

II. Euro foreign exchange reference rates of the European Central Bank *

1. End-of-month and daily rates

EUR 1 = CU ...

		EU member countries						
		Bulgaria	Czechia	Denmark	Hungary	Poland	Romania	Sweden
Period		Bulgarian lev BGN	Czech koruna CZK	Danish krone DKK	Hungarian forint HUF	Polish zloty PLN	Romanian leu RON	Swedish krona SEK
2023	Oct.	1.9558	24.558	7.4647	382.13	4.4405	4.9659	11.8275
	Nov.	1.9558	24.292	7.4548	380.75	4.3490	4.9718	11.4308
	Dec.	1.9558	24.724	7.4529	382.80	4.3395	4.9756	11.0960
2024	Jan.	1.9558	24.891	7.4550	384.90	4.3330	4.9758	11.2682
	Feb.	1.9558	25.363	7.4540	393.48	4.3208	4.9706	11.2150
	Mar.	1.9558	25.305	7.4580	395.26	4.3123	4.9735	11.5250
	Apr.	1.9558	25.140	7.4583	390.68	4.3178	4.9759	11.7530
	May	1.9558	24.709	7.4588	388.83	4.2645	4.9767	11.4210
	June	1.9558	25.025	7.4575	395.10	4.3090	4.9773	11.3595
	July	1.9558	25.457	7.4621	395.78	4.2908	4.9749	11.6125
	Aug.	1.9558	25.031	7.4589	392.53	4.2763	4.9768	11.3355
	Sep.	1.9558	25.184	7.4560	396.88	4.2788	4.9753	11.3000
	Oct.	1.9558	25.327	7.4601	408.28	4.3508	4.9749	11.6308
2024	Oct. 28	1.9558	25.348	7.4585	404.83	4.3500	4.9738	11.4710
	29	1.9558	25.372	7.4588	405.23	4.3480	4.9749	11.5170
	30	1.9558	25.377	7.4606	408.38	4.3463	4.9747	11.5660
	31	1.9558	25.327	7.4601	408.28	4.3508	4.9749	11.6308
	Nov. 1	1.9558	25.330	7.4562	407.75	4.3543	4.9745	11.6115
	4	1.9558	25.288	7.4578	407.83	4.3423	4.9750	11.6445
	5	1.9558	25.343	7.4586	409.25	4.3580	4.9756	11.6665
	6	1.9558	25.339	7.4570	410.08	4.3493	4.9755	11.6515
	7	1.9558	25.262	7.4574	404.58	4.3253	4.9759	11.5990
	8	1.9558	25.208	7.4573	406.68	4.3255	4.9748	11.5900
	11	1.9558	25.339	7.4574	409.63	4.3440	4.9749	11.5920
	12	1.9558	25.390	7.4591	410.70	4.3503	4.9763	11.5420
	13	1.9558	25.295	7.4598	408.70	4.3425	4.9764	11.5895
	14	1.9558	25.305	7.4593	407.05	4.3383	4.9764	11.6030
	15	1.9558	25.286	7.4590	407.23	4.3200	4.9768	11.5905
	18	1.9558	25.282	7.4591	408.70	4.3278	4.9765	11.6000
	19	1.9558	25.284	7.4591	407.45	4.3303	4.9769	11.5840
	20	1.9558	25.286	7.4592	409.60	4.3308	4.9765	11.6050
	21	1.9558	25.346	7.4588	410.50	4.3418	4.9770	11.6070
	22	1.9558	25.358	7.4577	411.13	4.3373	4.9767	11.5530

		Other European and non-European countries						
		Australia	Brazil	Canada	China	Hong Kong	Iceland	India
Period		Australian dollar AUD	Brazilian real BRL	Canadian dollar CAD	Yuan (renminbi) CNY	Hong Kong dollar HKD	Icelandic krona ISK	Indian rupee INR
2023	Oct.	1.6739	5.3743	1.4712	7.7686	8.3079	147.50	88.4195
	Nov.	1.6542	5.3984	1.4870	7.8008	8.5384	150.70	91.1143
	Dec.	1.6263	5.3618	1.4642	7.8509	8.6314	150.50	91.9045
2024	Jan.	1.6468	5.3749	1.4558	7.7789	8.4734	148.30	90.0010
	Feb.	1.6684	5.4054	1.4719	7.7888	8.4735	149.30	89.7458
	Mar.	1.6607	5.4032	1.4672	7.8144	8.4594	150.30	90.1365
	Apr.	1.6423	5.4928	1.4672	7.7609	8.3817	150.30	89.4155
	May	1.6315	5.6418	1.4804	7.8577	8.4838	149.10	90.5255
	June	1.6079	5.8915	1.4670	7.7748	8.3594	148.90	89.2495
	July	1.6635	6.0874	1.4977	7.8194	8.4589	149.90	90.6250
	Aug.	1.6301	6.2155	1.4941	7.8585	8.6455	152.90	92.9485
	Sep.	1.6166	6.0504	1.5133	7.8511	8.6933	150.70	93.8130
	Oct.	1.6559	6.2635	1.5134	7.7436	8.4598	148.90	91.4930
2024	Oct. 28	1.6372	6.1550	1.5030	7.7099	8.4072	149.10	90.9580
	29	1.6423	6.1613	1.4981	7.6895	8.3716	148.70	90.5700
	30	1.6460	6.2564	1.5072	7.7054	8.4050	148.50	90.9430
	31	1.6559	6.2635	1.5134	7.7436	8.4598	148.90	91.4930
	Nov. 1	1.6530	6.2813	1.5144	7.7403	8.4660	149.10	91.4955
	4	1.6516	6.3344	1.5155	7.7363	8.4761	148.90	91.7180
	5	1.6452	6.3039	1.5128	7.7405	8.4687	148.90	91.6565
	6	1.6301	6.2127	1.4893	7.6779	8.3167	148.30	90.1810
	7	1.6196	6.0988	1.4960	7.7159	8.3818	148.30	90.9355
	8	1.6259	6.2034	1.4983	7.7233	8.3745	148.70	90.8900
	11	1.6186	6.1877	1.4848	7.6719	8.2812	148.30	89.8935
	12	1.6206	6.1131	1.4799	7.6781	8.2586	147.90	89.5888
	13	1.6299	6.1031	1.4840	7.6626	8.2682	147.90	89.6915
	14	1.6285	6.1122	1.4759	7.6267	8.1975	146.30	88.9645
	15	1.6345	6.1335	1.4861	7.6492	8.2385	145.70	89.3465
	18	1.6352	6.1030	1.4873	7.6442	8.2140	144.30	89.0765
	19	1.6264	6.1212	1.4833	7.6578	8.2335	145.30	89.2935
	20	1.6225	6.0975	1.4767	7.6528	8.2208	145.50	89.1025
	21	1.6141	6.1277	1.4700	7.6204	8.1921	145.90	88.9158
	22	1.6018	6.0483	1.4561	7.5458	8.1052	145.70	87.9290

* See Explanatory notes, p. 48.

II. Euro foreign exchange reference rates of the European Central Bank *

1. End-of-month and daily rates (cont'd)

EUR 1 = CU ...

Other European and non-European countries (cont'd)									
Period	Indonesia Indonesian rupiah IDR	Israel New shekel ILS	Japan Japanese yen JPY	Korea, Republic of South Korean won KRW	Malaysia Malaysian ringgit MYR	Mexico Mexican peso MXN	New Zealand New Zealand dollar NZD	Norway Norwegian krone NOK	
2023 Oct.	16,868.28	4.2756	160.30	1,434.66	5.0594	19.1551	1.8224	11.8735	
Nov.	16,981.14	4.0597	161.19	1,418.78	5.0933	19.0235	1.7762	11.7200	
Dec.	17,079.71	3.9993	156.33	1,433.66	5.0775	18.7231	1.7504	11.2405	
2024 Jan.	17,076.29	3.9431	160.19	1,444.63	5.1259	18.5817	1.7705	11.3510	
Feb.	17,038.18	3.8736	162.53	1,447.43	5.1375	18.4969	1.7807	11.4920	
Mar.	17,157.87	3.9799	163.45	1,458.67	5.1168	17.9179	1.8092	11.6990	
Apr.	17,422.11	4.0172	168.27	1,479.67	5.1130	18.1895	1.8035	11.8150	
May	17,641.72	4.0342	170.52	1,501.11	5.1080	18.4387	1.7696	11.3830	
June	17,487.21	4.0200	171.94	1,474.86	5.0501	19.5654	1.7601	11.3965	
July	17,634.43	4.0822	162.76	1,485.96	4.9749	20.3317	1.8289	11.8175	
Aug.	17,180.03	4.0245	161.19	1,478.60	4.7901	21.7581	1.7709	11.6620	
Sep.	16,975.88	4.1491	159.82	1,469.11	4.6167	21.9842	1.7616	11.7645	
Oct.	17,105.85	4.0441	166.30	1,500.05	4.7652	21.8087	1.8220	11.9385	
2024 Oct. 28	17,016.01	4.0327	165.18	1,496.45	4.7177	21.6223	1.8059	11.9120	
29	16,993.40	4.0298	165.66	1,496.40	4.7172	21.5719	1.8076	11.8415	
30	16,966.73	4.0214	165.91	1,493.02	4.7359	21.8174	1.8099	11.8785	
31	17,105.85	4.0441	166.30	1,500.05	4.7652	21.8087	1.8220	11.9385	
Nov. 1	17,132.28	4.0681	165.54	1,498.21	4.7660	21.7247	1.8164	11.9600	
4	17,190.86	4.0879	165.47	1,497.97	4.7678	21.9187	1.8196	11.9465	
5	17,180.21	4.0828	165.93	1,503.71	4.7353	21.9579	1.8169	11.9600	
6	16,976.60	4.0115	165.05	1,500.90	4.7095	22.0755	1.7997	11.9090	
7	16,889.15	4.0094	165.71	1,495.78	4.7492	21.3897	1.7932	11.7485	
8	16,801.68	4.0240	164.18	1,495.41	4.7208	21.5349	1.7970	11.7735	
11	16,750.08	3.9832	163.82	1,489.97	4.6971	21.8559	1.7857	11.7865	
12	16,770.14	3.9820	163.71	1,492.15	4.7139	21.6428	1.7848	11.7385	
13	16,716.39	3.9774	164.71	1,487.40	4.7278	21.7942	1.7941	11.7645	
14	16,803.82	3.9734	164.24	1,478.78	4.7193	21.7209	1.7958	11.7590	
15	16,810.00	3.9586	164.36	1,476.23	4.7311	21.5697	1.8015	11.6990	
18	16,732.73	3.9468	163.74	1,474.49	4.7278	21.5023	1.8062	11.7170	
19	16,759.52	3.9611	162.71	1,472.84	4.7315	21.4956	1.7949	11.6595	
20	16,790.04	3.9413	164.42	1,474.40	4.7228	21.3036	1.7947	11.6440	
21	16,732.97	3.9291	162.53	1,471.60	4.6999	21.4444	1.7924	11.6200	
22	16,569.60	3.8717	160.84	1,464.43	4.6516	21.2742	1.7824	11.5680	

Other European and non-European countries (cont'd)									
Period	Philippines Philippine peso PHP	Singapore Singapore dollar SGD	South Africa South African rand ZAR	Switzerland Swiss franc CHF	Thailand Thai baht THB	Turkey Turkish lira TRY	United Kingdom Pound sterling GBP	United States US dollar USD	
2023 Oct.	60.295	1.4525	19.9507	0.9607	38.266	30.0455	0.87366	1.0619	
Nov.	60.623	1.4602	20.5703	0.9562	38.494	31.5441	0.86368	1.0931	
Dec.	61.283	1.4591	20.3477	0.9260	37.973	32.6531	0.86905	1.1050	
2024 Jan.	61.023	1.4517	20.3238	0.9348	38.461	32.8984	0.85435	1.0837	
Feb.	60.858	1.4570	20.9007	0.9534	38.909	33.8067	0.85655	1.0826	
Mar.	60.797	1.4587	20.5226	0.9766	39.412	34.9487	0.85510	1.0811	
Apr.	61.830	1.4593	20.0682	0.9787	39.732	34.7045	0.85478	1.0718	
May	63.604	1.4663	20.2927	0.9818	39.925	34.9691	0.85365	1.0852	
June	62.560	1.4513	19.4970	0.9634	39.319	35.1868	0.84638	1.0705	
July	63.218	1.4491	19.7400	0.9533	38.629	35.9085	0.84380	1.0828	
Aug.	62.309	1.4441	19.5358	0.9416	37.541	37.7651	0.84120	1.1087	
Sep.	62.740	1.4342	19.2258	0.9439	36.107	38.2693	0.83543	1.1196	
Oct.	63.364	1.4377	19.1869	0.9412	36.754	37.2680	0.83753	1.0882	
2024 Oct. 28	62.969	1.4302	19.1877	0.9367	36.538	37.1009	0.83290	1.0818	
29	62.857	1.4287	19.1063	0.9369	36.400	36.9491	0.83020	1.0774	
30	63.010	1.4329	19.1535	0.9393	36.522	37.0855	0.83425	1.0815	
31	63.364	1.4377	19.1869	0.9412	36.754	37.2680	0.83753	1.0882	
Nov. 1	63.525	1.4392	19.1111	0.9427	36.873	37.3758	0.83998	1.0885	
4	63.762	1.4356	19.1248	0.9410	36.736	37.4528	0.84063	1.0904	
5	63.553	1.4351	19.0277	0.9402	36.652	37.4292	0.83920	1.0897	
6	62.949	1.4281	18.9842	0.9368	36.705	36.6357	0.83223	1.0695	
7	63.100	1.4258	18.7328	0.9432	36.798	36.9319	0.83185	1.0785	
8	62.850	1.4251	18.8777	0.9393	36.695	37.0104	0.83188	1.0772	
11	62.461	1.4197	19.0171	0.9369	36.703	36.5670	0.82680	1.0651	
12	62.273	1.4204	19.1584	0.9354	36.942	36.5039	0.82835	1.0617	
13	62.327	1.4214	19.1406	0.9379	36.861	36.5216	0.83413	1.0629	
14	61.972	1.4175	19.3136	0.9369	36.887	36.1969	0.83158	1.0533	
15	62.162	1.4187	19.2353	0.9389	36.861	36.4294	0.83455	1.0583	
18	61.929	1.4186	19.0768	0.9364	36.758	36.4467	0.83560	1.0552	
19	62.314	1.4163	19.0970	0.9329	36.521	36.5558	0.83638	1.0578	
20	62.282	1.4173	19.1266	0.9342	36.581	36.4025	0.83380	1.0562	
21	62.116	1.4144	19.0284	0.9294	36.467	36.2958	0.83273	1.0526	
22	61.368	1.4034	18.7942	0.9272	35.968	35.9737	0.83205	1.0412	

* See Explanatory notes, p. 48.