration and defence	9 225	9 292	10 743
Education	3 708	3 069	3 024
Human health and social work activities	4 224	4 375	4 791
Arts, entertainment and recreation	1 905	2 104	1 933
Other services	675	670	464

Figure C1 ICT investment

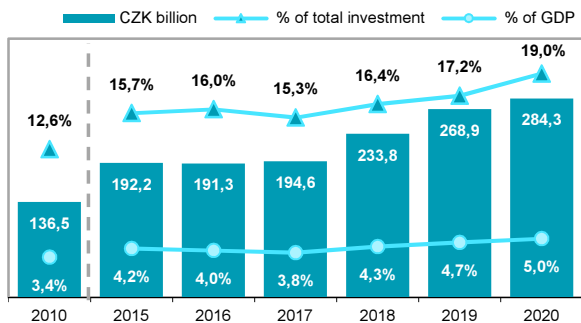
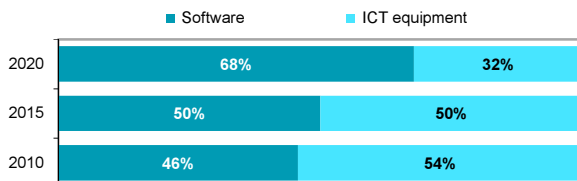


Figure C2 ICT investment, by asset (%)



Source: CZSO, Annual National Accounts Statistics

C ICT investment

Figure C3 ICT investment (% of GDP)

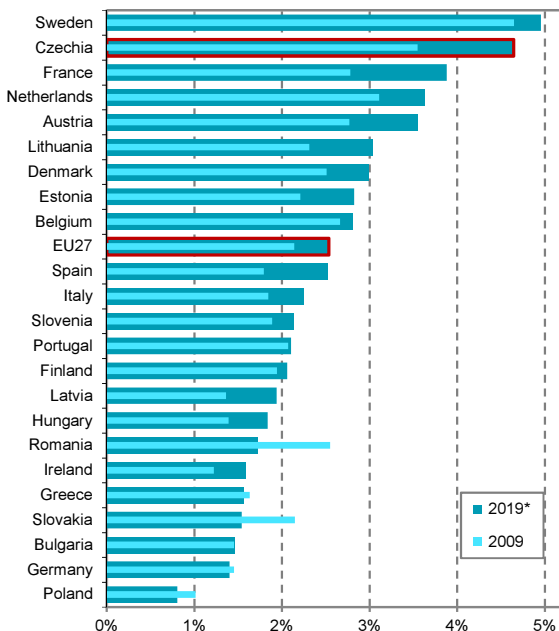
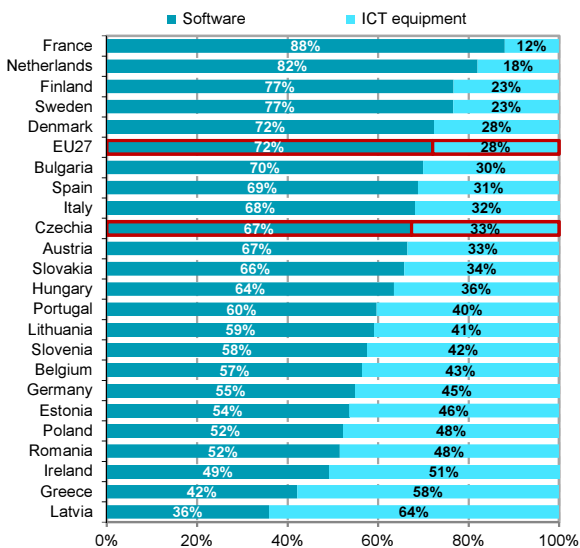


Figure C4 ICT investment, by asset (%); 2019*



* or the nearest available year

Source: CZSO calculations based on Eurostat data

C ICT investment

Table C2 ICT equipment investment in Czechia

CZK million

	2018	2019	2020
Total	82 840	87 703	91 184
Computer equipment	63 956	68 321	71 327
Communication equipment	18 884	19 382	20 121
Industry (CZ-NACE Section)			
Agriculture, forestry and fishing	1 726	2 505	489
Mining and quarrying	483	559	160
Manufacturing	40 263	42 993	46 309
Electricity, gas and water supply	3 104	4 101	2 929
Construction	2 947	4 894	5 329
Wholesale and retail trade	3 985	4 577	1 931
Transportation and storage	2 252	2 794	1 436
Accommodation and food service activities	1 615	2 143	2 507
Information and communication	9 549	5 210	6 315
Financial and insurance activities	1 662	4 316	7 659
Real estate activities	715	829	131
Professional, scientific and technical activities	3 491	4 073	7 626
Administrative and support service activities	615	773	140
Public administration and defence	3 898	2 719	3 100
Education	2 605	1 832	1 765
Human health and social work activities	3 010	2 480	2 552
Arts, entertainment and recreation	623	606	532
Other services	297	299	274

Figure C5 ICT equipment investment

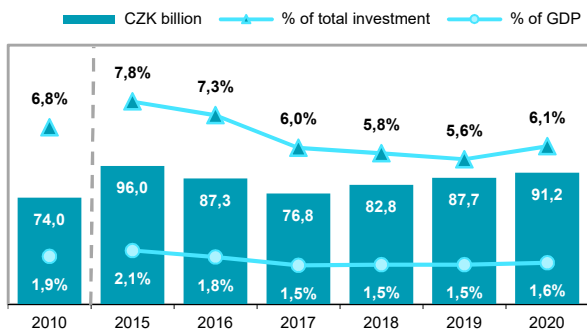
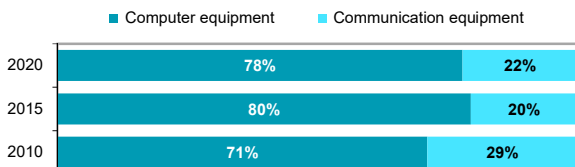


Figure C6 ICT equipment investment, by asset



Source: CZSO, Annual National Accounts Statistics

C ICT investment

Figure C7 ICT equipment investment (% GDP)

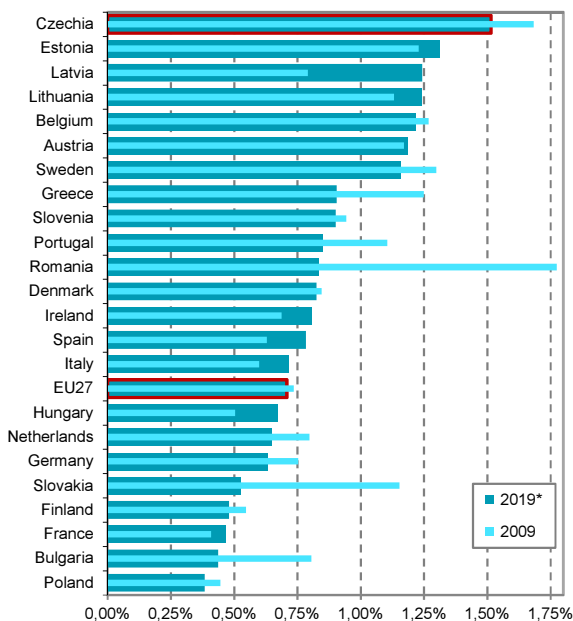
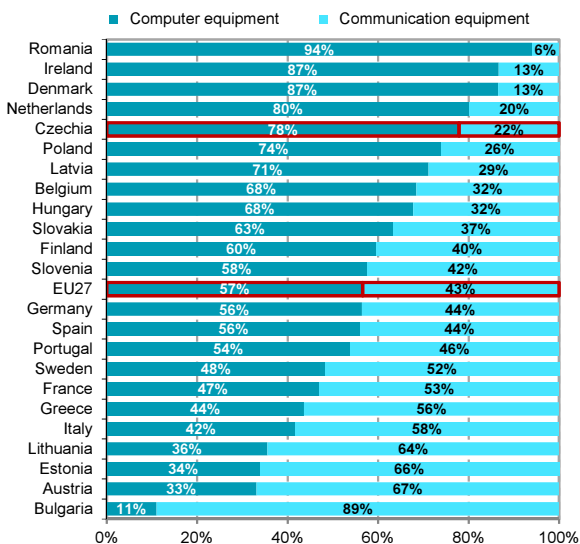


Figure C8 ICT equipment investment, by asset (%); 2019*



* or the nearest available year

Source: CZSO calculations based on Eurostat data

C ICT investment

Table C3 Software investment in Czechia

CZK million

	2018	2019	2020
Total	150 990	181 171	193 121
Industry (CZ-NACE Section)			
Agriculture, forestry and fishing	471	594	656
Mining and quarrying	95	91	100
Manufacturing	17 838	22 173	24 655
Electricity, gas and water supply	2 931	3 156	3 489
Construction	1 469	1 678	1 834
Wholesale and retail trade	12 910	14 122	15 598
Transportation and storage	5 487	6 087	6 286
Accommodation and food service activities	415	625	673
Information and communication	59 309	75 051	81 547
Financial and insurance activities	25 546	28 710	27 874
Real estate activities	1 751	2 204	2 392
Professional, scientific and technical activities	11 160	11 581	12 366
Administrative and support service activities	2 304	3 525	3 765
Public administration and defence	5 327	6 573	7 643
Education	1 103	1 237	1 259
Human health and social work activities	1 214	1 895	2 239
Arts, entertainment and recreation	1 282	1 498	1 401
Other services	378	371	190

Figure C9 Software investment

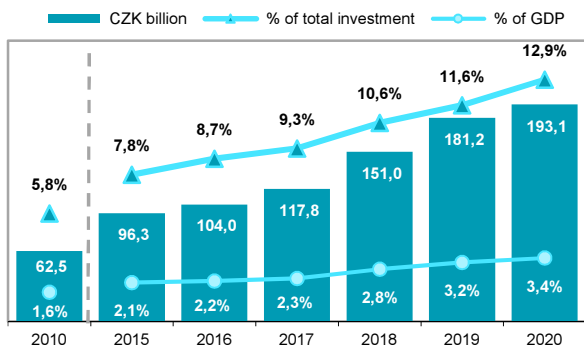
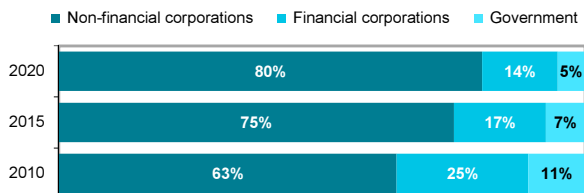


Figure C10 Software investment, by institutional sectors



Source: CZSO, Annual National Accounts Statistics

C ICT investment

Figure C11 Software investment
(% of total investment)

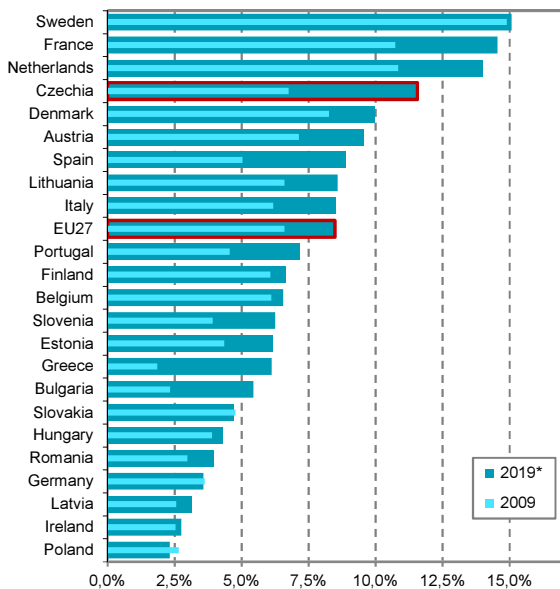
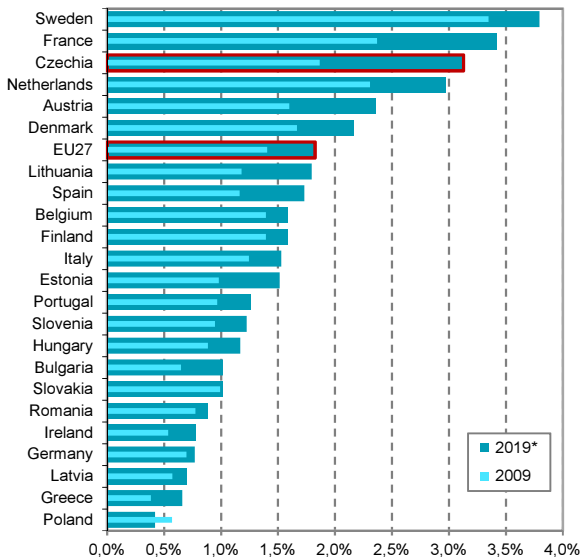


Figure C12 Software investment (% of GDP)



* or the nearest available year

Source: CZSO calculations based on Eurostat data

C ICT investment

Table C4 Household consumption expenditures on ICT equipment and services in Czechia

	CZK million		
	2018	2019	2020
Total	102 382	109 608	114 878
ICT equipment	38 837	41 015	42 236
Telephone equipment	8 119	9 432	8 627
Computers and consumer electronics	30 718	31 583	33 609
ICT (telephone) services	63 545	68 593	72 642

Figure C13 Household consumption expenditures on ICT

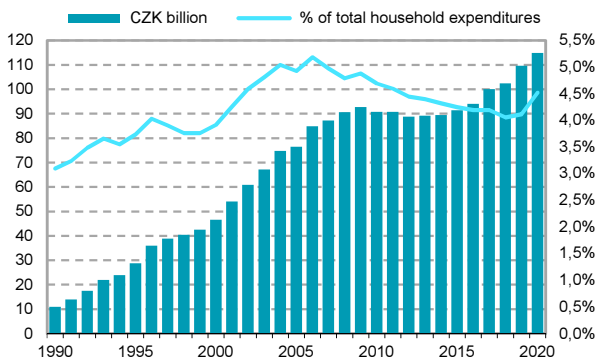


Figure C14 Household expenditures on ICT, by type of product

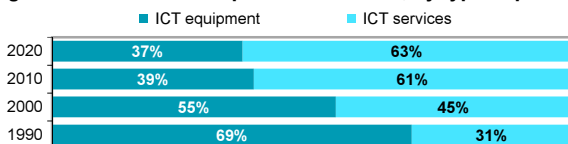
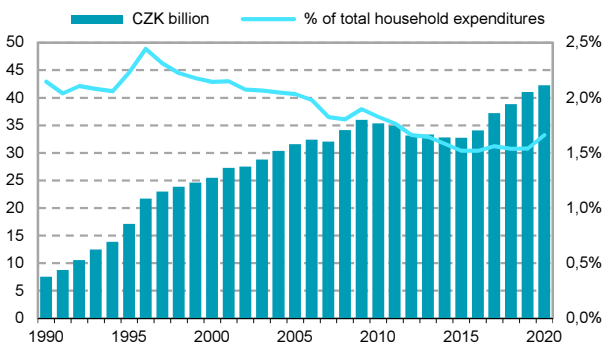


Figure C15 Households expenditures on ICT equipment



Source: CZSO, Annual National Accounts Statistics

C ICT investment

Figure C16 Household consumption expenditures on ICT
(% of total households consumption expenditures)

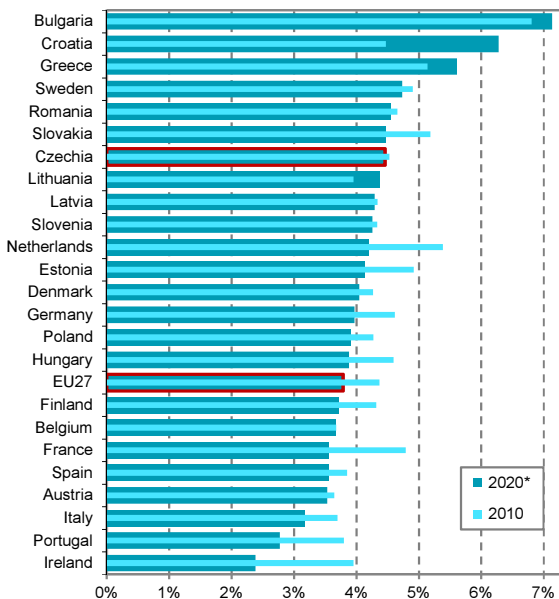
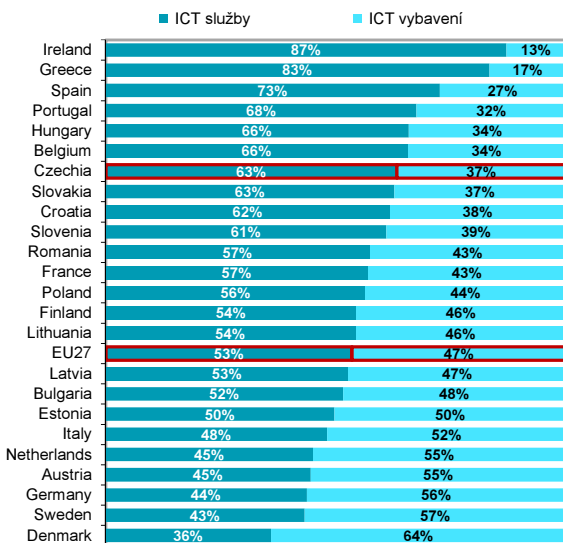


Figure C17 Household consumption expenditures on ICT, by type of product; 2020* (%)



* or the nearest available year

Source: CZSO calculations based on Eurostat data

C ICT investment

Table C5 Household consumption expenditures on telecommunication in Czechia

	CZK million		
	2018	2019	2020
Total	71 664	78 025	81 269
Telephone equipment	8 119	9 432	8 627
Telephone (ICT) services	63 545	68 593	72 642

Figure C18 Household expenditures on telecommunication

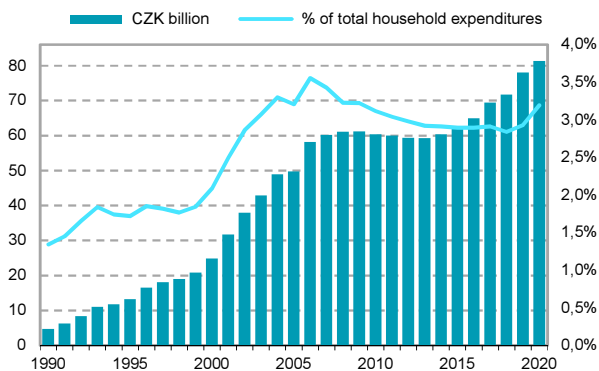


Figure C19 Household expenditures on telecommunication, by type of product

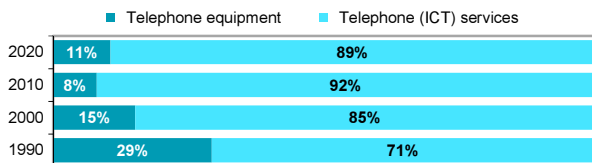
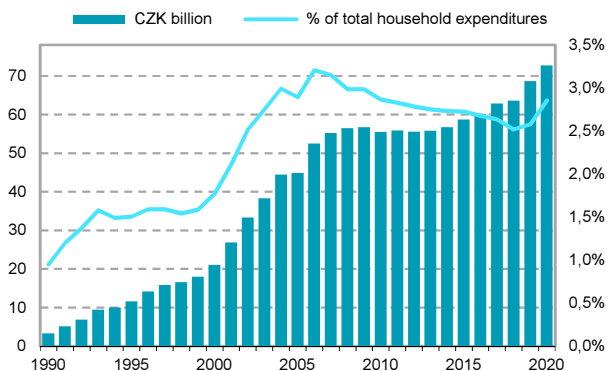


Figure C20 Household expenditures on ICT services



Source: CZSO, Annual National Accounts Statistics

C ICT investment

Figure C21 Household consumption expenditures on ICT services (% of total households consumption expenditures)

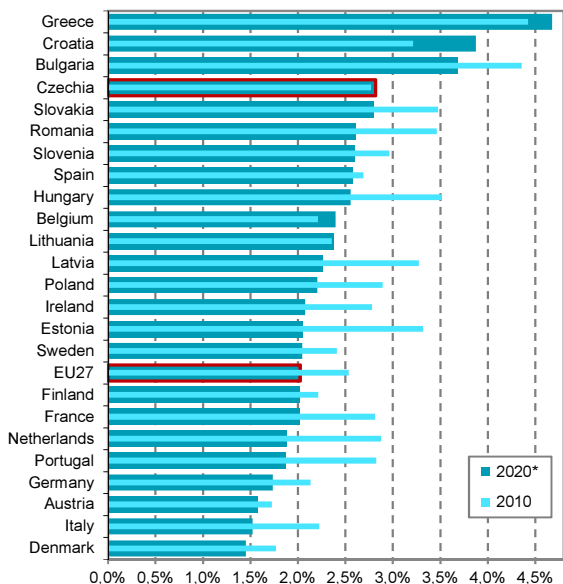
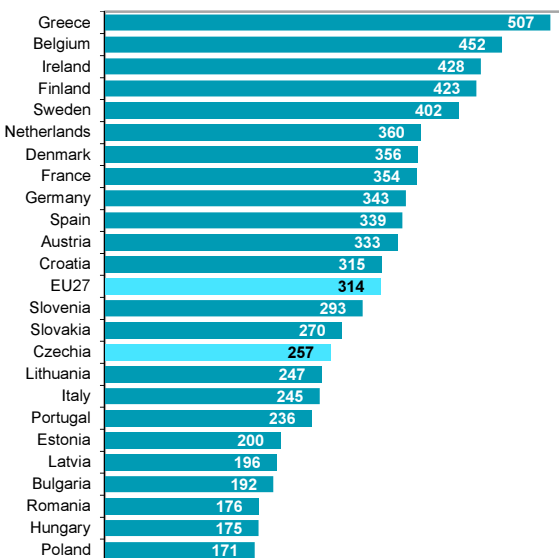


Figure C22 Household consumption expenditures on ICT services; 2020* (EUR per capita)



* or the nearest available year

Source: CZSO calculations based on Eurostat data

C ICT investmentT

Figure C23 Household consumption expenditures on ICT equipment (% of total households consumption expenditures)

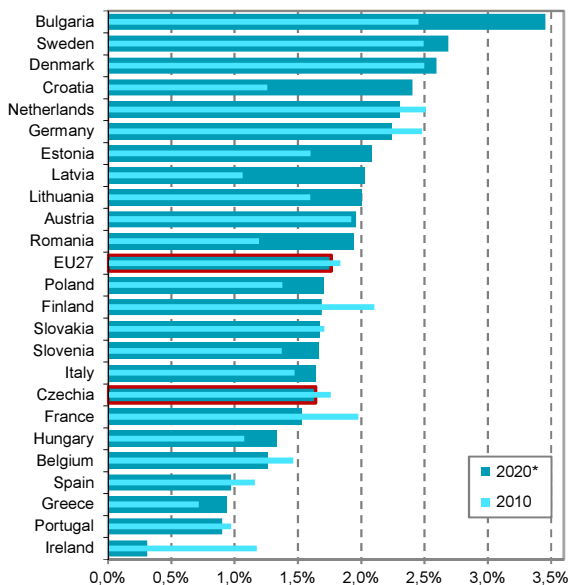
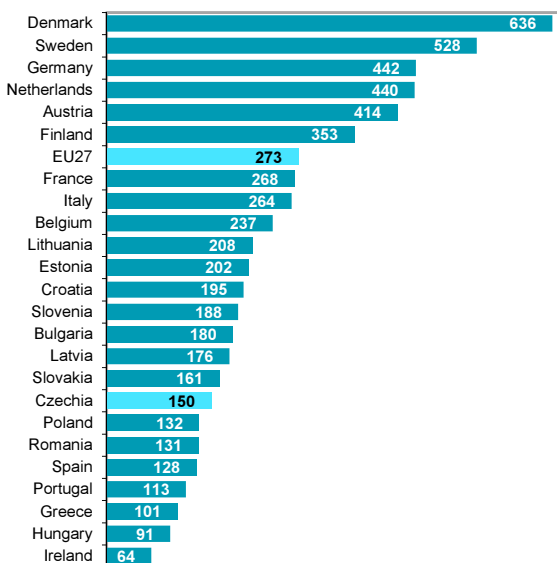


Figure C24 Household consumption expenditures on ICT equipment; 2020* (EUR per capita)



* or the nearest available year

Source: CZSO calculations based on Eurostat data