# **Putnam VT Mortgage Securities Fund**

# The fund's portfolio

3/31/23 (Unaudited)

### U.S. GOVERNMENT AND AGENCY MORTGAGE OBLIGATIONS (298.7%)(a)

	Principal amount	Value
J.S. Government Guaranteed Mortgage Obligations (25.7%)		
Government National Mortgage Association Pass-Through Certificates		
6.50%, with due dates from 4/15/28 to 7/20/36	\$16,177	\$17,176
6.00%, with due dates from 4/15/28 to 11/20/38	41,190	43,556
5.50%, 4/20/38	54,683	56,884
5.00%, 3/20/50	13,284	13,383
4.70%, 8/20/67	61,185	60,995
4.50%, TBA, 4/1/53	2,000,000	1,969,918
4.50%, with due dates from 5/20/48 to 5/20/48	69,414	69,113
4.00%, TBA, 4/1/53	1,000,000	962,669
3.50%, TBA, 4/1/53	2,000,000	1,875,111
3.00%, TBA, 4/1/53	2,000,000	1,819,332
2.00%, TBA, 4/1/53	1,000,000	849,078
		7,737,215
J.S. Government Agency Mortgage Obligations (273.0%)		
Federal Home Loan Mortgage Corporation Pass-Through Certificates		
7.50%, with due dates from 9/1/30 to 7/1/31	6,703	7,145
7.00%, with due dates from 11/1/26 to 4/1/32	37,420	39,456
Federal National Mortgage Association Pass-Through Certificates		
7.50%, with due dates from 9/1/30 to 11/1/30	3,172	3,347
7.00%, with due dates from 12/1/28 to 12/1/35	135,021	144,599
6.50%, 9/1/36	6,173	6,584
Jniform Mortgage-Backed Securities		
6.00%, TBA, 5/1/53	1,000,000	1,019,922
6.00%, TBA, 4/1/53	1,000,000	1,020,508
5.50%, TBA, 5/1/53	4,000,000	4,039,218
5.50%, TBA, 4/1/53	4,000,000	4,040,624
5.00%, TBA, 5/1/53	4,000,000	3,988,280
5.00%, TBA, 4/1/53	16,000,000	15,954,368
4.50%, TBA, 5/1/53	6,000,000	5,878,357

Total I.I.S. government and agency mortgage obligations (cost \$88 800 890)		\$89 895 190
		82,157,975
2.00%, TBA, 4/1/53	8,000,000	6,610,246
2.00%, TBA, 5/1/53	8,000,000	6,617,746
2.50%, TBA, 4/1/53	7,000,000	6,033,397
2.50%, TBA, 5/1/53	7,000,000	6,039,139
3.00%, TBA, 4/1/53	3,000,000	2,690,158
3.00%, TBA, 5/1/53	3,000,000	2,692,384
3.50%, TBA, 4/1/53	2,000,000	1,857,499
3.50%, TBA, 5/1/53	2,000,000	1,858,671
4.00%, TBA, 4/1/53	3,000,000	2,868,985
4.00%, TBA, 5/1/53	3,000,000	2,870,157
4.50%, TBA, 4/1/53	6,000,000	5,877,185

#### Total U.S. government and agency mortgage obligations (cost \$88,800,890)

\$89,895,190

## U.S. TREASURY OBLIGATIONS $(0.5\%)^{(a)}$

	Principal amount	Value
U.S. Treasury Notes 1.625%, 5/15/31 <sup>(i)</sup>	\$161,000	\$140,907
Total U.S. treasury obligations (cost \$140,907)		<b>\$140,907</b>

## MORTGAGE-BACKED SECURITIES (83.7%)<sup>(a)</sup>

	Principal amount	Value
Agency collateralized mortgage obligations (32.0%)		
Federal Home Loan Mortgage Corporation		
REMICs IFB Ser. 3408, Class EK, ((-4.024 x ICE LIBOR USD 1 Month) + 25.79%), 6.943%, 4/15/37	\$11,370	\$14,033
REMICs IFB Ser. 3065, Class DC, ((-3 x ICE LIBOR USD 1 Month) + 19.86%), 5.807%, 3/15/35	81,505	85,898
REMICs Ser. 5043, IO, 5.00%, 11/25/50	450,420	99,940

REMICs Ser. 4980, Class KI, IO, 4.50%, 6/25/50	726,194	150,969
REMICs Ser. 4018, Class DI, IO, 4.50%, 7/15/41	56,565	3,560
REMICs Ser. 5119, Class IC, IO, 4.00%, 6/25/51	446,253	87,577
REMICs Ser. 4953, Class AI, IO, 4.00%, 2/25/50	765,531	148,322
REMICs Ser. 4425, IO, 4.00%, 1/15/45	110,905	16,752
REMICs Ser. 4425, Class EI, IO, 4.00%, 1/15/45	192,639	29,010
REMICs Ser. 4452, Class QI, IO, 4.00%, 11/15/44	152,536	29,217
REMICs Ser. 4019, Class JI, IO, 4.00%, 5/15/41	88,329	5,662
REMICs Ser. 5077, Class NI, IO, 3.50%, 2/25/51	780,659	140,037
REMICs Ser. 5065, Class DI, IO, 3.50%, 1/25/51	1,203,648	211,477
REMICs Ser. 5050, Class IM, IO, 3.50%, 10/25/50	597,182	107,271
REMICs Ser. 5080, Class IQ, IO, 3.50%, 4/25/50	737,171	144,780
REMICs Ser. 4165, Class AI, IO, 3.50%, 2/15/43	103,270	15,582
REMICs Ser. 4136, Class IQ, IO, 3.50%, 11/15/42	200,015	27,250
Strips Ser. 304, Class C37, IO, 3.50%, 12/15/27	53,417	1,957
REMICs Ser. 5071, Class IV, IO, 3.00%, 12/25/50	1,103,920	188,533
REMICs Ser. 4141, Class PI, IO, 3.00%, 12/15/42	158,572	19,053
REMICs Ser. 4165, Class TI, IO, 3.00%, 12/15/42	322,667	24,159
REMICs Ser. 4171, Class NI, IO, 3.00%, 6/15/42	154,480	15,042
REMICs Ser. 4201, Class JI, IO, 3.00%, 12/15/41	91,200	3,878
REMICs IFB Ser. 4436, Class SC, IO, ((-1 x ICE LIBOR USD 1 Month) + 6.15%), 1.466%, 2/15/45	283,097	37,410
REMICs IFB Ser. 5003, Class DS, IO, ((-1 x ICE LIBOR USD 1 Month) + 6.10%), 1.255%, 8/25/50	680,673	90,482
REMICs IFB Ser. 4915, Class SD, IO, ((-1 x ICE LIBOR USD 1 Month) + 6.05%), 1.205%, 9/25/49	495,941	54,807
REMICs IFB Ser. 4933, Class SA, IO, ((-1 x ICE LIBOR USD 1 Month) + 6.00%), 1.155%, 12/25/49	700,459	92,256
REMICs Ser. 3391, PO, zero %, 4/15/37	2,774	2,312
Federal National Mortgage Association		
REMICs Ser. 15-58, Class KI, IO, 6.00%, 3/25/37	320,441	57,032
REMICs IFB Ser. 08-24, Class SP, ((-3.667 x ICE LIBOR USD 1 Month) + 23.28%), 5.517%, 2/25/38	35,279	34,848
REMICs Ser. 15-86, Class MI, IO, 5.50%, 11/25/45	267,766	44,318
REMICs Ser. 18-51, Class BI, IO, 5.50%, 7/25/38	329,252	30,960
Trust FRB Ser. 03-W8, Class 3F2, (ICE LIBOR USD 1 Month + 0.35%), 5.195%, 5/25/42	1,948	1,924
REMICs Ser. 17-19, Class IH, IO, 5.00%, 3/25/47	296,587	43,296
REMICs Ser. 12-151, Class IM, IO, 5.00%, 4/25/42	235,271	35,664
REMICs Ser. 20-31, IO, 4.50%, 5/25/50	1,244,199	232,487
REMICs Ser. 15-83, IO, 4.00%, 10/25/43	194,672	28,844
REMICs Ser. 12-104, Class HI, IO, 4.00%, 9/25/27	102,869	4,616
REMICs Ser. 21-25, Class IJ, IO, 3.50%, 5/25/51	484,028	85,310

REMICs Ser. 20-62, Class MI, IO, 3.50%, 5/25/49	1,205,024	212,569
REMICs Ser. 16-70, Class QI, IO, 3.50%, 10/25/46	343,131	48,038
REMICs Ser. 13-22, Class PI, IO, 3.50%, 10/25/42	134,137	23,591
REMICs Ser. 12-114, Class NI, IO, 3.50%, 10/25/41	170,388	10,717
REMICs Ser. 20-96, IO, 3.00%, 1/25/51	882,500	133,858
REMICs Ser. 13-55, Class IK, IO, 3.00%, 4/25/43	101,772	12,543
REMICs Ser. 13-6, Class JI, IO, 3.00%, 2/25/43	272,733	33,928
REMICs Ser. 12-151, Class PI, IO, 3.00%, 1/25/43	119,527	14,978
REMICs Ser. 12-145, Class TI, IO, 3.00%, 11/25/42	37,388	1,263
REMICs Ser. 13-55, Class PI, IO, 3.00%, 5/25/42	73,507	2,746
REMICs Ser. 13-30, Class IP, IO, 3.00%, 10/25/41	8,747	14
REMICs Ser. 13-23, Class LI, IO, 3.00%, 6/25/41	17,372	63
REMICs Ser. 21-12, Class NI, IO, 2.50%, 3/25/51	719,306	113,039
REMICs Ser. 21-3, Class IB, IO, 2.50%, 2/25/51	747,891	118,862
REMICs Ser. 21-3, Class NI, IO, 2.50%, 2/25/51	572,883	79,563
REMICs IFB Ser. 11-123, Class KS, IO, ((-1 x ICE LIBOR USD 1 Month) + 6.60%), 1.755%, 10/25/41	18,661	1,652
REMICs IFB Ser. 18-20, Class SB, IO, ((-1 x ICE LIBOR USD 1 Month) + 6.25%), 1.405%, 3/25/48	357,758	33,128
REMICs IFB Ser. 18-38, Class SP, IO, ((-1 x ICE LIBOR USD 1 Month) + 6.20%), 1.355%, 6/25/48	723,771	85,253
REMICs IFB Ser. 17-104, Class SL, IO, ((-1 x ICE LIBOR USD 1 Month) + 6.15%), 1.305%, 1/25/48	509,612	58,979
REMICs IFB Ser. 20-41, Class SE, IO, ((-1 x ICE LIBOR USD 1 Month) + 6.10%), 1.255%, 6/25/50	1,357,371	178,346
REMICs IFB Ser. 16-83, Class BS, IO, ((-1 x ICE LIBOR USD 1 Month) + 6.10%), 1.255%, 11/25/46	892,098	79,780
REMICs IFB Ser. 16-85, Class SL, IO, ((-1 x ICE LIBOR USD 1 Month) + 6.10%), 1.255%, 11/25/46	1,212,618	103,262
REMICs IFB Ser. 16-50, Class SM, IO, ((-1 x ICE LIBOR USD 1 Month) + 6.10%), 1.255%, 8/25/46	576,303	45,950
REMICs IFB Ser. 19-45, Class SD, IO, ((-1 x ICE LIBOR USD 1 Month) + 6.05%), 1.205%, 8/25/49	309,330	31,707
REMICs IFB Ser. 16-8, Class SA, IO, ((-1 x ICE LIBOR USD 1 Month) + 6.05%), 1.205%, 3/25/46	790,084	87,656
REMICs IFB Ser. 19-71, Class CS, IO, ((-1 x ICE LIBOR USD 1 Month) + 6.00%), 1.155%, 11/25/49	66,895	10,582
REMICs Ser. 08-53, Class DO, PO, zero %, 7/25/38 Government National Mortgage Association	13,485	11,107
Ser. 16-75, Class LI, IO, 6.00%, 1/20/40	183,363	31,409
Ser. 14-137, Class ID, IO, 5.50%, 9/16/44	199,606	33,511
Ser. 20-167, Class IT, IO, 5.00%, 9/20/47	476,118	96,693
Ser. 15-89, Class LI, IO, 5.00%, 12/20/44	292,497	55,586
Ser. 14-76, IO, 5.00%, 5/20/44	163,155	32,430
Ser. 13-51, Class QI, IO, 5.00%, 2/20/43	121,742	16,067

Ser. 13-6, Class OI, IO, 5.00%, 1/20/43	53,108	9,935
Ser. 10-35, Class UI, IO, 5.00%, 3/20/40	76,282	15,693
Ser. 10-9, Class UI, IO, 5.00%, 1/20/40	246,865	50,299
Ser. 09-121, Class UI, IO, 5.00%, 12/20/39	192,586	38,856
Ser. 18-1, IO, 4.50%, 1/20/48	271,053	51,829
Ser. 13-34, Class HI, IO, 4.50%, 3/20/43	176,168	31,893
Ser. 13-39, Class IJ, IO, 4.50%, 3/20/43	488,189	91,075
Ser. 10-35, Class AI, IO, 4.50%, 3/20/40	167,124	27,579
Ser. 10-35, Class DI, IO, 4.50%, 3/20/40	100,753	18,159
Ser. 10-35, Class QI, IO, 4.50%, 3/20/40	58,657	10,238
Ser. 09-121, Class CI, IO, 4.50%, 12/16/39	238,004	44,075
Ser. 15-53, Class MI, IO, 4.00%, 4/16/45	205,731	37,546
Ser. 14-100, Class NI, IO, 4.00%, 6/20/43	135,382	8,292
Ser. 13-165, Class IL, IO, 4.00%, 3/20/43	52,627	8,145
Ser. 12-56, Class IB, IO, 4.00%, 4/20/42	161,238	27,460
Ser. 12-38, Class MI, IO, 4.00%, 3/20/42	642,926	109,850
Ser. 14-182, Class BI, IO, 4.00%, 1/20/39	284,583	28,158
Ser. 17-H08, Class GI, IO, 3.929%, 2/20/67(WAC)	472,396	41,402
Ser. 21-177, Class IG, IO, 3.50%, 10/20/51	1,568,529	214,551
Ser. 20-175, Class JI, IO, 3.50%, 11/20/50	1,665,789	285,031
Ser. 15-168, Class IG, IO, 3.50%, 3/20/43	103,372	13,050
Ser. 12-136, IO, 3.50%, 11/20/42	261,893	36,281
Ser. 14-102, Class IG, IO, 3.50%, 3/16/41	38,690	1,724
Ser. 15-52, Class KI, IO, 3.50%, 11/20/40	108,855	8,055
Ser. 15-24, Class AI, IO, 3.50%, 12/20/37	15,884	51
Ser. 17-H08, Class NI, IO, 3.01%, 3/20/67 <sup>(WAC)</sup>	538,576	19,066
Ser. 21-176, Class GI, IO, 3.00%, 10/20/51	926,070	126,177
Ser. 21-188, Class IU, IO, 3.00%, 10/20/51	606,064	123,681
Ser. 21-188, Class IW, IO, 3.00%, 10/20/51	636,547	104,428
Ser. 21-76, Class NI, IO, 3.00%, 8/20/50	1,340,154	198,611
Ser. 14-174, Class AI, IO, 3.00%, 11/16/29	169,766	9,201
Ser. 16-H13, Class IK, IO, 2.654%, 6/20/66(WAC)	643,503	53,710
Ser. 21-7, Class MI, IO, 2.50%, 1/20/51	1,097,132	152,408
Ser. 21-8, Class IP, IO, 2.50%, 1/20/51	1,299,852	179,760
Ser. 20-162, Class UI, IO, 2.50%, 10/20/50	972,347	127,160
Ser. 20-138, Class IB, IO, 2.50%, 9/20/50	1,208,874	158,447
IFB Ser. 23-20, Class SP, IO, ((-1 x US 30 Day Average	2 446 622	161 727
SOFR) + 7.00%), 2.441%, 2/20/53	2,446,623	161,737
Ser. 16-H04, Class HI, IO, 2.368%, 7/20/65 <sup>(WAC)</sup>	424,512	12,905
Ser. 16-H07, Class PI, IO, 2.28%, 3/20/66 <sup>(WAC)</sup>	1,334,989	91,449

Ser. 16-H24, IO, 2.144%, 9/20/66(WAC)	617,807	47,369
Ser. 17-H10, Class MI, IO, 1.989%, 4/20/67(WAC)	617,526	18,958
Ser. 15-H23, Class TI, IO, 1.94%, 9/20/65(WAC)	631,377	30,306
IFB Ser. 13-182, Class SP, IO, ((-1 x ICE LIBOR USD 1 Month) + 6.70%), 1.939%, 12/20/43	129,318	14,720
Ser. 17-H14, Class JI, IO, 1.887%, 6/20/67 <sup>(WAC)</sup>	354,225	28,977
Ser. 17-H09, IO, 1.846%, 4/20/67(WAC)	539,122	14,485
IFB Ser. 11-156, Class SK, IO, ((-1 x ICE LIBOR USD 1 Month) + 6.60%), 1.839%, 4/20/38	395,272	47,966
Ser. 17-H14, Class LI, IO, 1.831%, 6/20/67(WAC)	465,854	24,241
Ser. 14-H25, Class BI, IO, 1.673%, 12/20/64(WAC)	653,190	20,998
IFB Ser. 21-98, Class SK, IO, ((-1 x ICE LIBOR USD 1 Month) + 6.30%), 1.539%, 6/20/51	947,157	120,175
IFB Ser. 20-112, Class MS, IO, ((-1 x ICE LIBOR USD 1 Month) + 6.30%), 1.539%, 8/20/50	1,535,042	205,788
IFB Ser. 17-156, Class SL, IO, ((-1 x ICE LIBOR USD 1 Month) + 6.20%), 1.439%, 10/20/47	434,591	43,530
IFB Ser. 13-87, Class SA, IO, ((-1 x ICE LIBOR USD 1 Month) + 6.20%), 1.439%, 6/20/43	606,526	64,995
IFB Ser. 19-158, Class AS, IO, ((-1 x ICE LIBOR USD 1 Month) + 6.15%), 1.422%, 9/16/43	594,982	65,248
IFB Ser. 19-56, Class SK, IO, ((-1 x ICE LIBOR USD 1 Month) + 6.15%), 1.389%, 5/20/49	417,579	40,535
IFB Ser. 18-148, Class GS, IO, ((-1 x ICE LIBOR USD 1 Month) + 6.10%), 1.372%, 2/16/46	333,557	35,095
IFB Ser. 19-100, Class JS, IO, ((-1 x ICE LIBOR USD 1 Month) + 6.10%), 1.339%, 8/20/49	293,984	26,343
IFB Ser. 20-7, Class SK, IO, ((-1 x ICE LIBOR USD 1 Month) + 6.05%), 1.289%, 1/20/50	594,776	63,483
IFB Ser. 19-125, Class SG, IO, ((-1 x ICE LIBOR USD 1 Month) + 6.05%), 1.289%, 10/20/49	645,883	94,672
IFB Ser. 19-110, Class SQ, IO, ((-1 x ICE LIBOR USD 1 Month) + 6.05%), 1.289%, 9/20/49	698,976	78,460
FRB Ser. 11-H07, Class FI, IO, 1.249%, 2/20/61 <sup>(WAC)</sup>	594,705	15,879
IFB Ser. 19-121, Class SD, IO, ((-1 x ICE LIBOR USD 1 Month) + 6.00%), 1.239%, 10/20/49	263,760	40,139
IFB Ser. 20-47, Class SA, IO, ((-1 x ICE LIBOR USD 1 Month) + 6.00%), 1.239%, 5/20/44	491,776	46,871
IFB Ser. 23-40, Class SP, IO, ((-1 x US 30 Day Average SOFR) + 5.65%), 1.092%, 3/20/53	3,555,000	145,562
IFB Ser. 22-209, Class SG, IO, ((-1 x US 30 Day Average SOFR) + 5.60%), 1.041%, 12/20/52	3,832,793	246,654
Ser. 17-H20, Class AI, IO, 0.24%, 10/20/67(WAC)	1,326,585	70,475
Ser. 17-H03, Class KI, IO, 0.178%, 1/20/67 <sup>(WAC)</sup>	882,942	72,313
Ser. 18-H01, Class XI, IO, 0.107%, 1/20/68 <sup>(WAC)</sup>	742,987	53,339

Ser. 16-H27, Class GI, IO, 0.102%, 12/20/66(WAC)	943,440	53,415
FRB Ser. 15-H16, Class XI, IO, 0.101%, 7/20/65 <sup>(WAC)</sup>	505,997	26,767
Ser. 17-H25, Class CI, IO, 0.097%, 12/20/67(WAC)	943,300	61,648
Ser. 15-H20, Class Cl, IO, 0.087%, 8/20/65 <sup>(WAC)</sup>	878,091	49,612
Ser. 16-H24, Class JI, IO, 0.08%, 11/20/66(WAC)	350,999	18,930
Ser. 15-H22, Class AI, IO, 0.08%, 9/20/65 <sup>(WAC)</sup>	887,290	45,252
Ser. 16-H18, Class QI, IO, 0.078%, 6/20/66( <i>WAC</i> )	735,791	37,840
Ser. 16-H24, Class KI, IO, 0.076%, 11/20/66 <sup>(WAC)</sup>	432,828	22,501
FRB Ser. 16-H19, Class AI, IO, 0.076%, 9/20/66 <sup>(WAC)</sup>	1,170,654	51,062
Ser. 17-H06, Class MI, IO, 0.064%, 2/20/67 <sup>(WAC)</sup>	894,842	33,872
Ser. 15-H13, Class AI, IO, 0.06%, 6/20/65(WAC)	669,843	28,582
Ser. 18-H02, Class IM, IO, 0.059%, 2/20/68(WAC)	518,945	31,554
Ser. 15-H14, Class AI, IO, 0.059%, 6/20/65 <sup>(WAC)</sup>	1,280,985	53,882
Ser. 15-H10, Class HI, IO, 0.054%, 4/20/65(WAC)	1,255,767	51,361
Ser. 14-H21, Class AI, IO, 0.047%, 10/20/64(WAC)	878,021	30,125
Ser. 17-H04, Class BI, IO, 0.037%, 2/20/67(WAC)	544,296	24,183
Ser. 16-H03, Class AI, IO, 0.034%, 1/20/66 <sup>(WAC)</sup>	806,444	29,778
Ser. 16-H24, Class BI, IO, 0.031%, 11/20/66(WAC)	1,970,624	84,979
Ser. 17-H25, IO, 0.026%, 11/20/67 <sup>(WAC)</sup>	589,984	25,720
Ser. 16-H23, Class NI, IO, 0.026%, 10/20/66( <i>WAC</i> )	1,051,361	46,996
Ser. 15-H04, Class AI, IO, 0.023%, 12/20/64(WAC)	598,498	19,308
Ser. 16-H06, Class DI, IO, 0.008%, 7/20/65(WAC)	791,184	19,030
Ser. 16-H10, Class Al, IO, zero %, 4/20/66(WAC)	763,318	15,946
		9,613,281
Commercial mortgage-backed securities (32.1%)		
BANK 144A Ser. 18-BN11, Class D, 3.00%, 3/15/61 Barclays Commercial Mortgage Trust 144A	59,000	34,735
Ser. 19-C4, Class E, 3.25%, 8/15/52	111,000	66,708
Ser. 19-C3, Class D, 3.00%, 5/15/52	65,000	44,337
Bear Stearns Commercial Mortgage Securities Trust FRB Ser. 07-T26, Class AJ, 5.566%, 1/12/45 <sup>(WAC)</sup>	608	586
Benchmark Mortgage Trust FRB Ser. 18-B1, Class C,	<b>47.00</b> 0	07.470
4.195%, 1/15/51 <sup>(WAC)</sup> Benchmark Mortgage Trust 144A	47,000	37,470
FRB Ser. 18-B3, Class D, 3.029%, 4/10/51 <sup>(WAC)</sup>	218,000	139,723
Ser. 19-B11, Class D, 3.00%, 5/15/52	115,000	73,064
Ser. 18-B1, Class E, 3.00%, 1/15/51 <sup>(WAC)</sup>	108,000	55,078

Ser. 19-B13, Class D, 2.50%, 8/15/57	152,000	94,447
BWAY Mortgage Trust 144A FRB Ser. 22-26BW, Class F, 4.866%, 2/10/44(WAC)	138,000	85,879
CD Commercial Mortgage Trust	404.000	00.500
FRB Ser. 17-CD3, Class C, 4.546%, 2/10/50 <sup>(WAC)</sup>	134,000	86,563
Ser. 17-CD3, Class B, 3.984%, 2/10/50 <sup>(WAC)</sup> CD Commercial Mortgage Trust 144A	60,000	50,111
Ser. 17-CD3, Class D, 3.25%, 2/10/50	140,000	84,826
Ser. 19-CD8, Class D, 3.00%, 8/15/57 Citigroup Commercial Mortgage Trust	84,000	55,784
FRB Ser. 13-GC15, Class C, 5.154%, 9/10/46(WAC)	104,000	100,962
FRB Ser. 15-GC27, Class C, 4.425%, 2/10/48(WAC) Citigroup Commercial Mortgage Trust 144A	116,000	106,150
FRB Ser. 15-GC27, Class D, 4.425%, 2/10/48 <sup>(WAC)</sup>	70,000	60,922
Ser. 15-P1, Class D, 3.225%, 9/15/48	209,000	154,918
Ser. 15-GC27, Class E, 3.00%, 2/10/48 COMM Mortgage Trust	150,000	109,464
FRB Ser. 12-CR1, Class C, 5.332%, 5/15/45(WAC)	68,000	63,738
FRB Ser. 14-CR16, Class C, 4.899%, 4/10/47 <sup>(WAC)</sup>	166,000	149,384
FRB Ser. 13-CR13, Class C, 4.876%, 11/10/46(WAC)	99,000	93,578
FRB Ser. 18-COR3, Class C, 4.56%, 5/10/51(WAC)	67,000	55,222
Ser. 13-CR12, Class AM, 4.30%, 10/10/46	106,000	95,472
FRB Ser. 15-CR23, Class C, 4.295%, 5/10/48(WAC)	72,000	66,657
Ser. 15-DC1, Class B, 4.035%, 2/10/48(WAC)	85,000	76,109
FRB Ser. 15-CR26, Class D, 3.467%, 10/10/48(WAC) COMM Mortgage Trust 144A	165,000	112,321
FRB Ser. 13-LC13, Class D, 5.255%, 8/10/46(WAC)	101,000	96,532
FRB Ser. 14-CR17, Class D, 4.845%, 5/10/47(WAC)	228,000	200,880
FRB Ser. 14-CR17, Class E, 4.845%, 5/10/47( <i>WAC</i> )	124,000	84,065
FRB Ser. 15-LC19, Class E, 4.215%, 2/10/48 <sup>(WAC)</sup>	115,000	88,034
FRB Ser. 13-CR6, Class D, 4.169%, 3/10/46( <i>WAC</i> )	160,000	116,000
Ser. 12-CR4, Class B, 3.703%, 10/15/45	123,000	75,617
Ser. 17-COR2, Class D, 3.00%, 9/10/50	157,000	114,557
FRB Ser. 18-COR3, Class D, 2.81%, 5/10/51 <sup>(WAC)</sup> Credit Suisse Mortgage Trust 144A FRB Ser. 22-NWPT,	112,000	63,501
Class A, 7.97%, 9/9/24 CSAIL Commercial Mortgage Trust	111,000	110,675
FRB Ser. 15-C3, Class C, 4.358%, 8/15/48(WAC)	56,000	44,155
FRB Ser. 15-C1, Class C, 4.256%, 4/15/50(WAC)	124,000	100,477
FRB Ser. 15-C2, Class C, 4.177%, 6/15/57(WAC)	69,000	56,063

FRB Ser. 15-C2, Class D, 4.177%, 6/15/57(WAC) CSAIL Commercial Mortgage Trust 144A	199,000	121,374
FRB Ser. 18-C14, Class D, 4.916%, 11/15/51 <sup>(WAC)</sup>	73,000	49,057
Ser. 19-C17, Class D, 2.50%, 9/15/52	138,000	77,747
DBUBS Mortgage Trust 144A FRB Ser. 11-LC3A, Class D,	,	
5.361%, 8/10/44(WAC)  Fodoral Hama Loan Martagae Corporation 1444	122,722	114,750
Federal Home Loan Mortgage Corporation 144A  Multifamily Structured Credit Risk FRB Ser. 21-MN3,		
Class M2, 8.56%, 11/25/51	148,000	127,573
Multifamily Structured Agency Credit Risk FRB Ser. 21-MN1, Class M2, 8.234%, 1/25/51	123,000	105,089
GS Mortgage Securities Corp., II 144A FRB Ser. 13-GC10,	154 000	105.012
Class D, 4.606%, 2/10/46 <sup>(WAC)</sup> GS Mortgage Securities Trust	154,000	125,913
FRB Ser. 14-GC18, Class C, 5.056%, 1/10/47(WAC)	155,000	102,300
FRB Ser. 14-GC22, Class C, 4.687%, 6/10/47 <sup>(WAC)</sup>	68,000	60,301
FRB Ser. 15-GC30, Class C, 4.069%, 5/10/50(WAC) GS Mortgage Securities Trust 144A	40,000	35,786
FRB Ser. 14-GC24, Class D, 4.526%, 9/10/47( <i>WAC</i> )	292,000	154,216
FRB Ser. 13-GC13, Class D, 4.122%, 7/10/46( <i>WAC</i> )	105,000	42,554
Ser. 17-GS5, Class D, 3.509%, 3/10/50 <sup>(WAC)</sup>	61,000	39,130
JPMBB Commercial Mortgage Securities Trust FRB Ser.	01,000	39,130
14-C22, Class C, 4.548%, 9/15/47 <sup>(WAC)</sup>	125,000	113,981
JPMBB Commercial Mortgage Securities Trust 144A		
FRB Ser. C14, Class D, 4.549%, 8/15/46 <sup>(WAC)</sup>	229,000	118,209
FRB Ser. 14-C25, Class D, 3.936%, 11/15/47 <sup>(WAC)</sup>	139,000	89,402
JPMDB Commercial Mortgage Securities Trust Ser. 17-C5, Class C, 4.512%, 3/15/50 <sup>(WAC)</sup>	88,000	63,735
JPMDB Commercial Mortgage Securities Trust 144A FRB	33,333	33,: 33
Ser. 16-C2, Class D, 3.334%, 6/15/49(WAC)	157,000	92,189
JPMorgan Chase Commercial Mortgage Securities Trust Ser. 06-LDP9, Class AMS, 5.337%, 5/15/47	111,790	106,695
FRB Ser. 13-C10, Class C, 4.346%, 12/15/47 <sup>(WAC)</sup>	130,000	124,953
FRB Ser. 13-LC11, Class D, 4.296%, 4/15/46(WAC)	168,000	103,969
Ser. 13-LC11, Class B, 3.499%, 4/15/46  JPMorgan Chase Commercial Mortgage Securities Trust	49,000	44,279
144A FRB Ser. 11-C3, Class D, 5.526%, 2/15/46( <i>WAC</i> )	145,000	99,930
Morgan Stanley Bank of America Merrill Lynch Trust		
FRB Ser. 15-C25, Class C, 4.524%, 10/15/48 <sup>(WAC)</sup>	122,000	109,707
FRB Ser. 14-C16, Class B, 4.301%, 6/15/47( <i>WAC</i> )	114,000	105,672
FRB Ser. 15-C22, Class C, 4.202%, 4/15/48 <sup>(WAC)</sup>	98,000	87,221
FRB Ser. 17-C34, Class C, 4.175%, 11/15/52 <sup>(WAC)</sup>	60,000	49,473
Ser. 14-C19, Class C, 4.00%, 12/15/47	69,000	62,222

FRB Ser. 13-C9, Class C, 3.996%, 5/15/46 <sup>(WAC)</sup> Morgan Stanley Bank of America Merrill Lynch Trust 144A	58,000	47,568
FRB Ser. 14-C15, Class D, 4.891%, 4/15/47 <sup>(WAC)</sup>	180,000	164,056
FRB Ser. 12-C5, Class E, 4.525%, 8/15/45 <sup>(WAC)</sup>	63,000	56,790
FRB Ser. 12-C6, Class E, 4.488%, 11/15/45 <sup>(WAC)</sup>	124,000	97,412
FRB Ser. 15-C24, Class E, 4.328%, 5/15/48 <sup>(WAC)</sup>	104,000	80,000
FRB Ser. 15-C23, Class D, 4.14%, 7/15/50 <sup>(WAC)</sup>	198,000	151,350
FRB Ser. 13-C10, Class F, 4.067%, 7/15/46(WAC) Morgan Stanley Capital I Trust	141,000	19,270
FRB Ser. 18-H3, Class C, 4.863%, 7/15/51 <sup>(WAC)</sup>	125,000	104,121
FRB Ser. 15-MS1, Class C, 4.024%, 5/15/48( <i>WAC</i> )	172,000	150,988
Morgan Stanley Capital I Trust 144A FRB Ser. 11-C3, Class E, 5.083%, 7/15/49 <sup>(WAC)</sup> Multifamily Connecticut Avenue Securities Trust 144A FRB	148,000	126,659
Ser. 19-01, Class M10, 8.095%, 10/25/49	420,337	385,453
PFP, Ltd. 144A FRB Ser. 21-8, Class A, 5.728%, 8/9/37 (Cayman Islands)	75,469	74,029
Ready Capital Mortgage Financing, LLC 144A FRB Ser. 22-FL9, Class A, 7.259%, 6/25/37	84,408	84,148
RIAL Issuer, Ltd. 144A FRB Ser. 22-FL8, Class B, 7.993%,		
1/19/37 UBS Commercial Mortgage Trust	109,000	106,820
FRB Ser. 18-C13, Class C, 4.925%, 10/15/51(WAC)	54,000	45,362
FRB Ser. 18-C11, Class C, 4.881%, 6/15/51(WAC)	117,000	95,637
FRB Ser. 17-C3, Class C, 4.391%, 8/15/50 <sup>(WAC)</sup> UBS Commercial Mortgage Trust 144A	202,000	163,679
FRB Ser. 12-C1, Class E, 5.00%, 5/10/45(WAC)	231,011	115,506
FRB Ser. 18-C11, Class D, 3.00%, 6/15/51 <sup>(WAC)</sup> UBS-Citigroup Commercial Mortgage Trust 144A FRB Ser.	216,000	125,406
11-C1, Class D, 6.03%, 1/10/45( <i>WAC</i> ) Wells Fargo Commercial Mortgage Trust	139,289	126,467
FRB Ser. 18-C46, Class C, 5.003%, 8/15/51 <sup>(WAC)</sup>	51,000	42,428
FRB Ser. 16-NXS5, Class D, 4.987%, 1/15/59( <i>WAC</i> )	107,000	88,210
FRB Ser. 15-SG1, Class B, 4.454%, 9/15/48 <sup>(WAC)</sup>	138,000	120,309
FRB Ser. 15-C29, Class D, 4.219%, 6/15/48(WAC)	189,000	159,844
FRB Ser. 20-C57, Class C, 4.023%, 8/15/53 <sup>(WAC)</sup>	49,000	38,730
Ser. 15-C31, Class D, 3.852%, 11/15/48	81,000	61,148
Ser. 16-BNK1, Class C, 3.071%, 8/15/49(WAC) Wells Fargo Commercial Mortgage Trust 144A	65,000	47,721
FRB Ser. 15-C31, Class E, 4.596%, 11/15/48(WAC)	118,000	70,784
FRB Ser. 15-C30, Class D, 4.499%, 9/15/58(WAC)	198,000	158,323
Ser. 17-RB1, Class D, 3.401%, 3/15/50	107,000	63,754

Ser. 16-C33, Class D, 3.123%, 3/15/59	134,000	104,095
Ser. 20-C55, Class D, 2.50%, 2/15/53	66,000	36,035
Ser. 19-C54, Class D, 2.50%, 12/15/52 WF-RBS Commercial Mortgage Trust	56,000	32,368
Ser. 14-C21, Class C, 4.234%, 8/15/47( <i>WAC</i> )	167,000	147,033
Ser. 12-C10, Class AS, 3.241%, 12/15/45 WF-RBS Commercial Mortgage Trust 144A	59,984	56,823
FRB Ser. 13-UBS1, Class E, 5.025%, 3/15/46(WAC)	128,000	121,546
FRB Ser. 11-C4, Class C, 4.845%, 6/15/44(WAC)	84,472	81,550
FRB Ser. 12-C9, Class D, 4.424%, 11/15/45 <sup>(WAC)</sup>	90,006	83,695
		9,667,308
Residential mortgage-backed securities (non-agency) (19.6%)		
American Home Mortgage Investment Trust FRB Ser. 07-1,		
Class GA1C, (ICE LIBOR USD 1 Month + 0.19%), 5.035%, 5/25/47	390,910	207,575
Bayview Financial Mortgage Pass-Through Trust Ser. 06-C, Class 1A3, 6.528%, 11/28/36	228,008	214,235
Carrington Mortgage Loan Trust FRB Ser. 06-NC2, Class A4, (ICE LIBOR USD 1 Month + 0.24%), 5.325%, 6/25/36	426,169	398,485
Chevy Chase Funding, LLC Mortgage-Backed Certificates 144A FRB Ser. 06-4A, Class A2, (ICE LIBOR USD 1 Month + 0.18%), 5.025%, 11/25/47	138,932	114,537
Countrywide Alternative Loan Trust FRB Ser. 06-OA19, Class A1, (ICE LIBOR USD 1 Month + 0.18%), 4.941%, 2/20/47	167,030	124,152
Countrywide Asset-Backed Certificates FRB Ser. 07-10, Class 1A1, (ICE LIBOR USD 1 Month + 0.18%), 5.025%, 6/25/47	226,564	209,109
Eagle Re, Ltd. 144A FRB Ser. 20-1, Class B1, (ICE LIBOR	220,304	209,109
USD 1 Month + 2.85%), 7.695%, 1/25/30 Federal Home Loan Mortgage Corporation	182,000	174,728
Structured Agency Credit Risk Debt FRN Ser. 15-HQA1,		
Class B, (ICE LIBOR USD 1 Month + 8.80%), 13.645%, 3/25/28	246,645	251,339
Structured Agency Credit Risk Debt FRN Ser. 16-DNA3, Class M3, (ICE LIBOR USD 1 Month + 5.00%), 9.845%, 12/25/28	146,140	155,748
Seasoned Credit Risk Transfer Trust Ser. 19-3, Class M, 4.75%, 10/25/58(WAC)	50,000	44,546
Federal Home Loan Mortgage Corporation 144A		
Structured Agency Credit Risk Trust FRB Ser. 19-HQA1, Class B2, (ICE LIBOR USD 1 Month + 12.25%), 17.095%, 2/25/49	222,000	254,575
Structured Agency Credit Risk Trust REMICs FRB Ser. 20-DNA5, Class B2, (US 30 Day Average SOFR + 11.50%), 16.06%, 10/25/50	56,000	66,024
Structured Agency Credit Risk Trust FRB Ser. 18-HQA2, Class B2, (ICE LIBOR USD 1 Month + 11.00%), 15.845%, 10/25/48	413,000	468,785

Structured Agency Credit Risk Trust FRB Ser. 19-DNA1,		
Class B2, (ICE LIBOR USD 1 Month + 10.75%), 15.595%, 1/25/49	32,000	36,378
Structured Agency Credit Risk Trust FRB Ser. 19-DNA2, Class B2, (ICE LIBOR USD 1 Month + 10.50%), 15.345%, 3/25/49	114,000	126,146
Structured Agency Credit Risk Trust REMICs FRB Ser. 20-DNA4, Class B2, (ICE LIBOR USD 1 Month + 10.00%), 14.845%, 8/25/50	65,000	72,393
Structured Agency Credit Risk Trust REMICs FRB Ser. 20-HQA3, Class B2, (ICE LIBOR USD 1 Month + 10.00%), 14.845%, 7/25/50	64,000	71,658
Structured Agency Credit Risk Trust FRB Ser. 18-DNA3, Class B2, (ICE LIBOR USD 1 Month + 7.75%), 12.595%, 9/25/48	431,000	445,890
Structured Agency Credit Risk Trust REMICs FRB Ser. 20-HQA3, Class B1, (ICE LIBOR USD 1 Month + 5.75%), 10.595%, 7/25/50	219,027	232,063
Structured Agency Credit Risk Trust FRB Ser. 19-DNA1, Class B1, (ICE LIBOR USD 1 Month + 4.65%), 9.495%, 1/25/49	95,000	100,643
Structured Agency Credit Risk Trust FRB Ser. 18-HQA2, Class B1, (ICE LIBOR USD 1 Month + 4.25%), 9.095%, 10/25/48	144,000	151,247
Structured Agency Credit Risk Trust REMICs FRB Ser. 20-HQA2, Class M2, (ICE LIBOR USD 1 Month + 3.10%), 7.945%, 3/25/50	26,320	26,896
Seasoned Credit Risk Transfer Trust Ser. 19-2, Class M, 4.75%, 8/25/58( <i>WAC</i> )	69,000	59,863
Seasoned Credit Risk Transfer Trust FRB Ser. 18-3, Class 3, 4.75%, 8/25/57 <sup>(WAC)</sup>	70,000	60,465
Federal National Mortgage Association		
Connecticut Avenue Securities FRB Ser. 16-C03, Class 1B, (ICE LIBOR USD 1 Month + 11.75%), 16.595%, 10/25/28	154,784	172,420
Connecticut Avenue Securities FRB Ser. 16-C03, Class 1M2, (ICE LIBOR USD 1 Month + 5.30%), 10.145%, 10/25/28	35,197	37,305
Connecticut Avenue Securities FRB Ser. 17-C07, Class 2B1, (ICE LIBOR USD 1 Month + 4.45%), 9.295%, 5/25/30	158,000	165,891
Connecticut Avenue Securities FRB Ser. 18-C05, Class 1B1, (ICE LIBOR USD 1 Month + 4.25%), 9.095%, 1/25/31	46,000	48,352
Connecticut Avenue Securities FRB Ser. 17-C06, Class 1B1, (ICE LIBOR USD 1 Month + 4.15%), 8.995%, 2/25/30	200,000	
	200,000	208,467
Connecticut Avenue Securities FRB Ser. 18-C06, Class 2B1, (ICE LIBOR USD 1 Month + 4.10%), 8.945%, 3/25/31	59,000	61,507
Federal National Mortgage Association 144A	47 000	10 110
Connecticut Avenue Securities Trust FRB Ser. 19-R01, Class 2B1, (ICE LIBOR USD 1 Month + 4.35%), 9.195%,	47,000	48,410

#### 7/25/31

Total mortgage-backed securities (cost \$27,747,742)		\$25,184,379
		5,903,790
WaMu Mortgage Pass-Through Certificates Trust FRB Ser. 05-AR8, Class 2AC2, (ICE LIBOR USD 1 Month + 0.92%), 5.765%, 7/25/45	65,072	58,556
Towd Point Mortgage Trust 144A Ser. 19-2, Class A2, 3.75%, 12/25/58( <i>WAC</i> )	102,000	89,421
FRB Ser. 06-AR7, Class A1BG, (ICE LIBOR USD 1 Month + 0.12%), 4.965%, 8/25/36	22,542	18,643
FRB Ser. 07-AR7, Class 1A1, (ICE LIBOR USD 1 Month + 0.85%), 5.695%, 5/25/47	369,959	294,260
Structured Asset Mortgage Investments II Trust		
Morgan Stanley Re-REMIC Trust 144A FRB Ser. 10-R4, Class 4B, (ICE LIBOR USD 1 Month + 0.23%), 2.702%, 2/26/37	65,645	54,490
Morgan Stanley ABS Capital I, Inc. Trust FRB Ser. 04-HE9, Class M2, (ICE LIBOR USD 1 Month + 0.93%), 5.775%, 11/25/34	12,561	11,931
JPMorgan Alternative Loan Trust FRB Ser. 06-A6, Class 1A1, (ICE LIBOR USD 1 Month + 0.32%), 5.165%, 11/25/36	69,805	56,875
Connecticut Avenue Securities Trust FRB Ser. 22-R02, Class 2M2, (US 30 Day Average SOFR + 3.00%), 7.56%, 1/25/42	292,000	282,510
Connecticut Avenue Securities Trust FRB Ser. 20-R02, Class 2B1, (ICE LIBOR USD 1 Month + 3.00%), 7.845%, 1/25/40	35,000	32,774
Connecticut Avenue Securities Trust FRB Ser. 20-SBT1, Class 1M2, (ICE LIBOR USD 1 Month + 3.65%), 8.495%, 2/25/40	79,000	79,637
Connecticut Avenue Securities Trust FRB Ser. 19-R05, Class 1B1, (ICE LIBOR USD 1 Month + 4.10%), 8.945%, 7/25/39	80,800	81,073
Connecticut Avenue Securities Trust FRB Ser. 22-R02, Class 2B1, (US 30 Day Average SOFR + 4.50%), 9.06%, 1/25/42	35,000	33,788
1725/01		

PURCHASED OPTIONS OUTSTANDING  $(1.4\%)^{(a)}$ 

	Expiration			
	date/	Notional	Contract	
Counterparty	strike price	amount	amount	Value

Uniform Mortgage-Backed Securities 30 yr 4.50% TBA commitments (Call)	Apr-23/\$96.16	\$4,897,654	\$5,000,000	\$92,235
Uniform Mortgage-Backed Securities 30 yr 5.00% TBA commitments (Call)	Apr-23/98.09	19,942,960	20,000,000	331,700
Total purchased options outstanding (cost \$210,938)				\$423,935

# ASSET-BACKED SECURITIES $(0.5\%)^{(a)}$

	Principal amount	Value
1Sharpe Mortgage Trust 144A FRB Ser. 20-1, Class NOTE, (ICE LIBOR USD 3 Month + 2.90%), 3.025%, 7/25/24	\$47,038	\$46,450
Mello Warehouse Securitization Trust 144A FRB Ser. 21-3, Class D, (ICE LIBOR USD 1 Month + 2.00%), 6.845%, 10/22/24	94,000	92,061
Total asset-backed securities (cost \$136,924)		\$138,511

# SHORT-TERM INVESTMENTS (12.6%)<sup>(a)</sup>

	an	Principal nount/shares	Value
Putnam Short Term Investment Fund Class P 4.88%(AFF)	Shares	712,218	\$712,218
State Street Institutional U.S. Government Money Market			
Fund, Premier Class 4.70% <sup>(P)</sup>	Shares	693,000	693,000
U.S. Treasury Bills 4.727%, 4/18/23(SEG)(SEGSF)(SEGCCS)		\$800,000	798,482
U.S. Treasury Bills 4.673%, 4/4/23(SEG)(SEGCCS)		700,000	699,911
U.S. Treasury Bills 4.737%, 5/2/23 (SEG) (SEGCCS)		500,000	498,152
U.S. Treasury Bills 4.240%, 5/18/23(SEGSF)(SEGCCS)		200,000	198,830
U.S. Treasury Bills 4.275%, 5/23/23(SEG)(SEGSF)		200,000	198,724
Total short-term investments (cost \$3,798,910)			\$3,799,317

#### **TOTAL INVESTMENTS**

#### **FUTURES CONTRACTS OUTSTANDING at 3/31/23 (Unaudited)**

	Number of contracts	Notional amount	Value	Expiration date	Unrealized appreciation/ (depreciation)
U.S. Treasury Note 2 yr (Short)	139	\$28,696,985	\$28,696,985	Jun-23	\$(294,547)
U.S. Treasury Note Ultra 10 yr (Short)	110	13,325,469	13,325,469	Jun-23	(70,560)
Unrealized appreciation					
Unrealized (depreciation)					(365,107)
Total					\$(365,107)

### WRITTEN OPTIONS OUTSTANDING at 3/31/23 (premiums \$107,813) (Unaudited)

Counterparty	Expiration date/ strike price	Notional amount	Contract amount	Value
JPMorgan Chase Bank N.A.				
Uniform Mortgage-Backed Securities 30 yr 4.50% TBA commitments (Put)	Apr-23/\$96.16	\$4,897,654	\$5,000,000	\$855
Uniform Mortgage-Backed Securities 30 yr 5.00% TBA commitments (Put)	Apr-23/98.09	19,942,960	20,000,000	1,340
Total				\$2.195

Counterparty Fixed right or obligation % to receive or (pay)/ Floating rate index/Maturity date	Expiration date/strike	Notional/ Contract amount	Premium receivable/ (payable)	Unrealized appreciation/ (depreciation)
Bank of America N.A.				
(1.39)/US SOFR/Dec-26 (Purchased)	Dec-24/1.39	\$10,869,900	\$(125,004)	\$215,441
1.39/US SOFR/Dec-26 (Purchased)	Dec-24/1.39	10,869,900	(125,004)	(78,915)
(1.085)/3 month USD-LIBOR-ICE/Apr-34 (Written)	Apr-24/1.085	6,137,300	84,234	72,973
3.63/US SOFR/Mar-26 (Written)	Mar-24/3.63	4,239,200	52,778	22,595
(3.63)/US SOFR/Mar-26 (Written)	Mar-24/3.63	4,239,200	52,778	(13,650)
3.073/US SOFR/Jun-37 (Written)	Jun-27/3.073	3,734,100	271,656	26,475
(3.073)/US SOFR/Jun-37 (Written)	Jun-27/3.073	3,734,100	271,656	21,658
2.17/3 month USD-LIBOR-ICE/Apr-34 (Purchased)	Apr-24/2.17	3,068,600	(148,213)	(118,141)
3.32/US SOFR/Oct-39 (Purchased)	Oct-29/3.32	2,791,800	(221,948)	9,827
(3.32)/US SOFR/Oct-39 (Purchased)	Oct-29/3.32	2,791,800	(221,948)	(29,844)
3.343/US SOFR/Dec-35 (Purchased)	Dec-25/3.343	2,234,600	(144,914)	18,391
(3.343)/US SOFR/Dec-35 (Purchased)	Dec-25/3.343	2,234,600	(144,914)	(42,122)
3.1625/US SOFR/Mar-37 (Written)	Mar-27/3.1625	2,037,900	140,615	16,894
(3.1625)/US SOFR/Mar-37 (Written)	Mar-27/3.1625	2,037,900	140,615	(978)
(1.29)/3 month USD-LIBOR-ICE/Mar-34 (Written)	Mar-24/1.29	1,534,300	23,935	20,744
(3.17)/US SOFR/Dec-35 (Purchased)	Dec-25/3.17	1,533,900	(79,763)	(3,528)
2.67/US SOFR/Dec-35 (Purchased)	Dec-25/2.67	1,533,900	(78,229)	(12,348)
(3.18)/US SOFR/Dec-35 (Purchased)	Dec-25/3.18	1,487,900	(75,139)	(1,890)
2.68/US SOFR/Dec-35 (Purchased)	Dec-25/2.68	1,487,900	(75,139)	(10,772)
(3.101)/US SOFR/Jun-39 (Written)	Jun-29/3.101	1,478,700	115,486	6,832
3.101/US SOFR/Jun-39 (Written)	Jun-29/3.101	1,478,700	115,486	5,900
3.03/US SOFR/Feb-33 (Written)	Feb-28/3.03	1,289,800	49,012	(1,638)
(3.03)/US SOFR/Feb-33 (Written)	Feb-28/3.03	1,289,800	49,012	(4,063)
2.29/3 month USD-LIBOR-ICE/Mar-34 (Purchased)	Mar-24/2.29	1,074,000	(52,825)	(42,004)
3.095/US SOFR/Mar-36 (Written)	Mar-26/3.095	903,300	59,798	9,476
(3.095)/US SOFR/Mar-36 (Written)	Mar-26/3.095	903,300	59,798	3,143
3.03/US SOFR/Mar-36 (Purchased)	Mar-26/3.03	883,600	(56,506)	(3,782)
(3.03)/US SOFR/Mar-36 (Purchased)	Mar-26/3.03	883,600	(56,506)	(5,514)
(2.558)/US SOFR/Dec-57 (Purchased)	Dec-27/2.558	679,500	(100,430)	(2,881)
2.558/US SOFR/Dec-57 (Purchased)	Dec-27/2.558	679,500	(100,430)	(18,048)
(1.275)/3 month USD-LIBOR-ICE/Mar-50 (Purchased)	Mar-30/1.275	671,400	(87,450)	94,083
1.275/3 month USD-LIBOR-ICE/Mar-50 (Purchased)	Mar-30/1.275	671,400	(87,450)	(57,190)
(2.47)/US SOFR/Dec-57 (Purchased)	Dec-27/2.47	392,200	(58,242)	1,181
2.47/US SOFR/Dec-57 (Purchased)	Dec-27/2.47	392,200	(58,242)	(13,519)

(1.405)/US SOFR/Dec-58 (Purchased)	Dec-28/1.405	153,500	(23,543)	18,303
1.405/US SOFR/Dec-58 (Purchased)	Dec-28/1.405	153,500	(23,543)	(13,631)
Barclays Bank PLC				
(2.232)/3 month USD-LIBOR-ICE/Jun-51 (Purchased)	Jun-31/2.232	2,648,900	(320,914)	148,736
2.232/3 month USD-LIBOR-ICE/Jun-51 (Purchased)	Jun-31/2.232	2,648,900	(320,914)	(122,114)
Citibank, N.A.				
2.703/US SOFR/Jul-33 (Purchased)	Jul-23/2.703	4,130,100	(46,038)	(13,960)
2.643/US SOFR/Jul-33 (Purchased)	Jul-23/2.643	4,130,100	(46,038)	(18,338)
3.578/US SOFR/Sep-33 (Purchased)	Sep-23/3.578	2,566,700	(71,483)	61,344
(3.578)/US SOFR/Sep-33 (Purchased)	Sep-23/3.578	2,566,700	(71,483)	(43,018)
(1.99)/US SOFR/Feb-42 (Purchased)	Feb-32/1.99	1,951,300	(153,665)	80,355
1.99/US SOFR/Feb-42 (Purchased)	Feb-32/1.99	1,951,300	(153,665)	(62,012)
(1.887)/US SOFR/Jan-35 (Written)	Jan-25/1.887	1,445,500	24,841	4,900
(2.25)/US SOFR/Jan-34 (Written)	Jan-24/2.25	1,445,500	18,828	4,553
(1.947)/US SOFR/Jan-35 (Written)	Jan-25/1.947	1,445,500	24,841	3,411
(2.311)/US SOFR/Jan-34 (Written)	Jan-24/2.311	1,445,500	18,828	3,079
(2.285)/3 month USD-LIBOR-ICE/Mar-51 (Purchased)	Mar-41/2.285	1,433,800	(123,809)	17,865
2.285/3 month USD-LIBOR-ICE/Mar-51 (Purchased)	Mar-41/2.285	1,433,800	(123,809)	(14,969)
2.394/US SOFR/Sep-33 (Purchased)	Sep-23/2.394	1,428,900	(17,290)	(5,530)
(1.826)/US SOFR/Jan-42 (Purchased)	Jan-32/1.826	1,062,800	(78,488)	55,797
1.826/US SOFR/Jan-42 (Purchased)	Jan-32/1.826	1,062,800	(78,488)	(33,372)
(2.689)/3 month USD-LIBOR-ICE/Nov-49 (Purchased)	Nov-24/2.689	237,000	(30,514)	(486)
2.689/3 month USD-LIBOR-ICE/Nov-49 (Purchased)	Nov-24/2.689	237,000	(30,514)	(19,109)
(2.427)/3 month USD-LIBOR-ICE/Jun-41 (Purchased)	Jun-31/2.427	229,400	(16,712)	8,944
2.427/3 month USD-LIBOR-ICE/Jun-41 (Purchased)	Jun-31/2.427	229,400	(16,712)	(5,955)
Deutsche Bank AG				
(2.98)/US SOFR/Mar-35 (Written)	Mar-30/2.98	5,048,800	233,759	21,205
2.98/US SOFR/Mar-35 (Written)	Mar-30/2.98	5,048,800	233,759	(454)
3.19/US SOFR/Mar-38 (Written)	Mar-28/3.19	332,400	23,152	1,303
(3.19)/US SOFR/Mar-38 (Written)	Mar-28/3.19	332,400	23,152	(1,313)
Goldman Sachs International				
3.293/US SOFR/May-33 (Purchased)	May-23/3.293	2,810,600	(50,029)	5,649
(3.293)/US SOFR/May-33 (Purchased)	May-23/3.293	2,810,600	(50,029)	(24,593)
(2.8175)/3 month USD-LIBOR-ICE/Mar-47 (Purchased)	Mar-27/2.8175	233,300	(29,454)	611

2.8175/3 month USD-LIBOR-ICE/Mar-47 (Purchased)	Mar-27/2.8175	233,300	(29,454)	(11,826)
JPMorgan Chase Bank N.A.				
(1.70)/US SOFR/Jan-29 (Written)	Jan-24/1.70	1,709,200	36,470	29,039
1.70/US SOFR/Jan-29 (Written)	Jan-24/1.70	1,709,200	36,470	(72,385)
(3.0175)/US SOFR/Dec-42 (Purchased)	Dec-32/3.0175	1,359,100	(114,504)	(1,780)
3.0175/US SOFR/Dec-42 (Purchased)	Dec-32/3.0175	1,359,100	(114,504)	(8,195)
3.115/US SOFR/Mar-43 (Written)	Mar-33/3.115	1,242,200	104,842	5,143
(3.115)/US SOFR/Mar-43 (Written)	Mar-33/3.115	1,242,200	104,842	2,621
3.187/US SOFR/Jan-36 (Purchased)	Jan-26/3.187	816,700	(52,718)	898
(3.187)/US SOFR/Jan-36 (Purchased)	Jan-26/3.187	816,700	(52,718)	(11,197)
3.0925/US SOFR/Mar-43 (Written)	Mar-33/3.0925	691,100	58,052	2,232
(3.0925)/US SOFR/Mar-43 (Written)	Mar-33/3.0925	691,100	58,052	1,797
(2.031)/3 month USD-LIBOR-ICE/Feb-41 (Purchased)	Feb-31/2.031	671,500	(45,931)	41,009
2.031/3 month USD-LIBOR-ICE/Feb-41 (Purchased)	Feb-31/2.031	671,500	(45,931)	(20,770)
(1.985)/3 month USD-LIBOR-ICE/Jan-41 (Purchased)	Jan-31/1.985	479,700	(32,907)	30,288
1.985/3 month USD-LIBOR-ICE/Jan-41 (Purchased)	Jan-31/1.985	479,700	(32,907)	(15,288)
3.1525/US SOFR/Mar-40 (Written)	Mar-30/3.1525	339,100	26,874	1,414
(3.1525)/US SOFR/Mar-40 (Written)	Mar-30/3.1525	339,100	26,874	719
(1.81)/US SOFR/Jan-37 (Written)	Jan-27/1.81	263,500	15,573	8,672
1.81/US SOFR/Jan-37 (Written)	Jan-27/1.81	263,500	15,573	(15,876)
Morgan Stanley & Co. International PLC				
(2.505)/3 month USD-LIBOR-ICE/Nov-49 (Purchased)	Nov-24/2.505	237,000	(36,308)	(815)
2.505/3 month USD-LIBOR-ICE/Nov-49 (Purchased)	Nov-24/2.505	237,000	(25,501)	(16,533)
3.27/3 month USD-LIBOR-ICE/Oct-53 (Purchased)	Oct-23/3.27	67,100	(7,656)	(3,277)
(3.27)/3 month USD-LIBOR-ICE/Oct-53 (Purchased)	Oct-23/3.27	67,100	(7,656)	(4,739)
Toronto-Dominion Bank				
(2.405)/3 month USD-LIBOR-ICE/Mar-41 (Purchased)	Mar-31/2.405	149,600	(10,435)	6,354
2.405/3 month USD-LIBOR-ICE/Mar-41 (Purchased)	Mar-31/2.405	149,600	(10,435)	(3,673)
UBS AG				
3.22/US SOFR/Aug-33 (Purchased)	Aug-23/3.22	3,183,800	(79,436)	10,379
(3.22)/US SOFR/Aug-33 (Purchased)	Aug-23/3.22	3,183,800	(79,436)	(18,466)
Unrealized appreciation				1,122,233

\$77,732

Total

### TBA SALE COMMITMENTS OUTSTANDING at 3/31/23 (proceeds receivable \$50,724,512) (Unaudited)

Agency	Principal amount	Settlement date	Value
Uniform Mortgage-Backed Securities, 6.00%, 4/1/53	\$1,000,000	4/13/23	\$1,020,508
Uniform Mortgage-Backed Securities, 5.50%, 4/1/53	4,000,000	4/13/23	4,040,623
Uniform Mortgage-Backed Securities, 5.00%, 5/1/53	4,000,000	5/11/23	3,988,280
Uniform Mortgage-Backed Securities, 5.00%, 4/1/53	16,000,000	4/13/23	15,954,368
Uniform Mortgage-Backed Securities, 4.50%, 4/1/53	6,000,000	4/13/23	5,877,185
Uniform Mortgage-Backed Securities, 4.00%, 4/1/53	3,000,000	4/13/23	2,868,985
Uniform Mortgage-Backed Securities, 3.50%, 4/1/53	2,000,000	4/13/23	1,857,499
Uniform Mortgage-Backed Securities, 3.00%, 4/1/53	3,000,000	4/13/23	2,690,158
Uniform Mortgage-Backed Securities, 2.50%, 4/1/53	7,000,000	4/13/23	6,033,397
Uniform Mortgage-Backed Securities, 2.00%, 4/1/53	8,000,000	4/13/23	6,610,246
Total			\$50,941,249

### CENTRALLY CLEARED INTEREST RATE SWAP CONTRACTS OUTSTANDING at 3/31/23 (Unaudited)

Notional amount	Value	Upfront premium received (paid)	Termi- nation date	Payments made by fund	Payments received by fund	Unrealized appreciation/ (depreciation)
\$951,100	\$149,969	\$39,848	9/1/32	3 month USD- LIBOR-ICE — Quarterly	1.512% — Semiannually	\$(111,355)
1,782,000	53,496	86	12/23/23	0.695% — Annually	US SOFR — Annually	72,074
1,612,000	136,520	139	12/23/26	1.085% — Annually	US SOFR — Annually	151,658
2,512,000	362,858	(654)	12/23/31	US SOFR — Annually	1.285% — Annually	(385,503)
736,000	213,388	(1,311)	12/23/51	US SOFR —	1.437% —	(220,835)

				Annually	Annually	
3,647,000	109,446	(371)	12/24/23	0.697% — Annually	US SOFR — Annually	145,050
189,000	15,940	12	12/24/26	US SOFR — Annually	1.096% — Annually	(17,596)
5,228,000	755,341	(2,334)	12/24/31	1.285% — Annually	US SOFR — Annually	796,551
847,000	245,893	(458)	12/24/51	1.435% — Annually	US SOFR — Annually	252,158
129,000	35,247	(21)	12/31/51	1.525% — Annually	US SOFR — Annually	36,199
308,000	25,644	(41)	12/31/26	US SOFR — Annually	1.135% — Annually	(28,316)
159,400	9,717 <i>(E)</i>	(4)	1/15/47	1.724% — Annually	US SOFR — Annually	9,713
460,000	112,309	(16)	1/21/52	1.679% — Annually	US SOFR — Annually	114,765
309,000	78,551	(11)	1/19/52	US SOFR — Annually	1.626% — Annually	(80,346)
1,099,000	273,486	(37)	2/1/52	1.6545% — Annually	US SOFR — Annually	278,666
897,600	71,835 <i>(E)</i>	(31)	2/13/57	1.68% — Annually	US SOFR — Annually	71,804
1,269,700	266,408	(43)	2/24/52	US SOFR — Annually	1.86% — Annually	(269,908)
13,000	2,957	_	2/29/52	1.7674% — Annually	US SOFR — Annually	2,989
64,000	7,114	(1)	2/29/32	US SOFR — Annually	1.75% — Annually	(7,276)
123,000	8,119	(1)	2/28/27	1.675% — Annually	US SOFR — Annually	8,436
299,000	8,752	(1)	2/29/24	US SOFR — Annually	1.47709% — Annually	(9,579)
388,900	45,424	(5)	3/7/32	3 month USD- LIBOR-ICE — Quarterly	1.9575% — Semiannually	(46,267)
886,000	19,802	(3)	4/7/24	2.45% — Annually	US SOFR — Annually	22,642
806,000	30,298	(7)	4/7/27	2.469% — Annually	US SOFR — Annually	31,412
686,000	46,072	(9)	4/7/23	2.3305% — Annually	US SOFR — Annually	48,013
41,000	6,714	(1)	4/7/52	2.1015% — Annually	US SOFR — Annually	6,889
574,000	67,898	(20)	4/14/52	US SOFR — Annually	2.3395% — Annually	(68,781)
123,000	6,688	(2)	4/14/32	US SOFR — Annually	2.4965% — Annually	(6,695)
599,000	22,247	(5)	4/14/27	2.483% — Annually	US SOFR — Annually	22,970
337,000	7,785	(1)	4/14/24	2.405% — Annually	US SOFR — Annually	9,156
2,643,300	78,480	(25)	5/2/27	US SOFR — Annually	2.685% — Annually	(85,207)
4,758,800	107,977	(18)	5/25/24	2.5945% — Annually	US SOFR — Annually	129,716

739,000	64,485	(25)	5/25/52	US SOFR — Annually	2.501% — Annually	(67,226)
2,069,000	71,587	(27)	6/7/32	US SOFR — Annually	2.7565% — Annually	(75,069)
376,000	24,072	(13)	6/7/52	US SOFR — Annually	2.622% — Annually	(25,439)
503,600	89,505	(63,209)	6/22/52	2.3075% — Semiannually	3 month USD- LIBOR-ICE — Quarterly	23,811
1,371,000	27,955	(5)	6/10/24	US SOFR — Annually	2.833% — Annually	(30,640)
1,143,000	28,952	(9)	6/10/27	2.8025% — Annually	US SOFR — Annually	31,488
6,851,500	100,374	(26)	6/15/24	US SOFR — Annually	3.3385% — Annually	(97,858)
3,686,000	38,777	(30)	6/15/27	3.185% — Annually	US SOFR — Annually	41,937
765,400	22,174	(11)	2/3/33	3.13% — Semiannually	3 month USD- LIBOR-ICE — Quarterly	24,161
463,000	33,609	(16)	7/8/52	US SOFR — Annually	2.5765% — Annually	(36,134)
811,000	30,485	(11)	7/15/32	US SOFR — Annually	2.723% — Annually	(34,088)
243,500	17,340	(8)	8/22/52	2.5823% — Annually	US SOFR — Annually	18,878
1,777,000	109,072	(24)	8/2/32	US SOFR — Annually	2.4275% — Annually	(122,620)
290,300	9,069 <i>(E)</i>	(6)	4/1/42	US SOFR — Annually	2.63% — Annually	(9,075)
201,900	9,447 <i>(E)</i>	(3)	3/24/35	US SOFR — Annually	2.39% — Annually	(9,450)
345,800	25,382	(10)	8/10/42	2.645% — Annually	US SOFR — Annually	27,694
586,200	46,404	(1,307)	8/10/42	US SOFR — Annually	2.605% — Annually	(51,568)
240,400	19,496	(7)	8/10/42	2.5915% — Annually	US SOFR — Annually	21,139
1,312,000	35,896 <i>(E)</i>	(12)	2/6/29	2.40% — Annually	US SOFR — Annually	35,884
1,956,000	91,326	(26)	8/16/32	US SOFR — Annually	2.613% — Annually	(104,602)
236,300	4,284 <i>(E)</i>	(5)	1/15/47	2.49% — Annually	US SOFR — Annually	4,279
56,000	1,590	(1)	8/25/32	US SOFR — Annually	2.8415% — Annually	(1,897)
193,000	2,916 <i>(E)</i>	(3)	2/21/35	2.785% — Annually	US SOFR — Annually	2,913
2,831,900	40,043	(11)	9/6/24	US SOFR — Annually	3.413% — Annually	(46,836)
1,176,300	3,200 <i>(E)</i>	(7)	1/15/27	US SOFR — Annually	2.73% — Annually	(3,206)
1,315,200	16,085	(17)	9/13/32	3.043% — Annually	US SOFR — Annually	22,044
120,300	1,068 <i>(E)</i>	(2)	1/15/42	2.9825% — Annually	US SOFR — Annually	1,066
420,000	3,658	(14)	9/26/52	2.905% —	US SOFR —	5,933

				Annually	Annually	
2,182,000	3,949	(21)	9/26/27	US SOFR — Annually	3.465% — Annually	(1,617)
209,000	775	(3)	9/19/32	3.24% — Annually	US SOFR — Annually	(13)
351,000	2,864 <i>(E)</i>	(12)	2/13/57	2.40% — Annually	US SOFR — Annually	2,852
1,067,000	11,534	(14)	9/23/32	3.3275% — Annually	US SOFR — Annually	(7,960)
94,039	474	(3)	9/28/52	2.976% — Annually	US SOFR — Annually	8
649,000	15,758	(9)	9/30/32	3.493% — Annually	US SOFR — Annually	(14,014)
560,000	12,135	(7)	10/4/32	US SOFR — Annually	3.4605% — Annually	10,639
342,000	7,757	(5)	10/4/23	US SOFR — Annually	3.473% — Annually	6,864
1,562,000	21,399	(13)	10/4/27	3.75% — Annually	US SOFR — Annually	(19,507)
1,796,000	39,728	(24)	10/5/32	US SOFR — Annually	3.466% — Annually	34,805
309,000	2,089 <i>(E)</i>	(5)	10/21/36	US SOFR — Annually	3.116% — Annually	2,084
1,565,000	17,481 <i>(E)</i>	(22)	8/23/33	US SOFR — Annually	3.237% — Annually	17,459
1,504,000	15,897 <i>(E)</i>	(21)	9/1/33	US SOFR — Annually	3.225% — Annually	15,876
375,000	4,740	(5)	11/14/32	3.347% — Annually	US SOFR — Annually	(3,492)
140,000	403	(5)	2/3/53	2.9275% — Annually	US SOFR — Annually	676
647,000	6,418 <i>(E)</i>	(22)	12/2/55	2.81% — Annually	US SOFR — Annually	(6,440)
3,464,000	9,976	(13)	10/7/24	US SOFR — Annually	4.1845% — Annually	(7,938)
663,000	16,535	(9)	10/7/32	3.5005% — Annually	US SOFR — Annually	(15,062)
6,928,000	19,398	1,586	10/7/24	4.19% — Annually	US SOFR — Annually	16,695
3,513,000	45,423	(831)	10/7/27	US SOFR — Annually	3.73% — Annually	38,868
10,032,000	249,797	(3,944)	10/7/32	3.50% — Annually	US SOFR — Annually	(226,112)
1,326,000	34,091	(1,270)	10/7/32	US SOFR — Annually	3.51% — Annually	29,234
3,503,000	67,958	2,346	10/7/52	US SOFR — Annually	3.05% — Annually	52,951
1,130,000	5,887 <i>(E)</i>	(8)	4/8/28	3.44% — Annually	US SOFR — Annually	(5,895)
2,812,000	11,501 <i>(E)</i>	(11)	1/31/25	US SOFR — Annually	4.035% — Annually	11,491
130,000	4,550 <i>(E)</i>	(4)	1/16/55	2.97% — Annually	US SOFR — Annually	(4,554)
2,122,000	12,923 <i>(E)</i>	(12)	1/16/26	US SOFR — Annually	3.605% — Annually	12,911
668,000	39,819	(23)	10/20/52	US SOFR — Annually	3.2571% — Annually	37,414

41,000	3,081	(1)	10/20/52	US SOFR — Annually	3.3375% — Annually	2,948
178,000	11,696 <i>(E)</i>	(6)	1/24/55	3.135% — Annually	US SOFR — Annually	(11,702)
441,400	12,425 <i>(E)</i>	(4)	4/13/28	3.965% — Annually	US SOFR — Annually	(12,430)
146,000	6,799 <i>(E)</i>	(2)	4/4/35	3.5575% — Annually	US SOFR — Annually	(6,801)
291,900	8,129 <i>(E)</i>	(3)	5/8/30	US SOFR — Annually	3.52% — Annually	8,126
399,700	3,090 <i>(E)</i>	(3)	4/4/32	3.515% — Annually	US SOFR — Annually	(3,093)
674,600	36,644 <i>(E)</i>	(10)	11/24/33	US SOFR — Annually	3.708% — Annually	36,635
206,700	9,886 <i>(E)</i>	(3)	2/19/36	US SOFR — Annually	3.6145% — Annually	9,883
153,200	7,300 <i>(E)</i>	(2)	3/3/36	US SOFR — Annually	3.614% — Annually	7,298
904,883	88,688	(31)	10/24/52	US SOFR — Annually	3.4555% — Annually	86,049
2,988,100	27,132 <i>(E)</i>	(11)	6/26/25	US SOFR — Annually	4.31% — Annually	27,121
484,000	53,284	(16)	10/27/32	3.5176% — Annually	US SOFR — Annually	(52,103)
762,600	45,619 <i>(E)</i>	(11)	12/4/33	US SOFR — Annually	3.77% — Annually	45,608
319,400	9,189 <i>(E)</i>	(4)	3/24/32	US SOFR — Annually	3.64% — Annually	9,186
1,138,000	24,376	(9)	11/1/27	3.9195% — Annually	US SOFR — Annually	(23,226)
2,812,000	19,572	(11)	11/9/24	US SOFR — Annually	4.7655% — Annually	26,712
900,000	19,143	(12)	11/21/32	3.4515% — Annually	US SOFR — Annually	(16,288)
124,800	2,920	(2)	11/25/32	3.477% — Annually	US SOFR — Annually	(2,608)
2,387,000	3,055	(9)	12/5/24	4.3515% — Annually	US SOFR — Annually	(3,591)
500,000	2,170	(7)	12/9/32	3.14% — Annually	US SOFR — Annually	3,875
104,600	4,085 <i>(E)</i>	(4)	12/10/57	2.47% — Annually	US SOFR — Annually	4,081
169,900	4,061 <i>(E)</i>	(6)	12/13/57	2.558% — Annually	US SOFR — Annually	4,055
567,000	27,301	(19)	12/29/52	US SOFR — Annually	3.1925% — Annually	25,402
751,000	5,670	(6)	1/6/28	3.5615% — Annually	US SOFR — Annually	(4,034)
924,000	351	(31)	1/18/53	US SOFR — Annually	2.9451% — Annually	(2,614)
605,000	823	(8)	1/19/33	US SOFR — Annually	3.175% — Annually	(2,449)
2,542,000	5,135	(34)	1/24/33	3.167% — Annually	US SOFR — Annually	11,531
163,000	2,038	(6)	1/25/53	3.007% — Annually	US SOFR — Annually	(1,588)

711,000	256	(9)	1/30/33	3.19529% — Annually	US SOFR — Annually	1,360
300,000	4,149	(4)	2/10/33	US SOFR — Annually	3.3555% — Annually	3,635
875,000	17,133	(11)	2/15/33	US SOFR — Annually	3.4235% — Annually	15,856
3,300,000	70,983	(27)	2/21/28	3.855% — Annually	US SOFR — Annually	(68,412)
1,600,000	48,224	(21)	2/21/33	US SOFR — Annually	3.5485% — Annually	46,412
306,000	11,597	(4)	2/23/33	US SOFR — Annually	3.6405% — Annually	11,297
718,000	17,548	(6)	2/24/28	3.9195% — Annually	US SOFR — Annually	(17,078)
448,000	16,549	(6)	2/24/33	US SOFR — Annually	3.629% — Annually	16,116
1,306,000	39,559	(11)	2/28/28	4.0475% — Annually	US SOFR — Annually	(38,946)
477,000	20,435	(6)	2/28/33	US SOFR — Annually	3.6985% — Annually	20,053
1,073,000	61,676	(36)	3/7/53	3.235% — Annually	US SOFR — Annually	(61,111)
1,693,000	12,460 <i>(E)</i>	(12)	6/24/28	3.254% — Annually	US SOFR — Annually	(12,472)
203,000	4,935 <i>(E)</i>	(3)	2/4/36	3.3105% — Annually	US SOFR — Annually	(4,938)
3,020,000	40,649 <i>(E)</i>	(34)	12/16/31	3.245% — Annually	US SOFR — Annually	(40,683)
1,542,000	69,513	(20)	3/2/33	3.7245% — Annually	US SOFR — Annually	(68,464)
138,000	6,203	(2)	3/3/33	US SOFR — Annually	3.723% — Annually	6,105
69,000	5,566	(2)	3/6/53	3.354% — Annually	US SOFR — Annually	(5,506)
655,000	34,178	(9)	3/6/33	US SOFR — Annually	3.808% — Annually	33,800
748,000	25,769	(6)	3/6/28	4.1355% — Annually	US SOFR — Annually	(25,530)
359,000	11,937	(3)	3/7/28	US SOFR — Annually	4.108% — Annually	11,814
519,000	23,993	(7)	3/7/33	3.7375% — Annually	US SOFR — Annually	(23,693)
87,000	5,196	(3)	3/7/53	US SOFR — Annually	3.2465% — Annually	5,112
515,000	21,079	(7)	3/8/33	US SOFR — Annually	3.6745% — Annually	20,758
259,000	10,104	(3)	3/10/33	3.6515% — Annually	US SOFR — Annually	(9,958)
74,300	2,890 <i>(E)</i>	(1)	8/9/33	3.575% — Annually	US SOFR — Annually	(2,891)
276,800	1,129 <i>(E)</i>	(4)	2/9/38	3.31% — Annually	US SOFR — Annually	(1,133)
132,100	1,917 <i>(E)</i>	(2)	2/9/38	3.275% — Annually	US SOFR — Annually	(1,919)
1,401,500	56,270 <i>(E)</i>	(20)	5/11/33	3.64% — Annually	US SOFR — Annually	(56,290)

5,781,500	179,631 <i>(E)</i>	(54)	5/11/28	US SOFR — Annually	3.997% — Annually	179,577
1,829,000	29,045	(15)	3/14/28	US SOFR — Annually	3.7185% — Annually	28,224
3,000	62	_	3/14/33	US SOFR — Annually	3.432% — Annually	60
100,000	1,264	(3)	3/14/53	3.0045% — Annually	US SOFR — Annually	(1,188)
447,000	1,681	(6)	3/15/33	3.234% — Annually	US SOFR — Annually	(1,398)
568,000	4,391	(8)	3/15/33	3.28091% — Annually	US SOFR — Annually	(4,044)
1,471,000	2,515	(12)	3/17/28	US SOFR — Annually	3.404% — Annually	1,767
180,000	1,051	(6)	3/17/53	2.9695% — Annually	US SOFR — Annually	(935)
323,000	342	(4)	3/20/33	3.2019% — Annually	US SOFR — Annually	(194)
137,000	245	(2)	3/20/33	US SOFR — Annually	3.2105% — Annually	179
26,493,000	179,887 <i>(E)</i>	152,073	6/21/25	4.20% — Annually	US SOFR — Annually	(27,814)
2,653,000	64,680 <i>(E)</i>	(56,472)	6/21/28	US SOFR — Annually	3.80% — Annually	8,208
3,562,000	77,901 <i>(E)</i>	53,116	6/21/33	3.40% — Annually	US SOFR — Annually	(24,785)
1,243,000	26,588 <i>(E)</i>	49,653	6/21/53	US SOFR — Annually	2.80% — Annually	23,066
362,000	1,202	(3)	3/21/28	US SOFR — Annually	3.2915% — Annually	(1,353)
264,000	855	(9)	3/22/53	US SOFR — Annually	2.9225% — Annually	(990)
439,500	66	(6)	3/22/33	3.1875% — Annually	US SOFR — Annually	237
621,000	1,167	(5)	3/22/28	US SOFR — Annually	3.323% — Annually	(1,398)
1,019,000	7,958	(8)	3/23/28	3.5365% — Annually	US SOFR — Annually	(7,686)
489,000	3,834	(4)	3/23/28	3.537% — Annually	US SOFR — Annually	(3,703)
182,000	1,525	(6)	3/24/53	US SOFR — Annually	2.982% — Annually	1,452
81,000	576	(3)	3/24/53	2.9755% — Annually	US SOFR — Annually	(549)
236,000	2,166	(3)	3/24/33	US SOFR — Annually	3.2975% — Annually	2,093
99,000	108	(3)	3/24/53	2.9335% — Annually	US SOFR — Annually	142
789,500	1,682	(6)	3/24/28	US SOFR — Annually	3.317% — Annually	(1,921)
223,000	299	(3)	3/24/33	3.17535% — Annually	US SOFR — Annually	369
1,230,000	3,272	(10)	3/27/28	US SOFR — Annually	3.3045% — Annually	(3,512)
1,230,000	5,904	(10)	3/27/28	US SOFR — Annually	3.2575% — Annually	(6,152)

1,230,000	3,493	(10)	3/27/28	3.3005% —	US SOFR —	3,714
1,230,000	5,495	(10)	3/2//20	Annually	Annually	5,714
451,000	6,364	(4)	3/28/28	US SOFR — Annually	3.0525% — Annually	(6,455)
297,000	4,740	(4)	3/28/33	3.001% — Annually	US SOFR — Annually	4,796
2,529,400	22,309 <i>(E)</i>	(36)	6/13/33	3.041% — Annually	US SOFR — Annually	22,274
4,991,200	41,876 <i>(E)</i>	(47)	6/13/28	3.086% — Annually	US SOFR — Annually	41,829
1,025,000	10,670	(14)	4/4/33	US SOFR — Annually	3.064% — Annually	(10,684)
49,200	102 <i>(E)</i>	(1)	3/27/40	US SOFR — Annually	3.1525% — Annually	101
662,000	20	(5)	3/29/28	3.363% — Annually	US SOFR — Annually	54
657,000	611	(9)	3/29/33	US SOFR — Annually	3.20% — Annually	515
256,000	3,469	(9)	3/30/53	3.008% — Annually	US SOFR — Annually	(3,452)
329,000	1,313	(4)	3/30/33	US SOFR — Annually	3.236% — Annually	1,280
1,783,000	499	(7)	3/30/25	4.0585% — Annually	US SOFR — Annually	566
288,000	1,405	(4)	3/30/33	3.2465% — Annually	US SOFR — Annually	(1,384)
892,000	5,031	(7)	3/31/28	3.4855% — Annually	US SOFR — Annually	(5,005)
1,680,000	252	(6)	3/31/25	4.081% — Annually	US SOFR — Annually	(223)
487,000	7,695	(17)	3/31/53	US SOFR — Annually	3.0195% — Annually	7,653
655,300	5,740 <i>(E)</i>	(9)	3/13/34	US SOFR — Annually	3.118% — Annually	5,731
1,196,000	395	(4)	3/31/25	US SOFR — Annually	4.0905% — Annually	365
467,000	3,176	(6)	3/31/33	US SOFR — Annually	3.269% — Annually	3,149
366,000	1,424	(5)	4/4/33	US SOFR — Annually	3.2325% — Annually	1,419
1,130,000	1,085	(4)	4/4/25	US SOFR — Annually	4.113% — Annually	1,081
436,000	807	(6)	4/4/33	US SOFR — Annually	3.2085% — Annually	801
466,000	144	(6)	4/4/33	3.1830% — Annually	US SOFR — Annually	138

Total \$164,832 \$542,231

(E) Extended effective date.

## OTC CREDIT DEFAULT CONTRACTS OUTSTANDING — PROTECTION SOLD at 3/31/23 (Unaudited)

Swap counterparty/ referenced debt*	Rating***	Upfront premium received (paid)**	Notional amount	Value	Termi- nation date	Payments received by fund	Unrealized appreciation/ (depreciation)			
Citigroup Global Markets, Inc.										
CMBX NA A.6 Index	A/P	\$151	\$392	\$68	5/11/63	200 bp — Monthly	\$84			
CMBX NA A.6 Index	A/P	364	1,175	203	5/11/63	200 bp — Monthly	161			
CMBX NA A.6 Index	A/P	1,667	5,483	949	5/11/63	200 bp — Monthly	720			
CMBX NA A.6 Index	A/P	1,903	5,875	1,017	5/11/63	200 bp — Monthly	889			
CMBX NA A.6 Index	A/P	1,791	5,875	1,017	5/11/63	200 bp — Monthly	776			
CMBX NA A.6 Index	A/P	11,341	37,206	6,440	5/11/63	200 bp — Monthly	4,915			
CMBX NA A.6 Index	A/P	15,540	43,473	7,525	5/11/63	200 bp — Monthly	8,033			
CMBX NA BB.11 Index	BB-/P	12,430	22,000	8,837	11/18/54	500 bp — Monthly	3,614			
CMBX NA BB.13 Index	BB-/P	1,276	14,000	6,040	12/16/72	500 bp — Monthly	(4,750)			
CMBX NA BB.13 Index	BB-/P	4,899	49,000	21,139	12/16/72	500 bp — Monthly	(16,192)			
CMBX NA BB.13 Index	BB-/P	5,103	56,000	24,158	12/16/72	500 bp — Monthly	(19,001)			
CMBX NA BB.13 Index	BB-/P	8,871	94,000	40,552	12/16/72	500 bp — Monthly	(31,589)			
CMBX NA BB.14 Index	BB/P	10,087	92,000	38,042	12/16/72	500 bp — Monthly	(27,866)			
CMBX NA BB.6 Index	B+/P	38,463	64,820	27,302	5/11/63	500 bp — Monthly	11,225			
CMBX NA BB.9 Index	B/P	1,425	7,000	2,972	9/17/58	500 bp — Monthly	(1,540)			
CMBX NA BB.9 Index	B/P	5,611	10,000	4,246	9/17/58	500 bp — Monthly	1,375			
CMBX NA BB.9 Index	B/P	13,070	64,000	27,174	9/17/58	500 bp — Monthly	(14,042)			
CMBX NA BBB10 Index	BB+/P	5,211	42,000	12,008	11/17/59	300 bp — Monthly	(6,772)			
CMBX NA BBB10 Index	BB+/P	6,982	64,000	18,298	11/17/59	300 bp — Monthly	(11,278)			
CMBX NA BBB11	BBB-/P	4,385	70,000	18,984	11/18/54	300 bp — Monthly	(14,559)			
CMBX NA BBB13 Index	BBB-/P	4,413	24,000	6,914	12/16/72	300 bp — Monthly	(2,487)			

CMBX NA BBB13 Index	BBB-/P	8,094	86,000	24,777	12/16/72	300 bp — Monthly	(16,633)			
CMBX NA BBB14 Index	BBB-/P	61	2,000	562	12/16/72	300 bp — Monthly	(500)			
CMBX NA BBB14 Index	BBB-/P	89	2,000	562	12/16/72	300 bp — Monthly	(472)			
CMBX NA BBB14 Index	BBB-/P	980	24,000	6,749	12/16/72	300 bp — Monthly	(5,754)			
CMBX NA BBB14 Index	BBB-/P	966	31,000	8,717	12/16/72	300 bp — Monthly	(7,733)			
CMBX NA BBB14 Index	BBB-/P	5,228	160,000	44,992	12/16/72	300 bp — Monthly	(39,643)			
CMBX NA BBB15 Index	BBB-/P	3,029	29,000	8,282	11/18/64	300 bp — Monthly	(5,236)			
CMBX NA BBB15 Index	BBB-/P	20,299	76,000	21,706	11/18/64	300 bp — Monthly	(1,362)			
CMBX NA BBB15Index	BBB-/P	8,326	49,000	13,994	11/18/64	300 bp — Monthly	(5,640)			
CMBX NA BBB16 Index	BBB-/P	18,640	82,000	23,829	4/17/65	300 bp — Monthly	(5,142)			
Credit Suisse Interna	Credit Suisse International									
CMBX NA BB.7 Index	B-/P	2,541	19,000	7,758	1/17/47	500 bp — Monthly	(5,198)			
Goldman Sachs Inte	rnational									
CMBX NA A.14 Index	A-/P	1,668	29,000	3,866	12/16/72	200 bp — Monthly	(2,186)			
CMBX NA A.7 Index	BBB+/P	(54)	37,000	2,890	1/17/47	200 bp — Monthly	(2,929)			
CMBX NA BB.14 Index	BB/P	11,521	74,000	30,599	12/16/72	500 bp — Monthly	(19,007)			
CMBX NA BB.14 Index	BB/P	13,001	103,000	42,591	12/16/72	500 bp — Monthly	(29,490)			
CMBX NA BB.6 Index	B+/P	556	2,701	1,138	5/11/63	500 bp — Monthly	(579)			
CMBX NA BB.6 Index	B+/P	52,374	107,358	45,219	5/11/63	500 bp — Monthly	7,260			
CMBX NA BB.6 Index	B+/P	106,448	210,664	88,732	5/11/63	500 bp — Monthly	17,923			
CMBX NA BB.7 Index	B-/P	4,751	14,000	5,716	1/17/47	500 bp — Monthly	(951)			
CMBX NA BB.7 Index	B-/P	6,389	19,000	7,758	1/17/47	500 bp — Monthly	(1,350)			
CMBX NA BB.7 Index	B-/P	7,560	24,000	9,799	1/17/47	500 bp — Monthly	(2,216)			
CMBX NA BBB15 Index	BBB-/P	1,305	21,000	5,998	11/18/64	300 bp — Monthly	(4,681)			
CMBX NA BBB16 Index	BBB-/P	13,237	55,000	15,983	4/17/65	300 bp — Monthly	(2,714)			

JPMorgan Securities	LLC									
CMBX NA A.13 Index	A-/P	81	1,000	126	12/16/72	200 bp — Monthly	(45)			
CMBX NA BB.10 Index	B/P	2,006	25,000	11,218	5/11/63	500 bp — Monthly	(9,187)			
CMBX NA BB.7 Index	B-/P	1,370	4,000	1,633	1/17/47	500 bp — Monthly	(259)			
CMBX NA BB.7 Index	B-/P	30,848	63,000	25,723	1/17/47	500 bp — Monthly	5,187			
CMBX NA BBB8 Index	BB/P	6,549	42,000	9,290	10/17/57	300 bp — Monthly	(2,717)			
Merrill Lynch Internat	Merrill Lynch International									
CMBX NA A.13 Index	A-/P	11,581	87,000	10,988	12/16/72	200 bp — Monthly	593			
CMBX NA A.13 Index	A-/P	11,339	87,000	10,988	12/16/72	200 bp — Monthly	351			
CMBX NA A.15 Index	A-/P	114	7,000	992	11/18/64	200 bp — Monthly	(875)			
CMBX NA A.15 Index	A-/P	187	14,000	1,984	11/18/64	200 bp — Monthly	(1,792)			
CMBX NA A.15 Index	A-/P	190	16,000	2,267	11/18/64	200 bp — Monthly	(2,071)			
CMBX NA BB.6 Index	B+/P	335	2,026	853	5/11/63	500 bp — Monthly	(516)			
CMBX NA BB.7 Index	B-/P	1,452	12,000	4,900	1/17/47	500 bp — Monthly	(3,436)			
Morgan Stanley & Co	. Internatio	nal PLC								
CMBX NA A.7 Index	BBB+/P	(2)	2,000	156	1/17/47	200 bp — Monthly	(157)			
CMBX NA A.7 Index	BBB+/P	(5)	11,000	859	1/17/47	200 bp — Monthly	(860)			
CMBX NA A.7 Index	BBB+/P	656	135,000	10,544	1/17/47	200 bp — Monthly	(9,835)			
CMBX NA BB.13 Index	BB-/P	184	2,000	863	12/16/72	500 bp — Monthly	(677)			
CMBX NA BB.13 Index	BB-/P	275	3,000	1,294	12/16/72	500 bp — Monthly	(1,016)			
CMBX NA BB.13 Index	BB-/P	372	4,000	1,726	12/16/72	500 bp — Monthly	(1,350)			
CMBX NA BB.13 Index	BB-/P	1,793	19,000	8,197	12/16/72	500 bp — Monthly	(6,385)			
CMBX NA BB.13 Index	BB-/P	4,636	25,000	10,785	12/16/72	500 bp — Monthly	(6,125)			
CMBX NA BB.13 Index	BB-/P	4,374	48,000	20,707	12/16/72	500 bp — Monthly	(16,287)			
CMBX NA BB.13 Index	BB-/P	5,634	61,000	26,315	12/16/72	500 bp — Monthly	(20,622)			

Total		\$803,811	811			Total		
Upfront pren	nium (paid)	(61)			Unreal	ized (depreciation)	(481,859)	
Upfront premiu	m received	803,872		Unrealized appreciation		123,173		
CMBX NA BBB9 Index	BB+/P	194	2,000	494	9/17/58	300 bp — Monthly	(298)	
CMBX NA BBB7 Index	BB-/P	23,003	338,000	74,056	1/17/47	300 bp — Monthly	(50,856)	
CMBX NA BBB7 Index	BB-/P	74	1,000	219	1/17/47	300 bp — Monthly	(144)	
CMBX NA BBB16 Index	BBB-/P	13,639	60,000	17,436	4/17/65	300 bp — Monthly	(3,762)	
CMBX NA BBB15 Index	BBB-/P	17,974	114,000	32,558	11/18/64	300 bp — Monthly	(14,518)	
CMBX NA BBB15 Index	BBB-/P	15,289	90,000	25,704	11/18/64	300 bp — Monthly	(10,363)	
CMBX NA BBB15 Index	BBB-/P	918	10,000	2,856	11/18/64	300 bp — Monthly	(1,932)	
CMBX NA BB.7 Index	B-/P	11,747	35,000	14,291	1/17/47	500 bp — Monthly	(2,510)	
CMBX NA BB.6 Index	B+/P	136,920	220,117	92,713	5/11/63	500 bp — Monthly	44,423	
CMBX NA BB.6 Index	B+/P	36,496	58,068	24,458	5/11/63	500 bp — Monthly	12,095	
CMBX NA BB.6 Index	B+/P	20,005	39,162	16,495	5/11/63	500 bp — Monthly	3,549	
CMBX NA BB.14 Index	BB/P	1,591	13,000	5,376	12/16/72	500 bp — Monthly	(3,772)	

<sup>\*</sup> Payments related to the referenced debt are made upon a credit default event.

# OTC CREDIT DEFAULT CONTRACTS OUTSTANDING — PROTECTION PURCHASED at 3/31/23 (Unaudited)

	Upfront					
	premium			Termi-		Unrealized
Swap counterparty/	received	Notional		nation	Payments (paid) by	appreciation/
referenced debt*	(paid)**	amount	Value	date	fund	(depreciation)

<sup>\*\*</sup> Upfront premium is based on the difference between the original spread on issue and the market spread on day of execution.

<sup>\*\*\*</sup> Ratings for an underlying index represent the average of the ratings of all the securities included in that index. The Moody's, Standard & Poor's or Fitch ratings are believed to be the most recent ratings available at March 31, 2023. Securities rated by Putnam are indicated by "/P." The Putnam rating categories are comparable to the Standard & Poor's classifications.

Citigroup (	Global	Markets.	Inc.
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Citigroup Global Markets	, inc.					
CMBX NA BB.10 Index	\$(22,695)	\$89,000	\$39,934	11/17/59	(500 bp) — Monthly	\$17,153
CMBX NA BB.10 Index	(6,028)	25,000	11,218	11/17/59	(500 bp) — Monthly	5,166
CMBX NA BB.10 Index	(1,252)	12,000	5,384	11/17/59	(500 bp) — Monthly	4,120
CMBX NA BB.10 Index	(987)	9,000	4,038	11/17/59	(500 bp) — Monthly	3,043
CMBX NA BB.11 Index	(363)	7,000	2,812	11/18/54	(500 bp) — Monthly	2,442
CMBX NA BB.11 Index	(505)	7,000	2,812	11/18/54	(500 bp) — Monthly	2,300
CMBX NA BB.11 Index	(357)	7,000	2,812	11/18/54	(500 bp) — Monthly	2,448
CMBX NA BB.7 Index	(9,339)	183,000	74,719	1/17/47	(500 bp) — Monthly	65,202
CMBX NA BB.7 Index	(808)	12,000	4,900	1/17/47	(500 bp) — Monthly	4,080
CMBX NA BB.8 Index	(12,059)	33,822	15,961	10/17/57	(500 bp) — Monthly	3,869
CMBX NA BB.8 Index	(2,980)	23,192	10,945	10/17/57	(500 bp) — Monthly	7,942
CMBX NA BBB10 Index	(30,261)	176,000	50,318	11/17/59	(300 bp) — Monthly	19,955
CMBX NA BBB10 Index	(17,178)	74,000	21,157	11/17/59	(300 bp) — Monthly	3,936
CMBX NA BBB10 Index	(6,246)	49,000	14,009	11/17/59	(300 bp) — Monthly	7,734
CMBX NA BBB10 Index	(8,077)	37,000	10,578	11/17/59	(300 bp) — Monthly	2,480
CMBX NA BBB10 Index	(7,182)	33,000	9,435	11/17/59	(300 bp) — Monthly	2,234
CMBX NA BBB10 Index	(1,657)	13,000	3,717	11/17/59	(300 bp) — Monthly	2,052
CMBX NA BBB10 Index	(1,101)	9,000	2,573	11/17/59	(300 bp) — Monthly	1,467
CMBX NA BBB10 Index	(1,670)	7,000	2,001	11/17/59	(300 bp) — Monthly	327
CMBX NA BBB11 Index	(9,616)	30,000	8,136	11/18/54	(300 bp) — Monthly	(1,498)
CMBX NA BBB11 Index	(3,680)	25,000	6,780	11/18/54	(300 bp) — Monthly	3,086
CMBX NA BBB12 Index	(12,736)	185,000	53,613	8/17/61	(300 bp) — Monthly	40,769
CMBX NA BBB12 Index	(15,467)	88,000	25,502	8/17/61	(300 bp) — Monthly	9,985
CMBX NA BBB12 Index	(21,043)	63,000	18,257	8/17/61	(300 bp) — Monthly	(2,822)

CMBX NA BBB12 Index	(16,684)	48,000	13,910	8/17/61	(300 bp) — Monthly	(2,802)
CMBX NA BBB12 Index	(7,475)	44,000	12,751	8/17/61	(300 bp) — Monthly	5,251
CMBX NA BBB12 Index	(8,800)	39,000	11,302	8/17/61	(300 bp) — Monthly	2,479
CMBX NA BBB12	(11,951)	34,000	9,853	8/17/61	(300 bp) — Monthly	(2,118)
CMBX NA BBB12 Index	(2,116)	31,000	8,984	8/17/61	(300 bp) — Monthly	6,850
CMBX NA BBB7 Index	(4,375)	20,000	4,382	1/17/47	(300 bp) — Monthly	(5)
CMBX NA BBB8 Index	(17,100)	114,000	25,217	10/17/57	(300 bp) — Monthly	8,050
CMBX NA BBB8 Index	(17,188)	110,000	24,332	10/17/57	(300 bp) — Monthly	7,080
CMBX NA BBB8 Index	(14,226)	90,000	19,908	10/17/57	(300 bp) — Monthly	5,630
CMBX NA BBB8 Index	(6,298)	44,000	9,733	10/17/57	(300 bp) — Monthly	3,410
CMBX NA BBB8 Index	(5,828)	42,000	9,290	10/17/57	(300 bp) — Monthly	3,438
CMBX NA BBB8 Index	(4,579)	33,000	7,300	10/17/57	(300 bp) — Monthly	2,702
CMBX NA BBB8 Index	(3,728)	28,000	6,194	10/17/57	(300 bp) — Monthly	2,450
CMBX NA BBB8 Index	(317)	2,000	442	10/17/57	(300 bp) — Monthly	124
CMBX NA BBB9 Index	(1,183)	5,000	1,235	9/17/58	(300 bp) — Monthly	49
Credit Suisse Internation	nal					
CMBX NA BB.10 Index	(2,854)	24,000	10,769	11/17/59	(500 bp) — Monthly	7,891
CMBX NA BB.10 Index	(3,202)	24,000	10,769	11/17/59	(500 bp) — Monthly	7,543
CMBX NA BB.10 Index	(1,616)	13,000	5,833	11/17/59	(500 bp) — Monthly	4,205
Goldman Sachs Internat	ional					
CMBX NA A.6 Index	(4,583)	18,407	3,186	5/11/63	(200 bp) — Monthly	(1,404)
CMBX NA A.6 Index	(1,482)	6,658	1,152	5/11/63	(200 bp) — Monthly	(332)
CMBX NA A.6 Index	(1,031)	4,700	814	5/11/63	(200 bp) — Monthly	(220)
CMBX NA A.6 Index	(629)	3,133	542	5/11/63	(200 bp) — Monthly	(88)
CMBX NA A.6 Index	(333)	1,567	271	5/11/63	(200 bp) — Monthly	(63)
CMBX NA A.6 Index	(248)	1,175	203	5/11/63	(200 bp) — Monthly	(45)
CMBX NA A.6 Index	(244)	1,175	203	5/11/63	(200 bp) — Monthly	(41)
CMBX NA A.6 Index	(165)	783	136	5/11/63	(200 bp) — Monthly	(30)
CMBX NA A.6 Index	(163)	783	136	5/11/63	(200 bp) — Monthly	(28)

	(193)	783	136	5/11/63	(200 bp) — Monthly	(57)
CMBX NA A.6 Index	(66)	392	68	5/11/63	(200 bp) — Monthly	1
CMBX NA A.6 Index	(3,862)	10,630	5,016	10/17/57	(500 bp) — Monthly	1,144
CMBX NA BB.8 Index		·			,	
CMBX NA BB.8 Index	(227)	1,933	912	10/17/57	(500 bp) — Monthly	684
CMBX NA BBB12 Index	(13,751)	77,000	22,315	8/17/61	(300 bp) — Monthly	8,518
JPMorgan Securities LL	.C					
CMBX NA A.15 Index	(364)	4,000	567	11/18/64	(200 bp) — Monthly	201
CMBX NA A.6 Index	(162)	783	136	5/11/63	(200 bp) — Monthly	(26)
CMBX NA A.6 Index	(81)	392	68	5/11/63	(200 bp) — Monthly	(14)
CMBX NA BB.11 Index	(5,148)	6,752	2,844	5/11/63	(500 bp) — Monthly	(2,311)
CMBX NA BB.11 Index	(545)	1,000	402	11/18/54	(500 bp) — Monthly	(145)
CMBX NA BBB14 Index	(10,479)	62,000	17,434	12/16/72	(300 bp) — Monthly	6,920
CMBX NA BBB7 Index	(56,108)	239,000	52,365	1/17/47	(300 bp) — Monthly	(3,883)
Merrill Lynch Internation	nal					
CMBX NA BB.10 Index	(455)	8,000	3,590	11/17/59	(500 bp) — Monthly	3,127
Morgan Stanley & Co. Ir	nternational P	LC				
CMBX NA A.6 Index	(5,038)	20,366	3,525	5/11/63	(200 bp) — Monthly	(1,521)
CMBX NA A.6 Index	(3,218)	12,924	2,237	5/11/63	(200 bp) — Monthly	(986)
CMBX NA A.6 Index	(2,124)	8,616	1,491	5/11/63	(200 bp) — Monthly	(636)
CMBX NA A.6 Index	(1,626)	6,658	1,152	5/11/63	(200 bp) — Monthly	(476)
CMBX NA A.6 Index	(1,199)	5,483	949	5/11/63	(200 bp) — Monthly	(252)
CMBX NA A.6 Index	(503)	2,350	407	5/11/63	(200 bp) — Monthly	(97)
CMBX NA A.6 Index	(490)	2,350	407	5/11/63	(200 bp) — Monthly	(84)
CMBX NA BB.10 Index	(10,024)	33,000	14,807	11/17/59	(500 bp) — Monthly	4,751
CMBX NA BB.8 Index	(2,174)	5,798	2,736	10/17/57	(500 bp) — Monthly	556
CMBX NA BB.9 Index	(4,754)	33,000	14,012	9/17/58	(500 bp) — Monthly	9,226
CMBX NA BB.9 Index	(2,309)	27,000	11,464	9/17/58	(500 bp) — Monthly	9,129
CMBX NA BB.9 Index	(2,188)	16,000	6,794	9/17/58	(500 bp) — Monthly	4,590
CMBX NA BB.9 Index	(757)	5,000	2,123	9/17/58	(500 bp) — Monthly	1,361
CMBX NA BBB10 Index	(19,616)	159,000	45,458	11/17/59	(300 bp) — Monthly	25,582

Total * Payments related to the	\$(536,966) referenced de	Total ebt are made upon a credit default event.				\$381,869
Upfront premium (paid)	(536,966)			Unr	realized (depreciation)	(22,064)
Upfront premium received	_			Ur	nrealized appreciation	403,933
CMBX NA BBB8 Index	(1,018)	8,000	1,770	10/17/57	(300 bp) — Monthly	747
CMBX NA BBB8 Index	(2,576)	18,000	3,982	10/17/57	, , ,	1,395
CMBX NA BBB8 Index	(2,660)	19,000	4,203	10/17/57	(300 bp) — Monthly	1,532
CMBX NA BBB8 Index	(2,713)	20,000	4,424	10/17/57	(300 bp) — Monthly	1,700
CMBX NA BBB8 Index	(3,951)	29,000	6,415	10/17/57	(300 bp) — Monthly	2,447
CMBX NA BBB8 Index	(4,688)	30,000	6,636	10/17/57	(300 bp) — Monthly	1,931
CMBX NA BBB7 Index	(4,063)	64,000	14,022	1/17/47	(300 bp) — Monthly	9,922
CMBX NA BBB13 Index	(1,233)	20,000	5,762	12/16/72	(300 bp) — Monthly	4,490
CMBX NA BBB12 Index	(1,237)	4,000	1,159	8/17/61	(300 bp) — Monthly	(80)
CMBX NA BBB12 Index	(2,921)	14,000	4,057	8/17/61	(300 bp) — Monthly	1,128
CMBX NA BBB12 Index	(5,797)	28,000	8,114	8/17/61	(300 bp) — Monthly	2,301
CMBX NA BBB11 Index	(2,361)	15,000	4,068	11/18/54	(300 bp) — Monthly	1,698
CMBX NA BBB10 Index	(2,168)	10,000	2,859	11/17/59	(300 bp) — Monthly	685
CMBX NA BBB10 Index	(1,993)	19,000	5,432	11/17/59	(300 bp) — Monthly	3,428
CMBX NA BBB10 Index	(4,005)	23,000	6,576	11/17/59	(300 bp) — Monthly	2,557
CMBX NA BBB10 Index	(3,171)	25,000	7,148	11/17/59	(300 bp) — Monthly	3,962
CMBX NA BBB10 Index	(7,801)	32,000	9,149	11/17/59	(300 bp) — Monthly	1,329
CMBX NA BBB10 Index	(3,464)	40,000	11,436	11/17/59	(300 bp) — Monthly	7,949

<sup>\*</sup> Payments related to the referenced debt are made upon a credit default event.

<sup>\*\*</sup> Upfront premium is based on the difference between the original spread on issue and the market spread on day of execution.

### Key to holding's abbreviations

- FRB Floating Rate Bonds: The rate shown is the current interest rate at the close of the reporting period. Rates may be subject to a cap or floor. For certain securities, the rate may represent a fixed rate currently in place at the close of the reporting period.
- FRN Floating Rate Notes: The rate shown is the current interest rate or yield at the close of the reporting period. Rates may be subject to a cap or floor. For certain securities, the rate may represent a fixed rate currently in place at the close of the reporting period.
- ICE Intercontinental Exchange
- IFB Inverse Floating Rate Bonds, which are securities that pay interest rates that vary inversely to changes in the market interest rates. As interest rates rise, inverse floaters produce less current income. The rate shown is the current interest rate at the close of the reporting period. Rates may be subject to a cap or floor.
- IO Interest Only
- LIBOR London Interbank Offered Rate
  - PO Principal Only
- REMICs Real Estate Mortgage Investment Conduits
  - SOFR Secured Overnight Financing Rate
    - TBA To Be Announced Commitments

#### Notes to the fund's portfolio

Unless noted otherwise, the notes to the fund's portfolio are for the close of the fund's reporting period, which ran from January 1, 2023 through March 31, 2023 (the reporting period). Within the following notes to the portfolio, references to "Putnam Management" represent Putnam Investment Management, LLC, the fund's manager, an indirect whollyowned subsidiary of Putnam Investments, LLC, references to "ASC 820" represent Accounting Standards Codification 820 Fair Value Measurements and Disclosures and references to "OTC", if any, represent over-the-counter.

- (a) Percentages indicated are based on net assets of \$30,098,256.
- (AFF) Affiliated company. For investments in Putnam Short Term Investment Fund, the rate quoted in the security description is the annualized 7-day yield of the fund at the close of the reporting period. Transactions during the period with any company which is under common ownership or control were as follows:

Name of affiliate	Fair value as of 12/31/22		Sale proceeds	Investment income	Shares outstanding and fair value as of 3/31/23
Short-term investments					
Putnam Short Term Investment Fund*	\$4,038,650	\$7,091,380	\$10,417,812	\$35,185	\$712,218
Total Short-term investments	\$4,038,650	\$7,091,380	\$10,417,812	\$35,185	\$712,218

<sup>\*</sup> Management fees charged to Putnam Short Term Investment Fund have been waived by Putnam Management. There were no realized or unrealized gains or losses during the period.

- (SEG) This security, in part or in entirety, was pledged and segregated with the broker to cover margin requirements for futures contracts at the close of the reporting period. Collateral at period end totaled \$563,916.
- (SEGSF) This security, in part or in entirety, was pledged and segregated with the custodian for collateral on certain derivative contracts at the close of the reporting period. Collateral at

period end totaled \$402,287.

- (SEGCCS) This security, in part or in entirety, was pledged and segregated with the custodian for collateral on the initial margin on certain centrally cleared derivative contracts at the close of the reporting period. Collateral at period end totaled \$821,331.
  - (i) This security was pledged, or purchased with cash that was pledged, to the fund for collateral on certain derivative contracts.
  - (P) This security was pledged, or purchased with cash that was pledged, to the fund for collateral on certain derivative contracts and TBA commitments. The rate quoted in the security description is the annualized 7-day yield of the fund at the close of the reporting period.
  - (WAC) The rate shown represents the weighted average coupon associated with the underlying mortgage pools. Rates may be subject to a cap or floor.

Unless otherwise noted, the rates quoted in Short-term investments security descriptions represent the weighted average yield to maturity.

144A after the name of an issuer represents securities exempt from registration under Rule 144A of the Securities Act of 1933, as amended. These securities may be resold in transactions exempt from registration, normally to qualified institutional buyers.

The dates shown on debt obligations are the original maturity dates.

**Security valuation:** Portfolio securities and other investments are valued using policies and procedures adopted by the Board of Trustees. The Trustees have formed a Pricing Committee to oversee the implementation of these procedures and have delegated responsibility for valuing the fund's assets in accordance with these procedures to Putnam Management. Putnam Management has established an internal Valuation Committee that is responsible for making fair value determinations, evaluating the effectiveness of the pricing policies of the fund and reporting to the Pricing Committee.

Market quotations are not considered to be readily available for certain debt obligations (including short-term investments with remaining maturities of 60 days or less) and other investments; such investments are valued on the basis of valuations furnished by an independent pricing service approved by the Trustees or dealers selected by Putnam Management. Such services or dealers determine valuations for normal institutional-size trading units of such securities using methods based on market transactions for comparable securities and various relationships, generally recognized by institutional traders, between securities (which consider such factors as security prices, yields, maturities and ratings). These securities will generally be categorized as Level 2. Securities quoted in foreign currencies, if any, are translated into U.S. dollars at the current exchange rate.

Investments in open-end investment companies (excluding exchange-traded funds), if any, which can be classified as Level 1 or Level 2 securities, are valued based on their net asset value. The net asset value of such investment companies equals the total value of their assets less their liabilities and divided by the number of their outstanding shares.

To the extent a pricing service or dealer is unable to value a security or provides a valuation that Putnam Management does not believe accurately reflects the security's fair value, the security will be valued at fair value by Putnam Management in accordance with policies and procedures approved by the Trustees. Certain investments, including certain restricted and illiquid securities and derivatives, are also valued at fair value following procedures approved by the Trustees. These valuations consider such factors as significant market or specific security events such as interest rate or credit quality changes, various relationships with other securities, discount rates, U.S. Treasury, U.S. swap and credit yields, index levels, convexity exposures, recovery rates, sales and other multiples and resale restrictions. These securities are classified as Level 2 or as Level 3 depending on the priority of the significant inputs.

To assess the continuing appropriateness of fair valuations, the Valuation Committee reviews and affirms the reasonableness of such valuations on a regular basis after considering all relevant information that is reasonably available. Such valuations and procedures are reviewed periodically by the Trustees. Certain securities may be valued on the basis of a price provided by a single source. The fair value of securities is generally determined as the amount that the fund could reasonably expect to realize from an orderly disposition of such securities over a reasonable period of time. By its nature, a fair value price is a good faith estimate of the value of a security in a current sale and does not reflect an actual market price, which may be different by a material amount.

**Stripped securities:** The fund may invest in stripped securities which represent a participation in securities that may be structured in classes with rights to receive different portions of the interest and principal. Interest-only securities receive all of the interest and principal-only securities receive all of the principal. If the interest-only securities experience greater than anticipated prepayments of principal, the fund may fail to recoup fully its initial investment in these securities. Conversely, principal-only securities increase in value if prepayments are greater than anticipated and decline if prepayments are slower than anticipated. The fair value of these securities is highly sensitive to changes in interest rates.

**Options contracts:** The fund used options contracts to hedge duration and convexity, to isolate prepayment risk and to manage downside risks.

The potential risk to the fund is that the change in value of options contracts may not correspond to the change in value of the hedged instruments. In addition, losses may arise from changes in the value of the underlying instruments if there is an illiquid secondary market for the contracts, if interest or exchange rates move unexpectedly or if the counterparty to the contract is unable to perform. Realized gains and losses on purchased options are included in realized gains and losses on investment securities. If a written call option is exercised, the premium originally received is recorded as an addition to sales proceeds. If a written put option is exercised, the premium originally received is recorded as a reduction to the cost of investments.

Exchange-traded options are valued at the last sale price or, if no sales are reported, the last bid price for purchased options and the last ask price for written options. OTC traded options are valued using prices supplied by dealers.

Options on swaps are similar to options on securities except that the premium paid or received is to buy or grant the right to enter into a previously agreed upon interest rate or credit default contract. Forward premium swap options contracts include premiums that have extended settlement dates. The delayed settlement of the premiums is factored into the daily valuation of the option contracts. In the case of interest rate cap and floor contracts, in return for a premium, ongoing payments between two parties are based on interest rates exceeding a specified rate, in the case of a cap contract, or falling below a specified rate in the case of a floor contract.

For the fund's average contract amount on options contracts, see the appropriate table at the end of these footnotes.

**Futures contracts:** The fund used futures contracts for hedging treasury term structure risk and for yield curve positioning.

The potential risk to the fund is that the change in value of futures contracts may not correspond to the change in value of the hedged instruments. In addition, losses may arise from changes in the value of the underlying instruments, if there is an illiquid secondary market for the contracts, if interest or exchange rates move unexpectedly or if the counterparty to the contract is unable to perform. With futures, there is minimal counterparty credit risk to the fund since futures are exchange traded and the exchange's clearinghouse, as counterparty to all exchange traded futures, guarantees the futures against default. When the contract is closed, the fund records a realized gain or loss equal to the difference between the value of the contract at the time it was opened and the value at the time it was closed.

Futures contracts are valued at the quoted daily settlement prices established by the exchange on which they trade. The fund and the broker agree to exchange an amount of cash equal to the daily fluctuation in the value of the futures contract. Such receipts or payments are known as "variation margin".

For the fund's average number of futures contracts, see the appropriate table at the end of these footnotes.

**Interest rate swap contracts:** The fund entered into OTC and/or centrally cleared interest rate swap contracts, which are arrangements between two parties to exchange cash flows based on a notional principal amount, for hedging term structure risk and for yield curve positioning.

An OTC and centrally cleared interest rate swap can be purchased or sold with an upfront premium. For OTC interest rate swap contracts, an upfront payment received by the fund is recorded as a liability on the fund's books. An upfront payment made by the fund is recorded as an asset on the fund's books. OTC and centrally cleared interest rate swap contracts are marked to market daily based upon quotations from an independent pricing service or market makers. Any change is recorded as an unrealized gain or loss on OTC interest rate swaps. Daily fluctuations in the value of centrally cleared interest rate swaps

are settled through a central clearing agent and are recorded as unrealized gain or loss. Payments, including upfront premiums, received or made are recorded as realized gains or losses at the reset date or the closing of the contract. Certain OTC and centrally cleared interest rate swap contracts may include extended effective dates. Payments related to these swap contracts are accrued based on the terms of the contract.

The fund could be exposed to credit or market risk due to unfavorable changes in the fluctuation of interest rates or if the counterparty defaults, in the case of OTC interest rate contracts, or the central clearing agency or a clearing member defaults, in the case of centrally cleared interest rate swap contracts, on its respective obligation to perform under the contract. The fund's maximum risk of loss from counterparty risk or central clearing risk is the fair value of the contract. This risk may be mitigated for OTC interest rate swap contracts by having a master netting arrangement between the fund and the counterparty and for centrally cleared interest rate swap contracts through the daily exchange of variation margin. There is minimal counterparty risk with respect to centrally cleared interest rate swap contracts due to the clearinghouse guarantee fund and other resources that are available in the event of a clearing member default.

For the fund's average notional amount on interest rate swap contracts, see the appropriate table at the end of these footnotes.

**Credit default contracts:** The fund entered into OTC and/or centrally cleared credit default contracts to hedge credit risk, to hedge market risk and for gaining exposure to specific sectors.

In OTC and centrally cleared credit default contracts, the protection buyer typically makes a periodic stream of payments to a counterparty, the protection seller, in exchange for the right to receive a contingent payment upon the occurrence of a credit event on the reference obligation or all other equally ranked obligations of the reference entity. Credit events are contract specific but may include bankruptcy, failure to pay, restructuring and obligation acceleration. For OTC credit default contracts, an upfront payment received by the fund is recorded as a liability on the fund's books. An upfront payment made by the fund is recorded as an asset on the fund's books. Centrally cleared credit default contracts provide the same rights to the protection buyer and seller except the payments between parties, including upfront premiums, are settled through a central clearing agent through variation margin payments. Upfront and periodic payments received or paid by the fund for OTC and centrally cleared credit default contracts are recorded as realized gains or losses at the reset date or close of the contract. The OTC and centrally cleared credit default contracts are marked to market daily based upon quotations from an independent pricing service or market makers. Any change in value of OTC credit default contracts is recorded as an unrealized gain or loss. Daily fluctuations in the value of centrally cleared credit default contracts are recorded as unrealized gain or loss. Upon the occurrence of a credit event, the difference between the par value and fair value of the reference obligation, net of any proportional amount of the upfront payment, is recorded as a realized gain or loss. In addition to bearing the risk that the credit event will occur, the fund could be exposed to market risk due to unfavorable changes in interest rates or in the price of the underlying security or index or the possibility that the fund may be unable to close out its position at the same time or at the same price as if it had purchased the underlying reference obligations. In certain circumstances, the fund may enter into offsetting OTC and centrally cleared credit default contracts which would mitigate its risk of loss. The fund's maximum risk of loss from counterparty risk, either as the protection seller or as the protection buyer, is the fair value of the contract. This risk may be mitigated for OTC credit default contracts by having a master netting arrangement between the fund and the counterparty and for centrally cleared credit default contracts through the daily exchange of variation margin. Counterparty risk is further mitigated with respect to centrally cleared credit default swap contracts due to the clearinghouse guarantee fund and other resources that are available in the event of a clearing member default. Where the fund is a seller of protection, the maximum potential amount of future payments the fund may be required to make is equal to the notional amount.

For the fund's average notional amount on credit default contracts, see the appropriate table at the end of these footnotes.

**TBA commitments:** The fund may enter into TBA (to be announced) commitments to purchase securities for a fixed unit price at a future date beyond customary settlement time. Although the unit price and par amount have been established, the actual securities have not been specified. However, it is anticipated that the amount of the commitments will not significantly differ from the principal amount. The fund holds, and maintains until settlement date, cash or high-grade debt obligations in an amount sufficient to meet the

purchase price, or the fund may enter into offsetting contracts for the forward sale of other securities it owns. Income on the securities will not be earned until settlement date.

The fund may also enter into TBA sale commitments to hedge its portfolio positions to sell mortgage-backed securities it owns under delayed delivery arrangements or to take a short position in mortgage-backed securities. Proceeds of TBA sale commitments are not received until the contractual settlement date. During the time a TBA sale commitment is outstanding, either equivalent deliverable securities, or an offsetting TBA purchase commitment deliverable on or before the sale commitment date, are held as "cover" for the transaction, or other liquid assets in an amount equal to the notional value of the TBA sale commitment are segregated. If the TBA sale commitment is closed through the acquisition of an offsetting TBA purchase commitment, the fund realizes a gain or loss. If the fund delivers securities under the commitment, the fund realizes a gain or a loss from the sale of the securities based upon the unit price established at the date the commitment was entered into.

TBA commitments, which are accounted for as purchase and sale transactions, may be considered securities themselves, and involve a risk of loss due to changes in the value of the security prior to the settlement date as well as the risk that the counterparty to the transaction will not perform its obligations. Counterparty risk is mitigated by having a master agreement between the fund and the counterparty.

Unsettled TBA commitments are valued at their fair value according to the procedures described under "Security valuation" above. The contract is marked to market daily and the change in fair value is recorded by the fund as an unrealized gain or loss. Based on market circumstances, Putnam Management will determine whether to take delivery of the underlying securities or to dispose of the TBA commitments prior to settlement.

Master agreements: The fund is a party to ISDA (International Swaps and Derivatives Association, Inc.) Master Agreements that govern OTC derivative and foreign exchange contracts and Master Securities Forward Transaction Agreements that govern transactions involving mortgage-backed and other asset-backed securities that may result in delayed delivery (Master Agreements) with certain counterparties entered into from time to time. The Master Agreements may contain provisions regarding, among other things, the parties' general obligations, representations, agreements, collateral requirements, events of default and early termination. With respect to certain counterparties, in accordance with the terms of the Master Agreements, collateral posted to the fund is held in a segregated account by the fund's custodian and, with respect to those amounts which can be sold or repledged, are presented in the fund's portfolio.

Collateral pledged by the fund is segregated by the fund's custodian and identified in the fund's portfolio. Collateral can be in the form of cash or debt securities issued by the U.S. Government or related agencies or other securities as agreed to by the fund and the applicable counterparty. Collateral requirements are determined based on the fund's net position with each counterparty.

With respect to ISDA Master Agreements, termination events applicable to the fund may occur upon a decline in the fund's net assets below a specified threshold over a certain period of time. Termination events applicable to counterparties may occur upon a decline in the counterparty's long-term or short-term credit ratings below a specified level. In each case, upon occurrence, the other party may elect to terminate early and cause settlement of all derivative and foreign exchange contracts outstanding, including the payment of any losses and costs resulting from such early termination, as reasonably determined by the terminating party. Any decision by one or more of the fund's counterparties to elect early termination could impact the fund's future derivative activity.

At the close of the reporting period, the fund had a net liability position of \$490,697 on open derivative contracts subject to the Master Agreements. Collateral posted by the fund at period end for these agreements totaled \$402,287 and may include amounts related to unsettled agreements.

ASC 820 establishes a three-level hierarchy for disclosure of fair value measurements. The valuation hierarchy is based upon the transparency of inputs to the valuation of the fund's investments. The three levels are defined as follows:

- Level 1: Valuations based on quoted prices for identical securities in active markets.
- **Level 2:** Valuations based on quoted prices in markets that are not active or for which all significant inputs are observable, either directly or indirectly.
- **Level 3:** Valuations based on inputs that are unobservable and significant to the fair value measurement. The following is a summary of the inputs used to value the fund's net assets as of the close of the reporting period:

#### **Valuation inputs**

Investments in securities:	Level 1	Level 2	Level 3
Asset-backed securities	\$—	\$138,511	<b>\$</b> —
Mortgage-backed securities	_	25,184,379	_
Purchased options outstanding	_	423,935	_
U.S. government and agency mortgage obligations	_	89,895,190	_
U.S. treasury obligations	_	140,907	_
Short-term investments	693,000	3,106,317	_
Totals by level	\$693,000	\$118,889,239	<b>\$</b> —

#### **Valuation inputs**

Other financial instruments:	Level 1	Level 2	Level 3
Futures contracts	\$(365,107)	\$—	\$—
Written options outstanding	_	(2,195)	
Forward premium swap option contracts	_	77,732	_
TBA sale commitments	_	(50,941,249)	_
Interest rate swap contracts	_	377,399	_
Credit default contracts	_	(243,662)	_
Totals by level	\$(365,107)	\$(50,731,975)	<b>\$</b> —

The volume of activity for the reporting period for any derivative type that was held at the close of the period is listed below and was based on an average of the holdings of that derivative at the end of each fiscal quarter in the reporting period:

Purchased TBA commitment option contracts (contract amount)	\$22,500,000
Purchased swap option contracts (contract amount)	\$96,800,000
Written TBA commitment option contracts (contract	
amount)	\$22,500,000
Written swap option contracts (contract amount)	\$50,600,000
Futures contracts (number of contracts)	200
Centrally cleared interest rate swap contracts	
(notional)	\$221,300,000
OTC credit default contracts (notional)	\$7,000,000

For additional information regarding the fund please see the fund's most recent annual or semiannual shareholder report filed on the Securities and Exchange Commission's Web site, www.sec.gov, or visit Putnam's Individual Investor Web site at www.putnaminvestments.com