

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

### 3. End-of-year rates and annual averages

EUR 1 = CU ...

| Period | EU member countries                 |                        |  |                                |                                |   |                                    |  |   |
|--------|-------------------------------------|------------------------|--|--------------------------------|--------------------------------|---|------------------------------------|--|---|
|        | Bulgaria<br>Bulgarian lev<br>BGN    | Croatia<br>Kuna<br>HRK | Cyprus<br>Cyprus pound<br>CYP <sup>1</sup> | Czechia<br>Czech koruna<br>CZK | Denmark<br>Danish krone<br>DKK | Estonia<br>Estonian kroon<br>EEK <sup>1</sup> | Hungary<br>Hungarian forint<br>HUF | Latvia<br>Latvian lats<br>LVL <sup>1</sup> | Lithuania<br>Lithuanian litas<br>LTL <sup>1</sup> |
|        | <b>End of year</b>                  |                        |  |                                |                                |   |                                    |  |   |
| 2007   | 1.9558                              | 7.3308                 | 0.585274                                   | 26.628                         | 7.4583                         | 15.6466                                       | 253.73                             | 0.6964                                     | 3.4528  |
| 2008   | 1.9558                              | 7.3555                 | –  | 26.875                         | 7.4506                         | 15.6466                                       | 266.70                             | 0.7083                                     | 3.4528  |
| 2009   | 1.9558                              | 7.3000                 | –  | 26.473                         | 7.4418                         | 15.6466                                       | 270.42                             | 0.7093                                     | 3.4528  |
| 2010   | 1.9558                              | 7.3830                 | –  | 25.061                         | 7.4535                         | 15.6466                                       | 277.95                             | 0.7094                                     | 3.4528  |
| 2011   | 1.9558                              | 7.5370                 | –  | 25.787                         | 7.4342                         | –   | 314.58                             | 0.6995                                     | 3.4528  |
| 2012   | 1.9558                              | 7.5575                 | –  | 25.151                         | 7.4610                         | –   | 292.30                             | 0.6977                                     | 3.4528  |
| 2013   | 1.9558                              | 7.6265                 | –  | 27.427                         | 7.4593                         | –   | 297.04                             | 0.702804                                   | 3.4528  |
| 2014   | 1.9558                              | 7.6580                 | –  | 27.735                         | 7.4453                         | –   | 315.54                             | –  | 3.4528  |
| 2015   | 1.9558                              | 7.6380                 | –  | 27.023                         | 7.4626                         | –   | 315.98                             | –  | –   |
| 2016   | 1.9558                              | 7.5597                 | –  | 27.021                         | 7.4344                         | –   | 309.83                             | –  | –   |
| 2017   | 1.9558                              | 7.4400                 | –  | 25.535                         | 7.4449                         | –   | 310.33                             | –  | –   |
| 2018   | 1.9558                              | 7.4125                 | –  | 25.724                         | 7.4673                         | –   | 320.98                             | –  | –   |
| 2019   | 1.9558                              | 7.4395                 | –  | 25.408                         | 7.4715                         | –   | 330.53                             | –  | –   |
| 2020   | 1.9558                              | 7.5519                 | –  | 26.242                         | 7.4409                         | –   | 363.89                             | –  | –   |
|        | <b>Annual averages <sup>+</sup></b> |                        |  |                                |                                |   |                                    |  |   |
| 2007   | 1.9558                              | 7.3376                 | 0.58263                                    | 27.766                         | 7.4506                         | 15.6466                                       | 251.35                             | 0.7001                                     | 3.4528  |
| 2008   | 1.9558                              | 7.2239                 | –  | 24.946                         | 7.4560                         | 15.6466                                       | 251.51                             | 0.7027                                     | 3.4528  |
| 2009   | 1.9558                              | 7.3400                 | –  | 26.435                         | 7.4462                         | 15.6466                                       | 280.33                             | 0.7057                                     | 3.4528  |
| 2010   | 1.9558                              | 7.2891                 | –  | 25.284                         | 7.4473                         | 15.6466                                       | 275.48                             | 0.7087                                     | 3.4528  |
| 2011   | 1.9558                              | 7.4390                 | –  | 24.590                         | 7.4506                         | –   | 279.37                             | 0.7063                                     | 3.4528  |
| 2012   | 1.9558                              | 7.5217                 | –  | 25.149                         | 7.4437                         | –   | 289.25                             | 0.6973                                     | 3.4528  |
| 2013   | 1.9558                              | 7.5786                 | –  | 25.980                         | 7.4579                         | –   | 296.87                             | 0.7015                                     | 3.4528  |
| 2014   | 1.9558                              | 7.6344                 | –  | 27.536                         | 7.4548                         | –   | 308.71                             | –  | 3.4528  |
| 2015   | 1.9558                              | 7.6137                 | –  | 27.279                         | 7.4587                         | –   | 310.00                             | –  | –   |
| 2016   | 1.9558                              | 7.5333                 | –  | 27.034                         | 7.4452                         | –   | 311.44                             | –  | –   |
| 2017   | 1.9558                              | 7.4637                 | –  | 26.326                         | 7.4386                         | –   | 309.19                             | –  | –   |
| 2018   | 1.9558                              | 7.4182                 | –  | 25.647                         | 7.4532                         | –   | 318.89                             | –  | –   |
| 2019   | 1.9558                              | 7.4180                 | –  | 25.670                         | 7.4661                         | –   | 325.30                             | –  | –   |
| 2020   | 1.9558                              | 7.5384                 | –  | 26.455                         | 7.4542                         | –   | 351.25                             | –  | –   |

| Period | EU member countries (cont'd)              |                               |                                |   |                                | Other European and non-European countries |  |                                  |                                       |
|--------|---|-------------------------------|--------------------------------|---|--------------------------------|---|--|----------------------------------|---------------------------------------|
|        | Malta<br>Maltese lira<br>MTL <sup>1</sup> | Poland<br>Polish zloty<br>PLN | Romania<br>Romanian leu<br>RON | Slovakia<br>Slovak koruna<br>SKK <sup>1</sup> | Sweden<br>Swedish krona<br>SEK | Australia<br>Australian dollar<br>AUD     | Brazil<br>Brazilian real<br>BRL <sup>2</sup> | Canada<br>Canadian dollar<br>CAD | China<br>Chinese yuan renminbi<br>CNY |
|        | <b>End of year</b>                        |                               |                                |   |                                |   |  |                                  |                                       |
| 2007   | 0.4293                                    | 3.5935                        | 3.6077                         | 33.583  | 9.4415                         | 1.6757                                    | 2.5914                                       | 1.4449                           | 10.7524                               |
| 2008   | –   | 4.1535                        | 4.0225                         | 30.126  | 10.8700                        | 2.0274                                    | 3.2436                                       | 1.6998                           | 9.4956                                |
| 2009   | –   | 4.1045                        | 4.2363                         | –   | 10.2520                        | 1.6008                                    | 2.5113                                       | 1.5128                           | 9.8350                                |
| 2010   | –   | 3.9750                        | 4.2620                         | –   | 8.9655                         | 1.3136                                    | 2.2177                                       | 1.3322                           | 8.8220                                |
| 2011   | –   | 4.4580                        | 4.3233                         | –   | 8.9120                         | 1.2723                                    | 2.4159                                       | 1.3215                           | 8.1588                                |
| 2012   | –   | 4.0740                        | 4.4445                         | –   | 8.5820                         | 1.2712                                    | 2.7036                                       | 1.3137                           | 8.2207                                |
| 2013   | –   | 4.1543                        | 4.4710                         | –   | 8.8591                         | 1.5423                                    | 3.2576                                       | 1.4671                           | 8.3491                                |
| 2014   | –   | 4.2732                        | 4.4828                         | –   | 9.3930                         | 1.4829                                    | 3.2207                                       | 1.4063                           | 7.5358                                |
| 2015   | –   | 4.2639                        | 4.5240                         | –   | 9.1895                         | 1.4897                                    | 4.3117                                       | 1.5116                           | 7.0608                                |
| 2016   | –   | 4.4103                        | 4.5390                         | –   | 9.5525                         | 1.4596                                    | 3.4305                                       | 1.4188                           | 7.3202                                |
| 2017   | –   | 4.1770                        | 4.6585                         | –   | 9.8438                         | 1.5346                                    | 3.9729                                       | 1.5039                           | 7.8044                                |
| 2018   | –   | 4.3014                        | 4.6635                         | –   | 10.2548                        | 1.6220                                    | 4.4440                                       | 1.5605                           | 7.8751                                |
| 2019   | –   | 4.2568                        | 4.7830                         | –   | 10.4468                        | 1.5995                                    | 4.5157                                       | 1.4598                           | 7.8205                                |
| 2020   | –   | 4.5597                        | 4.8683                         | –   | 10.0343                        | 1.5896                                    | 6.3735                                       | 1.5633                           | 8.0225                                |
|        | <b>Annual averages <sup>+</sup></b>       |                               |                                |   |                                |   |  |                                  |                                       |
| 2007   | 0.4293                                    | 3.7837                        | 3.3353                         | 33.775  | 9.2501                         | 1.6348                                    | 2.6633                                       | 1.4678                           | 10.4178                               |
| 2008   | –   | 3.5121                        | 3.6826                         | 31.262  | 9.6152                         | 1.7416                                    | 2.6737                                       | 1.5594                           | 10.2236                               |
| 2009   | –   | 4.3276                        | 4.2399                         | –   | 10.6191                        | 1.7727                                    | 2.7674                                       | 1.5850                           | 9.5277                                |
| 2010   | –   | 3.9947                        | 4.2122                         | –   | 9.5373                         | 1.4423                                    | 2.3314                                       | 1.3651                           | 8.9712                                |
| 2011   | –   | 4.1206                        | 4.2391                         | –   | 9.0298                         | 1.3484                                    | 2.3265                                       | 1.3761                           | 8.9960                                |
| 2012   | –   | 4.1847                        | 4.4593                         | –   | 8.7041                         | 1.2407                                    | 2.5084                                       | 1.2842                           | 8.1052                                |
| 2013   | –   | 4.1975                        | 4.4190                         | –   | 8.6515                         | 1.3777                                    | 2.8687                                       | 1.3684                           | 8.1646                                |
| 2014   | –   | 4.1843                        | 4.4437                         | –   | 9.0985                         | 1.4719                                    | 3.1211                                       | 1.4661                           | 8.1857                                |
| 2015   | –   | 4.1841                        | 4.4454                         | –   | 9.3535                         | 1.4777                                    | 3.7004                                       | 1.4186                           | 6.9733                                |
| 2016   | –   | 4.3632                        | 4.4904                         | –   | 9.4689                         | 1.4883                                    | 3.8561                                       | 1.4659                           | 7.3522                                |
| 2017   | –   | 4.2570                        | 4.5688                         | –   | 9.6351                         | 1.4732                                    | 3.6054                                       | 1.4647                           | 7.6290                                |
| 2018   | –   | 4.2615                        | 4.6540                         | –   | 10.2583                        | 1.5797                                    | 4.3085                                       | 1.5294                           | 7.8081                                |
| 2019   | –   | 4.2976                        | 4.7453                         | –   | 10.5891                        | 1.6109                                    | 4.4134                                       | 1.4855                           | 7.7355                                |
| 2020   | –   | 4.4430                        | 4.8383                         | –   | 10.4848                        | 1.6549                                    | 5.8943                                       | 1.5300                           | 7.8747                                |

\* See Explanatory notes, p. 48. + Averages: Bundesbank calculations based on the daily euro foreign exchange reference rates published by the ECB. <sup>1</sup> Accession to the euro area, see p. 7 (Table I. 1.). <sup>2</sup> Up to December 2007, ECB indicative rates.

## 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)

| Period                   | Hong Kong<br>Hong Kong<br>dollar<br>HKD | Iceland<br>Icelandic<br>krona<br>ISK <sup>1</sup> | India<br>Indian rupee<br>INR <sup>2</sup> | Indonesia<br>Indonesian<br>rupiah<br>IDR | Israel<br>New shekel<br>ILS <sup>3</sup> | Japan<br>Japanese yen<br>JPY | Korea,<br>Republic of<br>South<br>Korean won<br>KRW | Malaysia<br>Malaysian<br>ringgit<br>MYR | Mexico<br>Mexican<br>peso<br>MXN <sup>4</sup> | New Zealand<br>New Zealand<br>dollar<br>NZD |
|--------------------------|---|---|---|--|--|------------------------------|---|---|---|---|
| <b>End of year</b>       |   |   |   |  |  |                              |   |   |   |   |
| 2007                     | 11.4800                                 | 91.90   | 57.8620                                   | 13,826.70                                | 5.6539                                   | 164.93                       | 1,377.96  | 4.8682                                  | 16.0732                                       | 1.9024                                      |
| 2008                     | 10.7858                                 | –   | 67.4370                                   | 15,239.12                                | 5.2919                                   | 126.14                       | 1,839.13  | 4.8048                                  | 19.2333                                       | 2.4191                                      |
| 2009                     | 11.1709                                 | –   | 67.0400                                   | 13,626.13                                | 5.4524                                   | 133.16                       | 1,666.97  | 4.9326                                  | 18.9223                                       | 1.9803                                      |
| 2010                     | 10.3856                                 | –   | 59.7580                                   | 12,002.14                                | 4.7321                                   | 108.65                       | 1,499.06  | 4.0950                                  | 16.5475                                       | 1.7200                                      |
| 2011                     | 10.0510                                 | –   | 68.7130                                   | 11,731.47                                | 4.9453                                   | 100.20                       | 1,498.69  | 4.1055                                  | 18.0512                                       | 1.6737                                      |
| 2012                     | 10.2260                                 | –   | 72.5600                                   | 12,713.97                                | 4.9258                                   | 113.61                       | 1,406.23  | 4.0347                                  | 17.1845                                       | 1.6045                                      |
| 2013                     | 10.6933                                 | –   | 85.3660                                   | 16,764.78                                | 4.7880                                   | 144.72                       | 1,450.93  | 4.5221                                  | 18.0731                                       | 1.6762                                      |
| 2014                     | 9.4170                                  | –   | 76.7190                                   | 15,076.10                                | 4.7200                                   | 145.23                       | 1,324.80  | 4.2473                                  | 17.8679                                       | 1.5525                                      |
| 2015                     | 8.4376                                  | –   | 72.0215                                   | 15,039.99                                | 4.2481                                   | 131.07                       | 1,280.78  | 4.6959                                  | 18.9145                                       | 1.5923                                      |
| 2016                     | 8.1751                                  | –   | 71.5935                                   | 14,173.43                                | 4.0477                                   | 123.40                       | 1,269.36  | 4.7287                                  | 21.7719                                       | 1.5158                                      |
| 2017                     | 9.3720                                  | –   | 76.6055                                   | 16,239.12                                | 4.1635                                   | 135.01                       | 1,279.61  | 4.8536                                  | 23.6612                                       | 1.6850                                      |
| 2018                     | 8.9675                                  | 133.20  | 79.7298                                   | 16,500.00                                | 4.2972                                   | 125.85                       | 1,277.93  | 4.7317                                  | 22.4921                                       | 1.7056                                      |
| 2019                     | 8.7473                                  | 135.80  | 80.1870                                   | 15,595.60                                | 3.8845                                   | 121.94                       | 1,296.28  | 4.5953                                  | 21.2202                                       | 1.6653                                      |
| 2020                     | 9.5142                                  | 156.10  | 89.6605                                   | 17,240.76                                | 3.9447                                   | 126.49                       | 1,336.00  | 4.9340                                  | 24.4160                                       | 1.6984                                      |
| <b>Annual averages +</b> |   |   |   |  |  |                              |   |   |   |   |
| 2007                     | 10.6912                                 | 87.63   | 56.4186                                   | 12,528.33                                | 5.6278                                   | 161.25                       | 1,272.99  | 4.7076                                  | 14.9743                                       | 1.8627                                      |
| 2008                     | 11.4541                                 | 143.83  | 63.6143                                   | 14,165.16                                | 5.2561                                   | 152.45                       | 1,606.09  | 4.8893                                  | 16.2911                                       | 2.0770                                      |
| 2009                     | 10.8114                                 | –   | 67.3611                                   | 14,443.74                                | 5.4668                                   | 130.34                       | 1,772.90  | 4.9079                                  | 18.7989                                       | 2.2121                                      |
| 2010                     | 10.2994                                 | –   | 60.5878                                   | 12,041.70                                | 4.9457                                   | 116.24                       | 1,531.82  | 4.2668                                  | 16.7373                                       | 1.8377                                      |
| 2011                     | 10.8362                                 | –   | 64.8859                                   | 12,206.51                                | 4.9775                                   | 110.96                       | 1,541.23  | 4.2558                                  | 17.2877                                       | 1.7600                                      |
| 2012                     | 9.9663                                  | –   | 68.5973                                   | 12,045.73                                | 4.9536                                   | 102.49                       | 1,447.69  | 3.9672                                  | 16.9029                                       | 1.5867                                      |
| 2013                     | 10.3016                                 | –   | 77.9300                                   | 13,857.50                                | 4.7948                                   | 129.66                       | 1,453.91  | 4.1855                                  | 16.9641                                       | 1.6206                                      |
| 2014                     | 10.3025                                 | –   | 81.0406                                   | 15,748.92                                | 4.7449                                   | 140.31                       | 1,398.14  | 4.3446                                  | 17.6550                                       | 1.5995                                      |
| 2015                     | 8.6014                                  | –   | 71.1956                                   | 14,870.39                                | 4.3122                                   | 134.31                       | 1,256.54  | 4.3373                                  | 17.6157                                       | 1.5930                                      |
| 2016                     | 8.5922                                  | –   | 74.3717                                   | 14,720.83                                | 4.2489                                   | 120.20                       | 1,284.18  | 4.5835                                  | 20.6673                                       | 1.5886                                      |
| 2017                     | 8.8045                                  | –   | 73.5324                                   | 15,118.01                                | 4.0622                                   | 126.71                       | 1,276.74  | 4.8527                                  | 21.3286                                       | 1.5897                                      |
| 2018                     | 9.2559                                  | 127.89  | 80.7332                                   | 16,803.22                                | 4.2423                                   | 130.40                       | 1,299.07  | 4.7634                                  | 22.7054                                       | 1.7065                                      |
| 2019                     | 8.7715                                  | 137.28  | 78.8361                                   | 15,835.27                                | 3.9901                                   | 122.01                       | 1,305.32  | 4.6374                                  | 21.5565                                       | 1.6998                                      |
| 2020                     | 8.8587                                  | 154.59  | 84.6392                                   | 16,627.37                                | 3.9258                                   | 121.85                       | 1,345.58  | 4.7959                                  | 24.5194                                       | 1.7561                                      |

Other European and non-European countries (cont'd)

| Period                   | Norway<br>Norwegian<br>krona<br>NOK | Philippines<br>Philippine peso<br>PHP | Russian<br>Federation<br>Russian rouble<br>RUB | Singapore<br>Singapore<br>dollar<br>SGD | South Africa<br>South African<br>rand<br>ZAR | Switzerland<br>Swiss franc<br>CHF | Thailand<br>Thai baht<br>THB | Turkey<br>Turkish lira <sup>5</sup><br>TRY | United<br>Kingdom<br>Pound sterling<br>GBP | United States<br>US dollar<br>USD |
|--------------------------|-------------------------------------|---------------------------------------|--|---|--|-----------------------------------|------------------------------|--|--|-----------------------------------|
| <b>End of year</b>       |                                     |                                       |  |   |  |                                   |                              |  |  |                                   |
| 2007                     | 7.9580                              | 60.724                                | 35.9860  | 2.1163                                  | 10.0298                                      | 1.6547                            | 43.800                       | 1.7170                                     | 0.73335                                    | 1.4721                            |
| 2008                     | 9.7500                              | 65.930                                | 41.2830  | 2.0040                                  | 13.0667                                      | 1.4850                            | 48.285                       | 2.1488                                     | 0.95250                                    | 1.3917                            |
| 2009                     | 8.3000                              | 66.507                                | 43.1540  | 2.0194                                  | 10.6660                                      | 1.4836                            | 47.986                       | 2.1547                                     | 0.88810                                    | 1.4406                            |
| 2010                     | 7.8000                              | 58.300                                | 40.8200  | 1.7136                                  | 8.8625                                       | 1.2504                            | 40.170                       | 2.0694                                     | 0.86075                                    | 1.3362                            |
| 2011                     | 7.7540                              | 56.754                                | 41.7650  | 1.6819                                  | 10.4830                                      | 1.2156                            | 40.991                       | 2.4432                                     | 0.83530                                    | 1.2939                            |
| 2012                     | 7.3483                              | 54.107                                | 40.3295  | 1.6111                                  | 11.1727                                      | 1.2072                            | 40.347                       | 2.3551                                     | 0.81610                                    | 1.3194                            |
| 2013                     | 8.3630                              | 61.289                                | 45.3246  | 1.7414                                  | 14.5660                                      | 1.2276                            | 45.178                       | 2.9605                                     | 0.83370                                    | 1.3791                            |
| 2014                     | 9.0420                              | 54.436                                | 72.3370  | 1.6058                                  | 14.0353                                      | 1.2024                            | 39.910                       | 2.8320                                     | 0.77890                                    | 1.2141                            |
| 2015                     | 9.6030                              | 50.999                                | 80.6736  | 1.5417                                  | 16.9530                                      | 1.0835                            | 39.248                       | 3.1765                                     | 0.73395                                    | 1.0887                            |
| 2016                     | 9.0863                              | 52.268                                | 64.3000  | 1.5234                                  | 14.4570                                      | 1.0739                            | 37.726                       | 3.7072                                     | 0.85618                                    | 1.0541                            |
| 2017                     | 9.8403                              | 59.795                                | 69.3920  | 1.6024                                  | 14.8054                                      | 1.1702                            | 39.121                       | 4.5464                                     | 0.88723                                    | 1.1993                            |
| 2018                     | 9.9483                              | 60.113                                | 79.7153  | 1.5591                                  | 16.4594                                      | 1.1269                            | 37.052                       | 6.0588                                     | 0.89453                                    | 1.1450                            |
| 2019                     | 9.8638                              | 56.900                                | 69.9563  | 1.5111                                  | 15.7773                                      | 1.0854                            | 33.415                       | 6.6843                                     | 0.85080                                    | 1.1234                            |
| 2020                     | 10.4703                             | 59.125                                | 91.4671  | 1.6218                                  | 18.0219                                      | 1.0802                            | 36.727                       | 9.1131                                     | 0.89903                                    | 1.2271                            |
| <b>Annual averages +</b> |                                     |                                       |  |   |  |                                   |                              |  |  |                                   |
| 2007                     | 8.0165                              | 63.026                                | 35.0183  | 2.0636                                  | 9.6596                                       | 1.6427                            | 44.214                       | 1.7865                                     | 0.68434                                    | 1.3705                            |
| 2008                     | 8.2237                              | 65.172                                | 36.4207  | 2.0762                                  | 12.0590                                      | 1.5874                            | 48.475                       | 1.9064                                     | 0.79628                                    | 1.4708                            |
| 2009                     | 8.7278                              | 66.338                                | 44.1376  | 2.0241                                  | 11.6737                                      | 1.5100                            | 47.804                       | 2.1631                                     | 0.89094                                    | 1.3948                            |
| 2010                     | 8.0043                              | 59.739                                | 40.2629  | 1.8055                                  | 9.6984                                       | 1.3803                            | 42.014                       | 1.9965                                     | 0.85784                                    | 1.3257                            |
| 2011                     | 7.7934                              | 60.260                                | 40.8846  | 1.7489                                  | 10.0970                                      | 1.2326                            | 42.429                       | 2.3378                                     | 0.86788                                    | 1.3920                            |
| 2012                     | 7.4751                              | 54.246                                | 39.9262  | 1.6055                                  | 10.5511                                      | 1.2053                            | 39.928                       | 2.3135                                     | 0.81087                                    | 1.2848                            |
| 2013                     | 7.8067                              | 56.428                                | 42.3370  | 1.6619                                  | 12.8330                                      | 1.2311                            | 40.830                       | 2.5335                                     | 0.84926                                    | 1.3281                            |
| 2014                     | 8.3544                              | 58.979                                | 50.9518  | 1.6823                                  | 14.4037                                      | 1.2146                            | 43.147                       | 2.9065                                     | 0.80612                                    | 1.3285                            |
| 2015                     | 8.9496                              | 50.522                                | 68.0720  | 1.5255                                  | 14.1723                                      | 1.0679                            | 38.028                       | 3.0255                                     | 0.72584                                    | 1.1095                            |
| 2016                     | 9.2906                              | 52.556                                | 74.1446  | 1.5275                                  | 16.2645                                      | 1.0902                            | 39.043                       | 3.3433                                     | 0.81948                                    | 1.1069                            |
| 2017                     | 9.3270                              | 56.973                                | 65.9383  | 1.5588                                  | 15.0490                                      | 1.1117                            | 38.296                       | 4.1206                                     | 0.87667                                    | 1.1297                            |
| 2018                     | 9.5975                              | 62.210                                | 74.0416  | 1.5926                                  | 15.6186                                      | 1.1550                            | 38.164                       | 5.7077                                     | 0.88471                                    | 1.1810                            |
| 2019                     | 9.8511                              | 57.985                                | 72.4553  | 1.5273                                  | 16.1757                                      | 1.1124                            | 34.757                       | 6.3578                                     | 0.87777                                    | 1.1195                            |
| 2020                     | 10.7228                             | 56.615                                | 82.7248  | 1.5742                                  | 18.7655                                      | 1.0705                            | 35.708                       | 8.0547                                     | 0.88970                                    | 1.1422                            |

\* See Explanatory notes, p. 48. + Averages: Bundesbank calculations based on the daily euro foreign exchange reference rates published by the ECB. <sup>1</sup> The ECB did not fix euro foreign exchange reference rates for the Icelandic krona from 4 December

2008 to 31 January 2018. <sup>2</sup> Up to December 2008, ECB indicative rates. <sup>3</sup> Up to December 2010, ECB indicative rates. <sup>4</sup> Up to December 2007, ECB indicative rates. <sup>5</sup> Up to end-2008, New Turkish lira.