

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 ¹	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		
2025 Apr.	1.9558	24.920	7.4636	404.08	4.2753	4.9782	10.9715		
May	1.9558	24.918	7.4587	403.60	4.2498	5.0612	10.8735		
June	1.9558	24.746	7.4609	399.80	4.2423	5.0785	11.1465		
July	1.9558	24.571	7.4626	400.00	4.2728	5.0757	11.1575		
Aug.	1.9558	24.458	7.4642	396.90	4.2665	5.0728	11.0550		
Sep.	1.9558	24.335	7.4649	390.26	4.2698	5.0806	11.0565		
Oct.	1.9558	24.327	7.4677	388.10	4.2560	5.0858	10.9250		
Nov.	1.9558	24.177	7.4688	381.43	4.2390	5.0909	10.9695		
Dec.	1.9558	24.237	7.4689	385.15	4.2210	5.0968	10.8215		
2026 Jan.	–	24.325	7.4674	380.70	4.2073	5.0964	10.5205		
Feb.	–	24.244	7.4718	376.63	4.2243	5.0957	10.6643		
Mar.	–	24.514	7.4730	384.88	4.2890	5.0991	10.9430		
Apr.	–	24.366	7.4716	364.85	4.2605	5.1823	10.8555		
2026 Apr. 27	–	24.357	7.4726	363.68	4.2443	5.0954	10.7885		
28	–	24.372	7.4723	365.30	4.2478	5.0933	10.8485		
29	–	24.382	7.4727	363.88	4.2518	5.0981	10.8405		
30	–	24.366	7.4716	364.85	4.2605	5.1823	10.8555		
May 4	–	24.393	7.4725	363.33	4.2570	5.1977	10.8350		
5	–	24.380	7.4728	362.83	4.2543	5.2194	10.8400		
6	–	24.340	7.4725	359.15	4.2330	5.2598	10.8335		
7	–	24.306	7.4726	355.85	4.2270	5.2646	10.8250		
8	–	24.304	7.4726	356.15	4.2318	5.2235	10.8420		
11	–	24.333	7.4726	356.03	4.2398	5.2105	10.8765		
12	–	24.324	7.4729	357.23	4.2480	5.2045	10.8935		
13	–	24.347	7.4738	358.70	4.2513	5.2061	10.9150		
14	–	24.302	7.4729	357.43	4.2378	5.2054	10.9145		
15	–	24.333	7.4728	359.78	4.2465	5.2166	10.9820		
18	–	24.321	7.4733	361.08	4.2443	5.2092	10.9465		
19	–	24.297	7.4731	360.65	4.2435	5.2273	10.9090		
20	–	24.322	7.4732	361.30	4.2550	5.2333	10.8775		
21	–	24.292	7.4730	360.53	4.2483	5.2435	10.8615		
22	–	24.289	7.4731	359.08	4.2420	5.2490	10.8695		

Other European and non-European countries									
	Australia	Brazil	Canada	China	Hong Kong	Iceland	India		
	Australian dollar AUD	Brazilian real BRL	Canadian dollar CAD	Yuan (renminbi) CNY	Hong Kong dollar HKD	Icelandic krona ISK	Indian rupee INR		
2025 Apr.	1.7798	6.3839	1.5728	8.2635	8.8214	145.90	96.1360		
May	1.7647	6.4405	1.5656	8.1576	8.8926	144.20	97.0248		
June	1.7948	6.4384	1.6027	8.3970	9.2001	142.20	100.5605		
July	1.7762	6.3899	1.5838	8.2350	8.9851	142.20	100.2950		
Aug.	1.7865	6.3253	1.6031	8.3155	9.0877	143.00	102.8035		
Sep.	1.7760	6.2432	1.6346	8.3591	9.1359	142.40	104.2548		
Oct.	1.7672	6.2171	1.6207	8.2220	8.9787	144.80	102.5070		
Nov.	1.7721	6.1752	1.6210	8.1836	9.0020	148.20	103.4905		
Dec.	1.7581	6.4364	1.6088	8.2262	9.1464	147.20	105.5965		
2026 Jan.	1.7001	6.2233	1.6120	8.2834	9.3067	145.20	109.5825		
Feb.	1.6612	6.0862	1.6139	8.0961	9.2359	143.50	107.5205		
Mar.	1.6693	6.0065	1.6022	7.9341	9.0136	143.60	107.8788		
Apr.	1.6371	5.8292	1.5994	7.9910	9.1662	144.00	111.0695		
2026 Apr. 27	1.6337	5.8370	1.5979	8.0165	9.2080	143.60	110.6745		
28	1.6327	5.8420	1.5974	7.9877	9.1527	143.20	110.4260		
29	1.6344	5.8359	1.6007	7.9993	9.1736	143.60	111.0315		
30	1.6371	5.8292	1.5994	7.9910	9.1662	144.00	111.0695		
May 4	1.6289	5.8103	1.5930	7.9914	9.1647	143.60	111.2585		
5	1.6299	5.7875	1.5910	7.9818	9.1577	143.40	111.3500		
6	1.6238	5.7742	1.5999	8.0113	9.2163	143.60	111.2865		
7	1.6219	5.7870	1.6040	8.0058	9.2180	143.80	110.9380		
8	1.6259	5.7794	1.6063	7.9989	9.2067	143.80	111.1285		
11	1.6249	5.7671	1.6079	7.9961	9.2112	143.80	112.1385		
12	1.6252	5.7561	1.6088	7.9726	9.1887	143.80	112.2585		
13	1.6158	5.7449	1.6039	7.9556	9.1735	143.60	112.0793		
14	1.6162	5.8475	1.6060	7.9400	9.1662	143.60	112.0675		
15	1.6265	5.8517	1.5995	7.9194	9.1065	143.60	111.5940		
18	1.6256	5.8697	1.6006	7.9209	9.1211	143.40	112.2285		
19	1.6327	5.8370	1.5985	7.9087	9.1015	143.40	112.1815		
20	1.6271	5.8347	1.5959	7.8912	9.0861	143.40	112.3170		
21	1.6273	5.8134	1.5972	7.8899	9.0873	143.40	111.5885		
22	1.6283	5.8165	1.6002	7.8791	9.0865	143.60	110.9585		

* See Explanatory notes, p. 48. ¹ Accession to the euro area on 1 January 2026.

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
2025 Apr.	18,901.98	4.1231	162.68	1,618.39	4.9074	22.2020	1.9219	11.8090
May	18,519.93	3.9761	162.96	1,563.09	4.8264	21.8766	1.9017	11.5408
June	19,021.03	3.9492	169.17	1,588.21	4.9365	22.0899	1.9334	11.8345
July	18,882.87	3.8758	171.52	1,596.29	4.8817	21.5455	1.9375	11.7740
Aug.	19,207.37	3.8953	171.72	1,622.26	4.9255	21.7935	1.9811	11.7465
Sep.	19,578.94	3.8786	173.76	1,648.05	4.9412	21.5314	2.0257	11.7265
Oct.	19,251.16	3.7544	178.14	1,650.07	4.8388	21.4286	2.0212	11.6485
Nov.	19,269.07	3.7705	180.57	1,699.81	4.7796	21.2168	2.0247	11.7645
Dec.	19,640.83	3.7471	184.09	1,696.94	4.7682	21.1180	2.0380	11.8430
2026 Jan.	20,010.00	3.6799	183.59	1,719.47	4.7044	20.5979	1.9660	11.3885
Feb.	19,833.70	3.7107	184.13	1,702.25	4.5933	20.3189	1.9731	11.2085
Mar.	19,506.24	3.6380	183.39	1,753.22	4.6555	20.7101	2.0061	11.2125
Apr.	20,297.94	3.4553	183.21	1,728.39	4.6457	20.4973	1.9957	10.9123
2026 Apr. 27	20,218.68	3.4997	187.06	1,728.54	4.6438	20.3899	1.9851	10.8830
28	20,188.41	3.4919	186.58	1,725.01	4.6159	20.3893	1.9905	10.8875
29	20,308.33	3.4656	187.05	1,730.59	4.6268	20.3670	1.9981	10.8620
30	20,297.94	3.4553	183.21	1,728.39	4.6457	20.4973	1.9957	10.9123
May 4	20,368.53	3.4651	183.83	1,722.28	4.6250	20.4637	1.9874	10.8280
5	20,395.93	3.4395	184.42	1,721.29	4.6306	20.3819	1.9876	10.8055
6	20,381.49	3.4180	183.74	1,703.26	4.6166	20.3017	1.9713	10.8980
7	20,360.28	3.4222	184.07	1,707.40	4.6021	20.2473	1.9686	10.8675
8	20,424.09	3.4167	184.37	1,725.08	4.6115	20.2716	1.9735	10.8215
11	20,500.04	3.4206	184.87	1,732.87	4.6148	20.2592	1.9785	10.8275
12	20,538.21	3.4163	184.98	1,747.64	4.6177	20.2454	1.9743	10.7710
13	20,496.97	3.4066	184.83	1,743.87	4.6046	20.1774	1.9749	10.7415
14	20,437.54	3.3998	184.83	1,745.62	4.6006	20.1255	1.9734	10.7980
15	20,452.14	3.3977	184.36	1,743.76	4.5942	20.2024	1.9908	10.8450
18	20,597.22	3.3862	184.93	1,744.64	4.6324	20.1417	1.9858	10.8005
19	20,617.42	3.3891	184.89	1,753.17	4.6219	20.1520	1.9880	10.7635
20	20,532.64	3.3910	184.48	1,746.31	4.6052	20.1472	1.9841	10.7640
21	20,504.02	3.3821	184.59	1,749.99	4.5961	20.1257	1.9802	10.7075
22	20,516.54	3.3569	184.53	1,759.60	4.6009	20.1045	1.9817	10.7295

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
2025 Apr.	63.538	1.4859	21.1095	0.9389	38.009	43.7574	0.85180	1.1373
May	63.209	1.4633	20.2939	0.9341	37.243	44.4954	0.84120	1.1339
June	66.161	1.4941	20.8411	0.9347	38.125	46.5682	0.85550	1.1720
July	66.770	1.4845	20.7390	0.9297	37.400	46.4644	0.86490	1.1446
Aug.	66.687	1.4987	20.6758	0.9364	37.760	47.9536	0.86680	1.1658
Sep.	68.375	1.5145	20.2820	0.9364	38.088	48.8227	0.87340	1.1741
Oct.	67.835	1.5039	20.0452	0.9287	37.348	48.5832	0.88160	1.1554
Nov.	67.853	1.5008	19.7962	0.9318	37.237	49.1509	0.87520	1.1566
Dec.	69.266	1.5105	19.4439	0.9314	37.218	50.4838	0.87260	1.1750
2026 Jan.	70.211	1.5111	18.9906	0.9157	37.455	51.8324	0.86620	1.1919
Feb.	68.095	1.4942	18.8178	0.9104	36.696	51.8946	0.87630	1.1805
Mar.	69.780	1.4811	19.6271	0.9194	37.667	51.1433	0.86833	1.1498
Apr.	71.918	1.4934	19.6480	0.9190	38.084	52.8757	0.86625	1.1702
2026 Apr. 27	71.385	1.4954	19.3608	0.9210	37.946	52.8788	0.86580	1.1749
28	71.580	1.4930	19.4289	0.9238	38.024	52.6239	0.86715	1.1680
29	72.111	1.4952	19.4303	0.9236	38.226	52.7585	0.86643	1.1706
30	71.918	1.4934	19.6480	0.9190	38.084	52.8757	0.86625	1.1702
May 4	72.123	1.4927	19.5680	0.9173	38.171	52.8853	0.86358	1.1700
5	71.995	1.4925	19.5044	0.9165	38.143	52.8435	0.86343	1.1686
6	71.463	1.4917	19.2959	0.9165	37.856	53.1933	0.86370	1.1762
7	71.061	1.4898	19.1354	0.9157	37.835	53.2386	0.86410	1.1770
8	71.136	1.4911	19.3109	0.9156	37.897	53.3534	0.86410	1.1761
11	71.683	1.4938	19.3488	0.9163	38.136	53.3860	0.86488	1.1765
12	72.152	1.4937	19.3990	0.9172	38.055	53.2905	0.86803	1.1738
13	71.925	1.4904	19.2712	0.9155	37.880	53.2069	0.86713	1.1715
14	71.998	1.4901	19.1994	0.9150	37.815	53.1677	0.86618	1.1702
15	71.738	1.4884	19.3739	0.9144	37.989	52.9598	0.87050	1.1628
18	71.851	1.4895	19.3632	0.9144	37.967	53.0915	0.87020	1.1648
19	71.720	1.4887	19.3449	0.9150	37.951	52.9565	0.86671	1.1620
20	71.568	1.4852	19.2485	0.9165	37.903	52.8803	0.86555	1.1600
21	71.447	1.4848	19.2009	0.9145	37.911	52.9055	0.86433	1.1599
22	71.450	1.4846	19.1045	0.9119	37.875	53.0067	0.86418	1.1595

* See Explanatory notes, p. 48.

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

2. Annual and monthly averages +

EUR 1 = CU ...

EU member countries									
	Bulgaria ¹	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		
2024	1.9558	25.120	7.4589	395.30	4.3058	4.9746	11.4325		
2025	1.9558	24.688	7.4634	397.77	4.2397	5.0424	11.0663		
2024 Mar.	1.9558	25.292	7.4566	395.09	4.3069	4.9708	11.3054		
Apr.	1.9558	25.278	7.4596	392.41	4.3026	4.9730	11.5910		
May	1.9558	24.819	7.4606	387.18	4.2796	4.9754	11.6186		
June	1.9558	24.779	7.4592	394.76	4.3209	4.9767	11.2851		
July	1.9558	25.299	7.4606	392.84	4.2817	4.9730	11.5324		
Aug.	1.9558	25.179	7.4614	394.70	4.2917	4.9766	11.4557		
Sep.	1.9558	25.099	7.4600	394.86	4.2761	4.9744	11.3577		
Oct.	1.9558	25.298	7.4593	401.90	4.3170	4.9750	11.4048		
Nov.	1.9558	25.301	7.4583	409.25	4.3317	4.9762	11.5828		
Dec.	1.9558	25.136	7.4589	411.99	4.2704	4.9749	11.5040		
2025 Jan.	1.9558	25.163	7.4609	411.73	4.2467	4.9752	11.4797		
Feb.	1.9558	25.077	7.4592	403.13	4.1722	4.9770	11.2474		
Mar.	1.9558	25.001	7.4597	399.81	4.1820	4.9768	10.9675		
Apr.	1.9558	25.039	7.4648	406.44	4.2652	4.9775	10.9744		
May	1.9558	24.923	7.4600	403.94	4.2538	5.0714	10.8812		
June	1.9558	24.804	7.4597	402.08	4.2658	5.0454	11.0094		
July	1.9558	24.625	7.4625	399.19	4.2541	5.0716	11.1985		
Aug.	1.9558	24.517	7.4638	396.45	4.2613	5.0651	11.1610		
Sep.	1.9558	24.347	7.4644	391.63	4.2589	5.0740	11.0004		
Oct.	1.9558	24.315	7.4680	389.91	4.2488	5.0872	10.9699		
Nov.	1.9558	24.234	7.4679	384.20	4.2376	5.0867	10.9915		
Dec.	1.9558	24.259	7.4696	384.97	4.2239	5.0913	10.8956		
2026 Jan.	–	24.278	7.4703	384.18	4.2127	5.0919	10.6815		
Feb.	–	24.260	7.4702	378.61	4.2184	5.0945	10.6351		
Mar.	–	24.438	7.4717	389.19	4.2715	5.0954	10.7614		
Apr.	–	24.381	7.4728	368.96	4.2502	5.0991	10.8348		

Other European and non-European countries							
	Australia	Brazil	Canada	China	Hong Kong	Iceland	India
	Australian dollar AUD	Brazilian real BRL	Canadian dollar CAD	Yuan (renminbi) CNY	Hong Kong dollar HKD	Icelandic krona ISK	Indian rupee INR
2024	1.6397	5.8283	1.4821	7.7875	8.4454	149.31	90.5563
2025	1.7518	6.3072	1.5787	8.1185	8.8104	144.66	98.5239
2024 Mar.	1.6586	5.4157	1.4726	7.8297	8.5049	149.04	90.2515
Apr.	1.6469	5.4975	1.4661	7.7658	8.4006	150.35	89.4676
May	1.6317	5.5529	1.4780	7.8206	8.4458	150.00	90.1573
June	1.6206	5.7884	1.4750	7.8051	8.4023	149.36	89.8106
July	1.6257	6.0053	1.4868	7.8750	8.4684	149.43	90.6557
Aug.	1.6559	6.1193	1.5049	7.8736	8.5849	151.84	92.4062
Sep.	1.6398	6.1528	1.5037	7.8611	8.6528	152.21	93.0808
Oct.	1.6250	6.1195	1.4993	7.7276	8.4726	149.07	91.6266
Nov.	1.6267	6.1729	1.4855	7.6617	8.2699	146.72	89.6717
Dec.	1.6529	6.3843	1.4915	7.6298	8.1459	145.24	89.0453
2025 Jan.	1.6626	6.2408	1.4904	7.5560	8.0605	145.40	89.3418
Feb.	1.6528	6.0053	1.4893	7.5749	8.1031	146.26	90.6346
Mar.	1.7158	6.2368	1.5518	7.8353	8.4000	145.26	93.4985
Apr.	1.7844	6.4759	1.5701	8.1850	8.7071	145.00	95.9723
May	1.7521	6.3953	1.5646	8.1348	8.8022	145.49	96.1427
June	1.7723	6.3913	1.5754	8.2700	9.0387	143.45	98.9782
July	1.7862	6.4611	1.5982	8.3754	9.1661	142.39	100.6043
Aug.	1.7920	6.3439	1.6057	8.3442	9.1035	143.10	101.8425
Sep.	1.7795	6.3013	1.6227	8.3586	9.1342	142.98	103.6023
Oct.	1.7781	6.2614	1.6280	8.2810	9.0426	142.22	102.8353
Nov.	1.7772	6.1728	1.6248	8.2149	8.9898	146.83	102.7101
Dec.	1.7634	6.3806	1.6168	8.2491	9.1114	148.19	105.4131
2026 Jan.	1.7304	6.2674	1.6173	8.1806	9.1523	146.32	106.6826
Feb.	1.6763	6.1529	1.6140	8.1682	9.2421	144.75	107.3203
Mar.	1.6470	6.0498	1.5848	7.9703	9.0461	144.04	107.3446
Apr.	1.6489	5.8830	1.6097	8.0005	9.1703	143.73	109.4829

* See Explanatory notes, p. 48. + Averages: Bundesbank calculations based on the daily euro foreign exchange reference rates published by the ECB. ¹ Accession to the euro area on 1 January 2026.

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

2. Annual and monthly averages + (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
2024	17,157.68	4.0067	163.85	1,475.40	4.9503	19.8314	1.7880	11.6290
2025	18,623.06	3.8927	169.04	1,605.45	4.8339	21.6705	1.9422	11.7173
2024 Mar.	17,063.66	3.9442	162.77	1,448.12	5.1272	18.2610	1.7869	11.5214
Apr.	17,258.77	4.0240	165.03	1,469.42	5.1139	18.0066	1.7992	11.6828
May	17,375.67	4.0062	168.54	1,474.96	5.0971	18.1549	1.7819	11.5988
June	17,595.94	4.0074	169.81	1,485.38	5.0680	19.6134	1.7539	11.4178
July	17,623.29	3.9902	171.17	1,499.62	5.0737	19.6397	1.7985	11.7160
Aug.	17,347.75	4.1079	161.06	1,488.61	4.8605	21.0823	1.8112	11.7895
Sep.	17,020.23	4.1452	159.08	1,478.72	4.7341	21.7625	1.7845	11.7852
Oct.	16,988.19	4.1020	163.20	1,484.59	4.6883	21.4603	1.7917	11.7907
Nov.	16,817.07	3.9523	163.23	1,482.25	4.7141	21.6152	1.7967	11.7408
Dec.	16,810.95	3.7896	161.08	1,506.85	4.6728	21.2338	1.8217	11.7447
2025 Jan.	16,832.40	3.7450	161.92	1,503.60	4.6232	21.2951	1.8393	11.7456
Feb.	17,020.42	3.7149	158.09	1,505.02	4.6261	21.3268	1.8337	11.6574
Mar.	17,800.79	3.9523	161.17	1,576.45	4.7927	21.8760	1.8879	11.5472
Apr.	18,871.74	4.1460	161.67	1,617.41	4.9510	22.5071	1.9256	11.8380
May	18,526.84	4.0189	163.14	1,566.14	4.8091	21.9250	1.8998	11.5968
June	18,776.57	4.0064	166.52	1,573.37	4.8848	21.9261	1.9114	11.5841
July	19,029.69	3.9148	171.53	1,608.95	4.9462	21.8347	1.9471	11.8537
Aug.	18,967.88	3.9507	171.79	1,617.15	4.9166	21.7728	1.9721	11.8653
Sep.	19,399.67	3.9235	173.55	1,634.39	4.9417	21.7063	1.9940	11.6702
Oct.	19,310.79	3.8204	176.15	1,655.92	4.9028	21.4305	2.0198	11.6633
Nov.	19,303.88	3.7629	179.32	1,687.64	4.8021	21.2957	2.0439	11.7402
Dec.	19,548.05	3.7648	182.50	1,717.44	4.7920	21.1787	2.0249	11.8428
2026 Jan.	19,757.02	3.6916	183.94	1,710.38	4.7262	20.7288	2.0090	11.6670
Feb.	19,896.39	3.6699	183.45	1,712.39	4.6261	20.3806	1.9683	11.3206
Mar.	19,561.24	3.5988	183.40	1,723.13	4.5687	20.5284	1.9762	11.1657
Apr.	20,083.87	3.5438	186.21	1,734.05	4.6484	20.4023	2.0000	11.0332

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
2024	62.007	1.4458	19.8297	0.9526	38.181	35.5734	0.84662	1.0824
2025	64.977	1.4756	20.1789	0.9370	37.116	44.8161	0.85679	1.1300
2024 Mar.	60.736	1.4573	20.4955	0.9656	39.079	34.8229	0.85524	1.0872
Apr.	61.171	1.4554	20.2378	0.9761	39.454	34.6926	0.85658	1.0728
May	62.523	1.4606	19.9079	0.9830	39.607	34.8605	0.85564	1.0812
June	63.177	1.4547	19.8144	0.9616	39.492	35.0667	0.84643	1.0759
July	63.416	1.4602	19.7950	0.9676	39.324	35.6969	0.84332	1.0844
Aug.	62.710	1.4488	19.8651	0.9450	38.263	37.1098	0.85150	1.1012
Sep.	62.256	1.4396	19.5634	0.9414	37.012	37.8238	0.84021	1.1106
Oct.	62.655	1.4283	19.1609	0.9386	36.411	37.3473	0.83496	1.0904
Nov.	62.410	1.4206	19.0553	0.9355	36.596	36.6237	0.83379	1.0630
Dec.	61.203	1.4144	19.0606	0.9339	35.794	36.6588	0.82804	1.0479
2025 Jan.	60.479	1.4092	19.3821	0.9414	35.444	36.8091	0.83908	1.0354
Feb.	60.443	1.4022	19.2451	0.9413	35.189	37.6927	0.83071	1.0413
Mar.	62.013	1.4441	19.7403	0.9548	36.522	40.1683	0.83703	1.0807
Apr.	63.744	1.4852	21.1972	0.9370	37.883	42.7740	0.85379	1.1214
May	62.742	1.4589	20.4124	0.9356	37.143	43.7908	0.84350	1.1278
June	64.901	1.4782	20.5631	0.9380	37.564	45.4347	0.84981	1.1516
July	66.415	1.4960	20.7477	0.9325	37.883	46.9835	0.86469	1.1677
Aug.	66.452	1.4954	20.6230	0.9387	37.755	47.4983	0.86528	1.1631
Sep.	67.212	1.5075	20.4793	0.9350	37.549	48.4914	0.86895	1.1732
Oct.	67.884	1.5074	20.0976	0.9289	37.886	48.6799	0.87155	1.1630
Nov.	68.066	1.5058	19.9088	0.9290	37.436	48.8908	0.87997	1.1560
Dec.	68.941	1.5120	19.7180	0.9332	37.009	49.9695	0.87500	1.1709
2026 Jan.	69.479	1.5027	19.1152	0.9272	36.735	50.7458	0.86828	1.1738
Feb.	68.790	1.4979	18.9206	0.9140	36.960	51.6771	0.87032	1.1824
Mar.	68.874	1.4790	19.3533	0.9094	37.298	51.0938	0.86631	1.1558
Apr.	70.609	1.4933	19.3554	0.9213	37.784	52.4489	0.86933	1.1706

* See Explanatory notes, p. 48. + Averages: Bundesbank calculations based on the daily euro foreign exchange reference rates published by the ECB.

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

3. End-of-year rates and annual averages

EUR 1 = CU ...

EU member countries								
Bulgaria ¹	Croatia ¹	Czechia	Denmark	Hungary	Latvia ¹	Lithuania ¹	Poland	
Bulgarian lev BGN	Kuna HRK	Czech koruna CZK	Danish krone DKK	Hungarian forint HUF	Latvian lats LVL	Lithuanian litas LTL	Polish zloty PLN	
End of year								
2012	1.9558	7.5575	25.151	7.4610	292.30	0.697700	3.4528	4.0740
2013	1.9558	7.6265	27.427	7.4593	297.04	0.702804	3.4528	4.1543
2014	1.9558	7.6580	27.735	7.4453	315.54	–	3.4528	4.2732
2015	1.9558	7.6380	27.023	7.4626	315.98	–	–	4.2639
2016	1.9558	7.5597	27.021	7.4344	309.83	–	–	4.4103
2017	1.9558	7.4400	25.535	7.4449	310.33	–	–	4.1770
2018	1.9558	7.4125	25.724	7.4673	320.98	–	–	4.3014
2019	1.9558	7.4395	25.408	7.4715	330.53	–	–	4.2568
2020	1.9558	7.5519	26.242	7.4409	363.89	–	–	4.5597
2021	1.9558	7.5156	24.858	7.4364	369.19	–	–	4.5969
2022	1.9558	7.5365	24.116	7.4365	400.87	–	–	4.6808
2023	1.9558	–	24.724	7.4529	382.80	–	–	4.3395
2024	1.9558	–	25.185	7.4578	411.35	–	–	4.2750
2025	1.9558	–	24.237	7.4689	385.15	–	–	4.2210
Annual averages +								
2012	1.9558	7.5217	25.149	7.4437	289.25	0.6973	3.4528	4.1847
2013	1.9558	7.5786	25.980	7.4579	296.87	0.7015	3.4528	4.1975
2014	1.9558	7.6344	27.536	7.4548	308.71	–	3.4528	4.1843
2015	1.9558	7.6137	27.279	7.4587	310.00	–	–	4.1841
2016	1.9558	7.5333	27.034	7.4452	311.44	–	–	4.3632
2017	1.9558	7.4637	26.326	7.4386	309.19	–	–	4.2570
2018	1.9558	7.4182	25.647	7.4532	318.89	–	–	4.2615
2019	1.9558	7.4180	25.670	7.4661	325.30	–	–	4.2976
2020	1.9558	7.5384	26.455	7.4542	351.25	–	–	4.4430
2021	1.9558	7.5284	25.640	7.4370	358.52	–	–	4.5652
2022	1.9558	7.5349	24.566	7.4396	391.29	–	–	4.6861
2023	1.9558	–	24.004	7.4509	381.85	–	–	4.5420
2024	1.9558	–	25.120	7.4589	395.30	–	–	4.3058
2025	1.9558	–	24.688	7.4634	397.77	–	–	4.2397

EU member countries (cont'd)		Other European and non-European countries						
Romania	Sweden	Australia	Brazil	Canada	China	Hong Kong	Iceland	
Romanian leu RON	Swedish krona SEK	Australian dollar AUD	Brazilian real BRL	Canadian dollar CAD	Yuan (renminbi) CNY	Hong Kong dollar HKD	Icelandic krona ISK ²	
End of year								
2012	4.4445	8.5820	1.2712	2.7036	1.3137	8.2207	10.2260	–
2013	4.4710	8.8591	1.5423	3.2576	1.4671	8.3491	10.6933	–
2014	4.4828	9.3930	1.4829	3.2207	1.4063	7.5358	9.4170	–
2015	4.5240	9.1895	1.4897	4.3117	1.5116	7.0608	8.4376	–
2016	4.5390	9.5525	1.4596	3.4305	1.4188	7.3202	8.1751	–
2017	4.6585	9.8438	1.5346	3.9729	1.5039	7.8044	9.3720	–
2018	4.6635	10.2548	1.6220	4.4440	1.5605	7.8751	8.9675	133.20
2019	4.7830	10.4468	1.5995	4.5157	1.4598	7.8205	8.7473	135.80
2020	4.8683	10.0343	1.5896	6.3735	1.5633	8.0225	9.5142	156.10
2021	4.9490	10.2503	1.5615	6.3101	1.4393	7.1947	8.8333	147.60
2022	4.9495	11.1218	1.5693	5.6386	1.4440	7.3582	8.3163	151.50
2023	4.9756	11.0960	1.6263	5.3618	1.4642	7.8509	8.6314	150.50
2024	4.9743	11.4590	1.6772	6.4253	1.4948	7.5833	8.0686	143.90
2025	5.0968	10.8215	1.7581	6.4364	1.6088	8.2262	9.1464	147.20
Annual averages +								
2012	4.4593	8.7041	1.2407	2.5084	1.2842	8.1052	9.9663	–
2013	4.4190	8.6515	1.3777	2.8687	1.3684	8.1646	10.3016	–
2014	4.4437	9.0985	1.4719	3.1211	1.4661	8.1857	10.3025	–
2015	4.4454	9.3535	1.4777	3.7004	1.4186	6.9733	8.6014	–
2016	4.4904	9.4689	1.4883	3.8561	1.4659	7.3522	8.5922	–
2017	4.5688	9.6351	1.4732	3.6054	1.4647	7.6290	8.8045	–
2018	4.6540	10.2583	1.5797	4.3085	1.5294	7.8081	9.2559	127.89
2019	4.7453	10.5891	1.6109	4.4134	1.4855	7.7355	8.7715	137.28
2020	4.8383	10.4848	1.6549	5.8943	1.5300	7.8747	8.8587	154.59
2021	4.9215	10.1465	1.5749	6.3779	1.4826	7.6282	9.1932	150.15
2022	4.9313	10.6296	1.5167	5.4399	1.3695	7.0788	8.2451	142.24
2023	4.9467	11.4788	1.6288	5.4010	1.4595	7.6600	8.4650	149.13
2024	4.9746	11.4325	1.6397	5.8283	1.4821	7.7875	8.4454	149.31
2025	5.0424	11.0663	1.7518	6.3072	1.5787	8.1185	8.8104	144.66

* See Explanatory notes, p. 48. + Averages: Bundesbank calculations based on the daily euro foreign exchange reference rates published by the ECB. ¹ Accession to the euro

area, see p. 7 (Table 1.1.). ² The ECB did not fix euro foreign exchange reference rates for the Icelandic krona from 4 December 2008 to 31 January 2018.

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

3. End-of-year rates and annual averages (cont'd)

EUR 1 = CU ...

Other European and non-European countries (cont'd)									
India	Indonesia	Israel	Japan	Korea, Republic of	Malaysia	Mexico	New Zealand	Norway	
Indian rupee INR	Indonesian rupiah IDR	New shekel ILS	Japanese yen JPY	South Korean won KRW	Malaysian ringgit MYR	Mexican peso MXN	New Zealand dollar NZD	Norwegian krone NOK	
End of year									
2012	72.5600	12,713.97	4.9258	113.61	1,406.23	4.0347	17.1845	1.6045	7.3483
2013	85.3660	16,764.78	4.7880	144.72	1,450.93	4.5221	18.0731	1.6762	8.3630
2014	76.7190	15,076.10	4.7200	145.23	1,324.80	4.2473	17.8679	1.5525	9.0420
2015	72.0215	15,039.99	4.2481	131.07	1,280.78	4.6959	18.9145	1.5923	9.6030
2016	71.5935	14,173.43	4.0477	123.40	1,269.36	4.7287	21.7719	1.5158	9.0863
2017	76.6055	16,239.12	4.1635	135.01	1,279.61	4.8536	23.6612	1.6850	9.8403
2018	79.7298	16,500.00	4.2972	125.85	1,277.93	4.7317	22.4921	1.7056	9.9483
2019	80.1870	15,595.60	3.8845	121.94	1,296.28	4.5953	21.2202	1.6653	9.8638
2020	89.6605	17,240.76	3.9447	126.49	1,336.00	4.9340	24.4160	1.6984	10.4703
2021	84.2292	16,100.42	3.5159	130.38	1,346.38	4.7184	23.1438	1.6579	9.9888
2022	88.1710	16,519.82	3.7554	140.66	1,344.09	4.6984	20.8560	1.6798	10.5138
2023	91.9045	17,079.71	3.9993	156.33	1,433.66	5.0775	18.7231	1.7504	11.2405
2024	88.9335	16,820.88	3.7885	163.06	1,532.15	4.6454	21.5504	1.8532	11.7950
2025	105.5965	19,640.83	3.7471	184.09	1,696.94	4.7682	21.1180	2.0380	11.8430
Annual averages +									
2012	68.5973	12,045.73	4.9536	102.49	1,447.69	3.9672	16.9029	1.5867	7.4751
2013	77.9300	13,857.50	4.7948	129.66	1,453.91	4.1855	16.9641	1.6206	7.8067
2014	81.0406	15,748.92	4.7449	140.31	1,398.14	4.3446	17.6550	1.5995	8.3544
2015	71.1956	14,870.39	4.3122	134.31	1,256.54	4.3373	17.6157	1.5930	8.9496
2016	74.3717	14,720.83	4.2489	120.20	1,284.18	4.5835	20.6673	1.5886	9.2906
2017	73.5324	15,118.01	4.0622	126.71	1,276.74	4.8527	21.3286	1.5897	9.3270
2018	80.7332	16,803.22	4.2423	130.40	1,299.07	4.7634	22.7054	1.7065	9.5975
2019	78.8361	15,835.27	3.9901	122.01	1,305.32	4.6374	21.5565	1.6998	9.8511
2020	84.6392	16,627.37	3.9258	121.85	1,345.58	4.7959	24.5194	1.7561	10.7228
2021	87.4392	16,920.72	3.8208	129.88	1,354.06	4.9015	23.9852	1.6724	10.1633
2022	82.6864	15,625.25	3.5345	138.03	1,358.07	4.6279	21.1869	1.6582	10.1026
2023	89.3001	16,479.62	3.9880	151.99	1,412.88	4.9320	19.1830	1.7622	11.4248
2024	90.5563	17,157.68	4.0067	163.85	1,475.40	4.9503	19.8314	1.7880	11.6290
2025	98.5239	18,623.06	3.8927	169.04	1,605.45	4.8339	21.6705	1.9422	11.7173

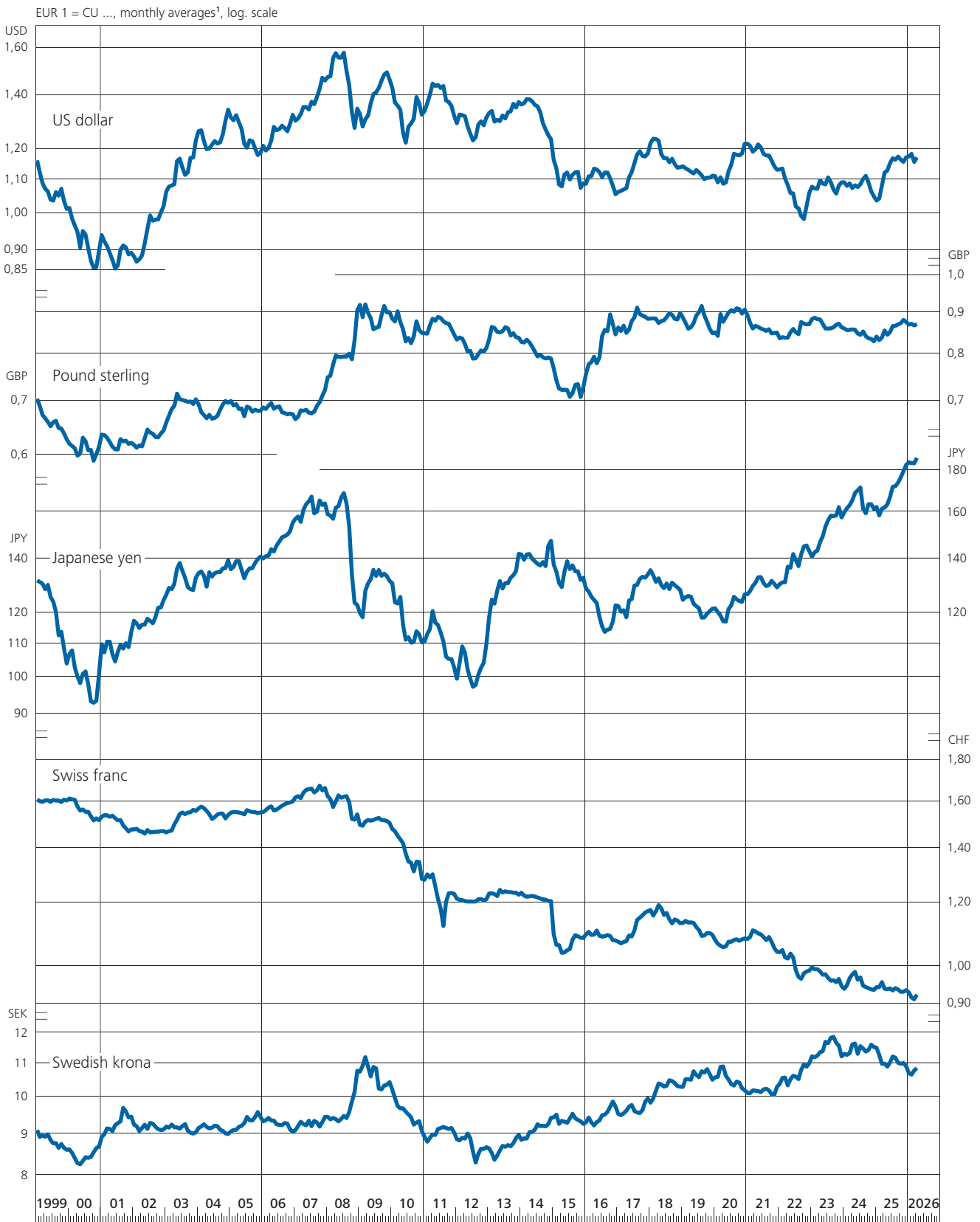
Other European and non-European countries (cont'd)									
Philippines	Russian Federation	Singapore	South Africa	Switzerland	Thailand	Turkey	United Kingdom	United States	
Philippine peso PHP	Russian rouble RUB 1	Singapore dollar SGD	South African rand ZAR	Swiss franc CHF	Thai baht THB	Turkish lira TRY	Pound sterling GBP	US dollar USD	
End of year									
2012	54.107	40.3295	1.6111	11.1727	1.2072	40.347	2.3551	0.81610	1.3194
2013	61.289	45.3246	1.7414	14.5660	1.2276	45.178	2.9605	0.83370	1.3791
2014	54.436	72.3370	1.6058	14.0353	1.2024	39.910	2.8320	0.77890	1.2141
2015	50.999	80.6736	1.5417	16.9530	1.0835	39.248	3.1765	0.73395	1.0887
2016	52.268	64.3000	1.5234	14.4570	1.0739	37.726	3.7072	0.85618	1.0541
2017	59.795	69.3920	1.6024	14.8054	1.1702	39.121	4.5464	0.88723	1.1993
2018	60.113	79.7153	1.5591	16.4594	1.1269	37.052	6.0588	0.89453	1.1450
2019	56.900	69.9563	1.5111	15.7773	1.0854	33.415	6.6843	0.85080	1.1234
2020	59.125	91.4671	1.6218	18.0219	1.0802	36.727	9.1131	0.89903	1.2271
2021	57.763	85.3004	1.5279	18.0625	1.0331	37.653	15.2335	0.84028	1.1326
2022	59.320	–	1.4300	18.0986	0.9847	36.835	19.9649	0.88693	1.0666
2023	61.283	–	1.4591	20.3477	0.9260	37.973	32.6531	0.86905	1.1050
2024	60.301	–	1.4164	19.6188	0.9412	35.676	36.7372	0.82918	1.0389
2025	69.266	–	1.5105	19.4439	0.9314	37.218	50.4838	0.87260	1.1750
Annual averages +									
2012	54.246	39.9262	1.6055	10.5511	1.2053	39.928	2.3135	0.81087	1.2848
2013	56.428	42.3370	1.6619	12.8330	1.2311	40.830	2.5335	0.84926	1.3281
2014	58.979	50.9518	1.6823	14.4037	1.2146	43.147	2.9065	0.80612	1.3285
2015	50.522	68.0720	1.5255	14.1723	1.0679	38.028	3.0255	0.72584	1.1095
2016	52.556	74.1446	1.5275	16.2645	1.0902	39.043	3.3433	0.81948	1.1069
2017	56.973	65.9383	1.5588	15.0490	1.1117	38.296	4.1206	0.87667	1.1297
2018	62.210	74.0416	1.5926	15.6186	1.1550	38.164	5.7077	0.88471	1.1810
2019	57.985	72.4553	1.5273	16.1757	1.1124	34.757	6.3578	0.87777	1.1195
2020	56.615	82.7248	1.5742	18.7655	1.0705	35.708	8.0547	0.88970	1.1422
2021	58.299	87.1527	1.5891	17.4766	1.0811	37.837	10.5124	0.85960	1.1827
2022	57.314	–	1.4512	17.2086	1.0047	36.856	17.4088	0.85276	1.0530
2023	60.163	–	1.4523	19.9551	0.9718	37.631	25.7597	0.86979	1.0813
2024	62.007	–	1.4458	19.8297	0.9526	38.181	35.5734	0.84662	1.0824
2025	64.977	–	1.4756	20.1789	0.9370	37.116	44.8161	0.85679	1.1300

* See Explanatory notes, p. 48. + Averages: Bundesbank calculations based on the daily euro foreign exchange reference rates published by the ECB. 1 The ECB has suspended

the publication of the euro foreign exchange reference rate against the Russian rouble with effect from 2 March 2022.

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

4. Exchange rates of major currencies



* See explanatory notes, p. 48. ¹ Bundesbank calculations based on the daily euro foreign exchange reference rates published by the ECB.