

II. Term structure of interest rates in the debt securities market *

b) Term structure of interest rates in the debt securities market - estimated values, Pfandbriefe

% per annum

		Interest rate at a residual maturity of ... years									
End of year or month or trading day		1	2	3	4	5	6	7	8	9	10
2013		0.50	0.60	0.84	1.12	1.40	1.67	1.92	2.15	2.37	2.58
2014		0.25	0.23	0.27	0.34	0.44	0.54	0.65	0.76	0.87	0.97
2015		0.10	0.10	0.14	0.25	0.39	0.54	0.69	0.84	0.97	1.09
2016		–	0.03	0.07	0.06	0.09	0.16	0.26	0.38	0.51	0.74
2017		–	0.12	–	0.03	0.08	0.20	0.33	0.46	0.59	0.72
2018		–	0.11	–	0.04	0.04	0.15	0.29	0.44	0.59	0.73
2019		–	0.21	–	0.20	–	0.15	–	0.09	–	0.02
2020		–	0.42	–	0.40	–	0.37	–	0.34	–	0.31
2021		–	0.41	–	0.23	–	0.07	–	0.03	–	0.09
2022		3.22	3.33	3.28	3.28	3.26	3.26	3.26	3.27	3.28	3.29
2023		3.53	3.01	2.79	2.71	2.71	2.73	2.76	2.80	2.83	2.86
2022 Nov.		2.82	2.85	2.83	2.81	2.80	2.79	2.78	2.78	2.77	2.77
2022 Dec.		3.22	3.33	3.28	3.26	3.26	3.26	3.27	3.28	3.29	3.28
2023 Jan.		3.34	3.29	3.15	3.08	3.05	3.04	3.05	3.05	3.06	3.07
2023 Feb.		3.66	3.74	3.64	3.53	3.47	3.43	3.41	3.41	3.40	3.40
2023 Mar.		3.63	3.48	3.36	3.29	3.26	3.24	3.23	3.23	3.22	3.22
2023 Apr.		3.83	3.55	3.38	3.29	3.26	3.24	3.23	3.23	3.24	3.24
2023 May		3.87	3.61	3.36	3.24	3.19	3.17	3.17	3.17	3.18	3.18
2023 June		4.07	3.93	3.69	3.51	3.41	3.34	3.31	3.29	3.27	3.26
2023 July		4.08	3.80	3.57	3.45	3.38	3.35	3.34	3.33	3.33	3.33
2023 Aug.		4.03	3.74	3.52	3.41	3.35	3.33	3.32	3.32	3.33	3.33
2023 Sep.		4.18	3.90	3.73	3.66	3.63	3.62	3.63	3.63	3.64	3.65
2023 Oct.		4.03	3.72	3.55	3.49	3.49	3.52	3.55	3.59	3.61	3.64
2023 Nov.		3.84	3.49	3.29	3.20	3.16	3.17	3.19	3.22	3.26	3.30
2023 Dec.		3.53	3.01	2.79	2.71	2.71	2.73	2.76	2.80	2.83	2.86
2024 Jan.		3.62	3.15	2.96	2.90	2.91	2.93	2.96	3.00	3.02	3.05
2024 Feb.		3.90	3.55	3.35	3.24	3.20	3.18	3.19	3.21	3.23	3.26
2024 Mar.		3.81	3.43	3.21	3.08	3.01	2.99	2.99	3.01	3.04	3.07
2024 Apr.		3.85	3.58	3.40	3.29	3.23	3.21	3.21	3.22	3.25	3.28
2024 Apr.	2	3.79	3.42	3.20	3.08	3.02	3.01	3.01	3.04	3.07	3.10
2024 Apr.	3	3.78	3.41	3.20	3.09	3.03	3.02	3.03	3.06	3.09	3.12
2024 Apr.	4	3.78	3.42	3.21	3.09	3.04	3.02	3.03	3.06	3.09	3.12
2024 Apr.	5	3.79	3.42	3.20	3.08	3.03	3.01	3.02	3.04	3.07	3.11
2024 Apr.	8	3.81	3.47	3.26	3.15	3.09	3.07	3.08	3.10	3.13	3.16
2024 Apr.	9	3.82	3.48	3.27	3.15	3.08	3.06	3.07	3.08	3.11	3.14
2024 Apr.	10	3.81	3.45	3.23	3.11	3.05	3.03	3.04	3.05	3.08	3.11
2024 Apr.	11	3.86	3.54	3.33	3.21	3.15	3.12	3.12	3.13	3.15	3.18
2024 Apr.	12	3.83	3.49	3.28	3.17	3.10	3.08	3.08	3.10	3.12	3.15
2024 Apr.	15	3.82	3.47	3.27	3.15	3.10	3.08	3.08	3.10	3.13	3.16
2024 Apr.	16	3.83	3.50	3.31	3.20	3.15	3.13	3.14	3.16	3.18	3.21
2024 Apr.	17	3.85	3.55	3.36	3.25	3.20	3.18	3.18	3.20	3.22	3.25
2024 Apr.	18	3.85	3.53	3.34	3.23	3.17	3.15	3.16	3.17	3.20	3.23
2024 Apr.	19	3.86	3.56	3.37	3.26	3.20	3.17	3.17	3.18	3.21	3.23
2024 Apr.	22	3.87	3.58	3.40	3.29	3.24	3.21	3.21	3.23	3.25	3.28
2024 Apr.	23	3.85	3.55	3.37	3.26	3.20	3.18	3.19	3.20	3.22	3.25
2024 Apr.	24	3.86	3.57	3.39	3.28	3.23	3.22	3.22	3.24	3.26	3.29
2024 Apr.	25	3.86	3.58	3.40	3.31	3.26	3.25	3.25	3.27	3.30	3.32
2024 Apr.	26	3.89	3.61	3.44	3.34	3.29	3.27	3.28	3.29	3.32	3.34
2024 Apr.	29	3.85	3.58	3.40	3.29	3.23	3.21	3.21	3.23	3.25	3.28
2024 Apr.	30	3.85	3.58	3.40	3.29	3.23	3.21	3.21	3.22	3.25	3.28
2024 May	2	3.86	3.60	3.42	3.31	3.25	3.22	3.21	3.23	3.25	3.28
Memo item: yields, derived from the term of structure of interest rates, on Pfandbriefe with annual coupon payments											
2024 Apr.	30	3.85	3.59	3.41	3.30	3.24	3.22	3.22	3.23	3.25	3.28
Parameters for calculating the term structure of interest rates											
		Beta0	Beta1	Beta2	Beta3	Tau1	Tau2				
2024 Apr.	26	0.49319	3.81311	0.07206	8.80946	2.25549	13.99351				
2024 Apr.	29	2.08465	2.17475	– 19.06250	20.00000	5.31644	6.60128				
2024 Apr.	30	1.92688	2.32164	– 18.71338	20.00000	5.49494	6.91268				
2024 May	2	1.67111	2.55724	– 18.06404	20.00000	5.87666	7.57453				

* Interest rates on (theoretical) zero coupon bonds, estimated according to the procedure outlined in the explanatory notes. The estimates are based on the prices of Pfandbriefe (mortgage Pfandbriefe and public Pfandbriefe) with a residual maturity of

at least three months. The interest rates are estimated using a non-linear, parametric approach.

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b) Term structure of interest rates in the debt securities market - estimated values, Pfandbriefe

% per annum

		Interest rate at a residual maturity of ... years										
End of year or month or trading day		11	12	13	14	15	16	17	18	19	20	
2013												
2014												
2015												
2016												
2017		1.05	1.15	1.24	1.32	1.39	1.46	1.52	1.57	1.62	1.67	
2018		1.07	1.17	1.25	1.32	1.38	1.44	1.49	1.54	1.58	1.62	
2019		0.36	0.41	0.47	0.52	0.57	0.62	0.66	0.71	0.76	0.81	
2020		–	0.09	–	0.01	0.04	0.08	0.13	0.17	0.22	0.27	0.32
2021		0.41	0.46	0.52	0.58	0.63	0.69	0.74	0.79	0.84	0.89	
2022		3.28	3.27	3.26	3.25	3.23	3.21	3.19	3.17	3.15	3.13	
2023		2.88	2.90	2.92	2.94	2.96	2.97	2.98	2.99	3.00	3.01	
2022 Nov.		2.77	2.77	2.77	2.76	2.76	2.76	2.76	2.76	2.76	2.76	
Dec.		3.28	3.27	3.26	3.25	3.23	3.21	3.19	3.17	3.15	3.13	
2023 Jan.		3.08	3.08	3.08	3.07	3.07	3.06	3.05	3.03	3.02	3.00	
Feb.		3.40	3.40	3.40	3.40	3.39	3.38	3.37	3.35	3.34	3.32	
Mar.		3.22	3.21	3.21	3.21	3.20	3.20	3.19	3.18	3.17	3.16	
Apr.		3.24	3.24	3.25	3.25	3.25	3.24	3.24	3.24	3.23	3.22	
May		3.19	3.19	3.20	3.20	3.20	3.21	3.21	3.21	3.21	3.21	
June		3.25	3.24	3.24	3.23	3.23	3.22	3.22	3.22	3.21	3.21	
July		3.33	3.33	3.33	3.33	3.34	3.34	3.34	3.34	3.34	3.34	
Aug.		3.34	3.35	3.35	3.36	3.36	3.37	3.37	3.37	3.38	3.38	
Sep.		3.66	3.67	3.68	3.69	3.69	3.70	3.70	3.71	3.71	3.72	
Oct.		3.66	3.68	3.69	3.71	3.72	3.73	3.74	3.75	3.75	3.76	
Nov.		3.33	3.36	3.39	3.41	3.43	3.44	3.45	3.45	3.46	3.46	
Dec.		2.88	2.90	2.92	2.94	2.96	2.97	2.98	2.99	3.00	3.01	
2024 Jan.		3.07	3.09	3.11	3.12	3.13	3.14	3.15	3.16	3.17	3.18	
Feb.		3.28	3.31	3.32	3.34	3.35	3.36	3.37	3.37	3.37	3.37	
Mar.		3.11	3.14	3.17	3.19	3.22	3.23	3.25	3.26	3.26	3.27	
Apr.		3.31	3.34	3.37	3.39	3.42	3.43	3.44	3.45	3.46	3.46	
2024 Apr.	2	3.14	3.17	3.20	3.23	3.25	3.27	3.28	3.29	3.29	3.30	
	3	3.16	3.19	3.22	3.25	3.27	3.29	3.30	3.31	3.32	3.32	
	4	3.16	3.19	3.22	3.24	3.27	3.29	3.30	3.31	3.32	3.32	
	5	3.15	3.18	3.21	3.24	3.27	3.29	3.30	3.32	3.32	3.33	
	8	3.20	3.23	3.26	3.29	3.31	3.33	3.34	3.35	3.36	3.36	
	9	3.17	3.20	3.23	3.26	3.28	3.30	3.31	3.32	3.33	3.34	
	10	3.14	3.17	3.20	3.23	3.25	3.27	3.28	3.29	3.30	3.30	
	11	3.21	3.24	3.26	3.28	3.30	3.32	3.33	3.34	3.35	3.35	
	12	3.18	3.21	3.24	3.26	3.28	3.30	3.32	3.33	3.33	3.34	
	15	3.19	3.22	3.25	3.27	3.29	3.30	3.32	3.32	3.33	3.33	
	16	3.24	3.27	3.30	3.32	3.34	3.36	3.37	3.38	3.39	3.39	
	17	3.28	3.31	3.34	3.36	3.38	3.39	3.41	3.41	3.42	3.42	
	18	3.26	3.29	3.31	3.34	3.36	3.38	3.39	3.40	3.40	3.40	
	19	3.26	3.29	3.32	3.34	3.36	3.38	3.39	3.40	3.40	3.41	
	22	3.30	3.33	3.35	3.37	3.39	3.41	3.42	3.42	3.43	3.43	
	23	3.28	3.31	3.33	3.36	3.38	3.39	3.40	3.41	3.42	3.42	
	24	3.32	3.35	3.37	3.39	3.41	3.43	3.44	3.44	3.45	3.45	
	25	3.35	3.38	3.41	3.43	3.45	3.46	3.47	3.48	3.48	3.48	
	26	3.37	3.40	3.42	3.45	3.47	3.48	3.49	3.50	3.51	3.51	
	29	3.32	3.35	3.38	3.40	3.42	3.44	3.45	3.46	3.46	3.46	
	30	3.31	3.34	3.37	3.39	3.42	3.43	3.44	3.45	3.46	3.46	
May	2	3.31	3.34	3.37	3.40	3.42	3.44	3.46	3.47	3.47	3.48	
Memo item: yields, derived from the term of structure of interest rates, on Pfandbriefe with annual coupon payments												
2024 Apr.	30	3.30	3.33	3.35	3.37	3.39	3.41	3.42	3.42	3.43	3.43	
Parameters for calculating the term structure of interest rates												
		Beta0	Beta1	Beta2	Beta3	Tau1	Tau2					
2024 Apr.	26	0.49319	3.81311	0.07206	8.80946	2.25549	13.99351					
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