

1	b	51	a	101	d	151	b	201	d
2	a	52	d	102	a	152	b	202	d
3	c	53	c	103	b	153	a	203	b
4	a	54	a	104	c	154	b	204	c
5	c	55	b	105	d	155	d	205	c
6	c	56	c	106	d	156	b	206	b
7	b	57	d	107	c	157	d	207	d
8	c	58	d	108	b	158	a	208	a
9	a	59	b	109	b	159	b	209	d
10	c	60	b	110	c	160	d	210	c
11	a	61	c	111	a	161	d		
12	b	62	b	112	c	162	d		
13	b	63	a	113	c	163	d		
14	c	64	d	114	c	164	a		
15	a	65	c	115	a	165	d		
16	d	66	c	116	d	166	c		
17	d	67	a	117	b	167	d		
18	d	68	a	118	a	168	b		
19	c	69	a	119	d	169	d		
20	d	70	d	120	d	170	b		
21	c	71	d	121	c	171	b		
22	d	72	b	122	b	172	a		
23	b	73	b	123	c	173	c		
24	a	74	a	124	d	174	b		
25	a	75	d	125	b	175	c		
26	d	76	d	126	c	176	a		
27	c	77	b	127	a	177	a		
28	a	78	d	128	a	178	b		
29	a	79	c	129	c	179	d		
30	d	80	c	130	a	180	a		
31	a	81	c	131	c	181	c		
32	b	82	b	132	b	182	b		
33	c	83	a	133	a	183	c		
34	a	84	a	134	b	184	a		
35	c	85	d	135	a	185	a		
36	c	86	a	136	a	186	b		
37	b	87	c	137	a	187	b		
38	d	88	b	138	a	188	c		
39	c	89	b	139	c	189	d		
40	d	90	b	140	b	190	a		
41	b	91	c	141	d	191	a		
42	d	92	d	142	a	192	b		
43	b	93	c	143	d	193	c		
44	a	94	a	144	c	194	a		
45	d	95	d	145	b	195	b		
46	a	96	a	146	c	196	c		
47	b	97	b	147	d	197	c		
48	c	98	a	148	d	198	d		
49	d	99	a	149	a	199	b		
50	b	100	c	150	c	200	d		

Elaborations of calculations questions**21**

The salesman has still to buy GBP 4,000,000 at USD 1.5500 and the trader has to sell GBP 8,000,000 at 1.5200 whereas he had bought these at 1.5500.
Result: $8,000,000 \times 0.0300 =$ USD 240,000 loss

51

$\text{EUR } 10,000,000 \times 3/360 \times 0.04 + \text{EUR } 10,000,000 \times 1 = \text{EUR } 13,333$

79

$\text{GBP } 15 \text{ million} \times (1 + 31/365 \times 0.0325) = \text{GBP } 15,041,404.11$

87

$\text{CHF } 15,000,000 \times (1 + 3/360 \times 0.0125) = \text{CHF } 15,001,562.50$

88

$20,000,000 (1 + 60/360 \times 0.03) - 20,000,000 \times 30/360 \times (0.04 - 0.03) =$
 $20,100,000 - 16,667 = 20,083,333$

89

$29,275 / 5,000,000 \times 360/91 = 0.0232$

90

$4.20\% + 10/30 \times (4.50\% - 4.20\%) = 4.30\%$

91

$2.60\% + 20/30 \times (2.90\% - 2.60\%) = 2.80\%$

92

$20,000,000 / (1 + 60/360 \times 0.035) = 19,884,009.94$

93

$20,000,000 / (1 + 120/360 \times 0.017) = 19,887,305.27$

109

The accrued interest is paid until the moment that the bond is traded.

117

$\text{EUR } 10,000,000 / (1 + 90/360 \times 0.032) = \text{EUR } 9,920,634.92$

118

$$\text{USD } 5,000,000 \times (1 - 90/360 \times 0.04) = \text{USD } 4,950,000$$

119

$$\text{GBP } 10,000,000 / (1 + 90/365 \times 0.035) = \text{GBP } 9,914,437.05$$

120

On the sale of a CD, the seller usually receives a price higher than originally paid. This is because of the accrued interest. However, this positive income will be set-off by a market loss of the current market yield is higher than the coupon rate of the CD. The net effect can be a loss.

121

Commercial paper is traded at the present value of the face value. If the currency yield (which is used as discount rate) is positive, then the present value is always lower than the face value.

121

$$10,000,000 / (1 + 180/360 \times 0.016) = \text{EUR } 9,920,634.92$$

123

$$10,000,000 \times (1 - 60/360 \times 0.06) = \text{USD } 9,900,000.00$$

124

$$\text{Final proceeds are } 10,000,000 \times (1 + 90/360 \times 0.04) = \text{EUR } 10,100,000.00$$

125

$$10,000,000 / (1 + 180/360 \times 0.0175) = 9,913,258.98$$

126

$$100,000,000 \times (1 + 90/360 \times 0.005) / (1 + 60/360 \times 0.0025) = \text{JPY } 100,083,298.63$$

127

$$5,000,000 \times (1 - 90/360 \times 0.004) = \text{USD } 4,950,000.00$$

128

$$10,000,000 \times (1 - 90/360 \times 0.025) = \text{USD } 9,937,500.00$$

133

$$727,500,000 / 5,000,000 = 145.50$$

134

$$15,000,000.00 \times 1.2950 = 19,425,000.00$$

135

You have bought 10M EUR at 1.3650 that you sell at 1.3638. Your loss is $10,000,000 \times (1.3650 - 1.3638) = \text{USD}12,000$

137

You have sold EUR 10 million against GBP at 0.6712 that you now can buy at 0.6729. Your loss is $10,000,000 \times (0.6712 - 0.6729) = \text{GBP } 17,000$

138

Buy 4, sell 5, buy 3 = long 2

$$\text{Average rate} = (4 \times 1.452 - 5 \times 1.4474 + 3 \times 1.4321) / (4 - 5 + 3) = 1.4203$$

139

Position: $+ 4 - 5 - (3,982,500 / 1.3275) + 9,326,100 / 1.3323 = 4 - 5 - 3 + 7 = 3$
long

$$\text{Average rate: } (4 \times 1.32345 - 5 \times 1.3308 - 3 \times 1.3275 + 7 \times 1.3323) / 3 = 1.3292$$

144

He has bought 20M EUR in the first leg and sold 20M EUR in the second leg. In return he expects $20\text{M} \times 0.8890 = 17,780,000$ in the far leg

145

$$- (50,000,000 / 32.50) + (50,000,000 / 34.00) = -\text{USD } 67,873,30$$

You did not have to calculate at all. After all, in the NDF you sold USD and the rate went up. This means that you made a loss and further you know that NDFs are always settled USD or EUR.

156

$$(\text{EUR } 10,000,000 \times (0.0470 - 0.0450) \times 91/360) / (1 + 01/360 \times 0.0470) = \text{EUR } 4,996.20 \text{ to be paid by the bank}$$

157

$$40,000,000 \times (0.0365 - 0.0375) \times 90/360 / (1 + 90/360 \times 0.0365) = 9,909.58$$

