Putnam Mortgage Securities Fund

The fund's portfolio

6/30/23 (Unaudited)

U.S. GOVERNMENT AND AGENCY MORTGAGE OBLIGATIONS $(364.7\%)^{(a)}$

U.O. GOVERNMENT AND AGENCT MORTGAGE OBLIGATIONS	Principal amount	Value
U.S. Government Guaranteed Mortgage Obligations (15.1%)		
Government National Mortgage Association Adjustable Rate Mortgages (US Treasury Yield Curve Rate + 1.50%), 2.625%, 7/20/26 Government National Mortgage Association Pass- Through Certificates	\$2,266	\$2,200
6.00%, 1/15/29	1	1
5.50%, 8/15/35	100	101
4.50%, TBA, 7/1/53	12,000,000	11,578,373
4.00%, TBA, 7/1/53	17,000,000	16,073,973
3.50%, TBA, 7/1/53	14,000,000	12,918,202
3.00%, TBA, 7/1/53	19,000,000	16,973,722
2.00%, TBA, 7/1/53	11,000,000	9,236,041
		66,782,613
U.S. Government Agency Mortgage Obligations (349.6%)		
Uniform Mortgage-Backed Securities		
6.00%, TBA, 8/1/53	34,400,000	34,692,930
6.00%, TBA, 7/1/53	34,400,000	34,703,683
5.50%, TBA, 8/1/53	71,000,000	70,661,586
5.50%, TBA, 7/1/53	142,000,000	141,312,152
5.00%, TBA, 8/1/53	68,000,000	66,645,318
5.00%, TBA, 7/1/53	247,000,000	241,992,470
4.50%, TBA, 8/1/53	32,000,000	30,770,010
4.50%, TBA, 7/1/53	120,000,000	115,368,720
4.00%, TBA, 8/1/53	36,000,000	33,806,239
4.00%, TBA, 7/1/53	72,000,000	67,564,656
3.50%, TBA, 8/1/53	52,000,000	47,417,495
3.50%, TBA, 7/1/53	67,000,000	61,051,137
3.00%, TBA, 8/1/53	59,000,000	51,975,307
3.00%, TBA, 7/1/53	84,000,000	73,696,896
2.50%, TBA, 8/1/53	146,000,000	123,906,068
2.50%, TBA, 7/1/53	165,000,000	139,901,850
2.00%, TBA, 8/1/53	128,000,000	104,465,459

1,544,307,016

Total U.S. government and agency mortgage obligations (cost \$1,618,690,546)

\$1,611,089,629

MORTGAGE-BACKED SECURITIES (82.8%)(a)

	Principal amount	Value
Agency collateralized mortgage obligations (29.8%)		
Federal Home Loan Mortgage Corporation		
REMICs Ser. 5043, IO, 5.00%, 11/25/50	\$7,486,021	\$1,701,117
REMICs IFB Ser. 3408, Class EK, ((-4.024 x ICE LIBOR USD 1 Month) + 25.79%), 4.896%, 4/15/37	142,891	166,310
REMICs Ser. 4024, Class PI, IO, 4.50%, 12/15/41	698,169	90,673
REMICs Ser. 4018, Class DI, IO, 4.50%, 7/15/41	553,897	33,042
REMICs IFB Ser. 3065, Class DC, ((-3 x ICE LIBOR USD 1 Month) + 19.86%), 4.28%, 3/15/35	1,264,444	1,267,478
REMICs Ser. 5119, Class KI, IO, 4.00%, 6/25/51	54,861	10,942
REMICs Ser. 5121, Class KI, IO, 4.00%, 6/25/51	7,603,614	1,600,785
REMICs Ser. 4953, Class AI, IO, 4.00%, 2/25/50	4,870,185	994,346
REMICs Ser. 4425, IO, 4.00%, 1/15/45	2,048,166	298,500
REMICs Ser. 4452, Class QI, IO, 4.00%, 11/15/44	2,879,755	558,667
REMICs Ser. 4019, Class JI, IO, 4.00%, 5/15/41	1,255,465	81,27
Structured Pass-Through Certificates FRB Ser. 57, Class 2A1, 3.696%, 7/25/43 ^(WAC)	10,703	9,73
Structured Pass-Through Certificates FRB Ser. 59, Class 2A1, 3.643%, 10/25/43(WAC)	5,712	4,218
REMICs Ser. 5050, Class IM, IO, 3.50%, 10/25/50	11,140,303	1,992,586
REMICs Ser. 5080, Class IQ, IO, 3.50%, 4/25/50	23,327,681	4,591,590
REMICs Ser. 4165, Class AI, IO, 3.50%, 2/15/43	1,417,427	210,830
REMICs Ser. 4136, Class IQ, IO, 3.50%, 11/15/42	3,274,737	447,310
Strips Ser. 304, Class C37, IO, 3.50%, 12/15/27	299,054	10,330
REMICs Ser. 5071, Class IV, IO, 3.00%, 12/25/50	19,240,582	3,270,80
REMICs Ser. 4141, Class PI, IO, 3.00%, 12/15/42	3,168,609	377,377
REMICs Ser. 4165, Class TI, IO, 3.00%, 12/15/42	5,107,766	387,097
REMICs Ser. 4171, Class NI, IO, 3.00%, 6/15/42	2,559,711	248,46
REMICs Ser. 4201, Class JI, IO, 3.00%, 12/15/41	1,713,620	71,499

REMICs IFB Ser. 5003, Class DS, IO, ((-1 x ICE LIBOR USD 1 Month) + 6.10%), 0.95%, 8/25/50	7,748,557	909,650
REMICs IFB Ser. 4915, Class SD, IO, ((-1 x ICE LIBOR USD 1 Month) + 6.05%), 0.90%, 9/25/49	9,547,799	936,369
REMICs IFB Ser. 4326, Class GS, IO, ((-1 x ICE LIBOR USD 1 Month) + 6.05%), 0.857%, 4/15/44	9,240,187	834,600
REMICs IFB Ser. 4933, Class SA, IO, ((-1 x ICE LIBOR USD 1 Month) + 6.00%), 0.85%, 12/25/49	6,479,904	765,029
REMICs Ser. 3369, Class BO, PO, zero %, 9/15/37	1,961	1,553
REMICs Ser. 3391, PO, zero %, 4/15/37	26,025	21,424
REMICs Ser. 3210, PO, zero %, 5/15/36	938	912
REMICs FRB Ser. 3117, Class AF, (ICE LIBOR USD 1 Month + 0.00%), zero %, 2/15/36	12,371	9,423
Federal National Mortgage Association		
REMICs Ser. 15-58, Class KI, IO, 6.00%, 3/25/37	4,699,330	800,771
REMICs Ser. 15-86, Class MI, IO, 5.50%, 11/25/45	4,099,525	652,234
REMICs Ser. 18-51, Class BI, IO, 5.50%, 7/25/38	4,416,171	393,171
REMICs Trust FRB Ser. 04-W7, Class A2, 5.472%, 3/25/34(<i>WAC</i>)	2.452	2.420
	2,452	2,439
REMICs FRB Ser. 03-W11, Class A1, 5.447%, 6/25/33 ^(WAC)	239	242
REMICs Ser. 17-19, Class IH, IO, 5.00%, 3/25/47	4,506,564	630,919
REMICs Ser. 20-31, IO, 4.50%, 5/25/50	10,860,373	2,155,580
REMICs IFB Ser. 08-24, Class SP, ((-3.667 x ICE LIBOR USD 1 Month) + 23.28%), 4.398%, 2/25/38	453,587	439,202
REMICs FRB Ser. 03-W14, Class 2A, 4.261%, 1/25/43(<i>WAC</i>)	7,150	6,676
Trust FRB Ser. 03-W3, Class 1A4, 4.016%,		
8/25/42 ^(WAC)	15,751	14,446
REMICs Ser. 20-60, Class NI, IO, 4.00%, 9/25/50	6,872,696	1,294,206
REMICs Ser. 15-83, IO, 4.00%, 10/25/43	1,100,938	164,196
REMICs Ser. 12-104, Class HI, IO, 4.00%, 9/25/27	1,442,285	60,175
Trust FRB Ser. 04-W2, Class 4A, 3.684%, 2/25/44(<i>WAC</i>)	3,686	3,512
REMICs Ser. 21-25, Class IJ, IO, 3.50%, 5/25/51	22,707,594	4,079,419
REMICs Ser. 20-20, Class IK, IO, 3.50%, 3/25/50	8,844,156	1,121,818
REMICs Ser. 20-62, Class MI, IO, 3.50%, 5/25/49	30,904,319	5,392,532
REMICs Ser. 16-70, Class QI, IO, 3.50%, 10/25/46	3,869,716	526,939
REMICs Ser. 13-22, Class PI, IO, 3.50%, 10/25/42	2,065,385	358,071
REMICs Ser. 12-114, Class NI, IO, 3.50%, 10/25/41	2,419,572	152,224
REMICs Ser. 20-96, IO, 3.00%, 1/25/51	8,492,767	1,319,351
REMICs Ser. 13-55, Class IK, IO, 3.00%, 4/25/43	1,938,086	241,336
REMICs Ser. 13-6, Class JI, IO, 3.00%, 2/25/43	4,459,616	562,804
REMICs Ser. 12-151, Class PI, IO, 3.00%, 1/25/43	2,431,857	308,916
REMICs Ser. 12-145, Class TI, IO, 3.00%, 11/25/42	662,514	21,648

REMICs Ser. 13-55, Class PI, IO, 3.00%, 5/25/42	1,295,681	46,829
REMICs Ser. 13-30, Class IP, IO, 3.00%, 10/25/41	31,876	4
REMICs Ser. 13-23, Class LI, IO, 3.00%, 6/25/41	83,356	75
REMICs Ser. 21-3, Class IB, IO, 2.50%, 2/25/51	6,402,473	1,049,237
REMICs Ser. 21-3, Class NI, IO, 2.50%, 2/25/51	14,568,529	2,002,707
REMICs IFB Ser. 11-123, Class KS, IO, ((-1 x ICE LIBOR USD 1 Month) + 6.60%), 1.45%, 10/25/41	284,769	21,673
REMICs IFB Ser. 18-20, Class SB, IO, ((-1 x ICE LIBOR USD 1 Month) + 6.25%), 1.10%, 3/25/48	4,905,725	394,420
REMICs IFB Ser. 17-104, Class SL, IO, ((-1 x ICE LIBOR USD 1 Month) + 6.15%), 1.00%, 1/25/48	6,119,277	617,690
REMICs IFB Ser. 20-41, Class SE, IO, ((-1 x ICE LIBOR USD 1 Month) + 6.10%), 0.95%, 6/25/50	5,564,546	645,853
REMICs IFB Ser. 16-83, Class BS, IO, ((-1 x ICE LIBOR USD 1 Month) + 6.10%), 0.95%, 11/25/46	13,621,053	999,619
REMICs IFB Ser. 16-85, Class SL, IO, ((-1 x ICE LIBOR USD 1 Month) + 6.10%), 0.95%, 11/25/46	18,232,580	1,250,618
REMICs IFB Ser. 16-50, Class SM, IO, ((-1 x ICE LIBOR USD 1 Month) + 6.10%), 0.95%, 8/25/46	8,635,410	549,501
REMICs IFB Ser. 19-51, Class SA, IO, ((-1 x ICE LIBOR USD 1 Month) + 6.05%), 0.90%, 9/25/49	7,895,231	762,482
REMICs IFB Ser. 16-8, Class SA, IO, ((-1 x ICE LIBOR USD 1 Month) + 6.05%), 0.90%, 3/25/46	8,351,270	804,507
REMICs IFB Ser. 19-71, Class CS, IO, ((-1 x ICE LIBOR USD 1 Month) + 6.00%), 0.85%, 11/25/49	2,680,957	383,452
REMICs IFB Ser. 19-83, Class QS, IO, ((-1 x ICE LIBOR USD 1 Month) + 5.95%), 0.80%, 1/25/50	15,450,122	1,842,419
REMICs Ser. 01-79, Class BI, IO, 0.243%, 3/25/45(WAC)	750,594	4,203
REMICs Ser. 03-34, PO, zero %, 4/25/43	36,696	29,786
REMICs Ser. 08-53, Class DO, PO, zero %, 7/25/38	88,063	71,199
REMICs Ser. 07-14, Class KO, PO, zero %, 3/25/37	3,025	2,515
REMICs Ser. 06-84, Class OT, PO, zero %, 9/25/36 Government National Mortgage Association	882	700
Ser. 16-75, Class LI, IO, 6.00%, 1/20/40	3,112,287	529,982
Ser. 20-167, Class IT, IO, 5.00%, 9/20/47	5,476,520	1,099,545
Ser. 15-89, Class LI, IO, 5.00%, 12/20/44	3,780,985	693,584
Ser. 14-76, IO, 5.00%, 5/20/44	2,143,227	422,253
Ser. 13-51, Class QI, IO, 5.00%, 2/20/43	2,686,460	349,139
Ser. 13-6, Class OI, IO, 5.00%, 1/20/43	6,159,721	1,113,801
Ser. 10-35, Class UI, IO, 5.00%, 3/20/40	1,030,141	209,620
Ser. 10-9, Class UI, IO, 5.00%, 1/20/40	5,034,806	1,019,548
Ser. 09-121, Class UI, IO, 5.00%, 12/20/39	3,000,327	590,794
Ser. 18-1, IO, 4.50%, 1/20/48	4,253,122	814,034
Ser. 13-34, Class HI, IO, 4.50%, 3/20/43	3,601,229	647,170
Ser. 13-39, Class IJ, IO, 4.50%, 3/20/43	4,719,320	871,862

Ser. 10-35, Class AI, IO, 4.50%, 3/20/40	3,274,935	530,809
Ser. 10-35, Class DI, IO, 4.50%, 3/20/40	5,105,447	886,867
Ser. 10-35, Class QI, IO, 4.50%, 3/20/40	1,275,262	220,282
Ser. 09-121, Class CI, IO, 4.50%, 12/16/39	3,364,803	615,491
Ser. 15-53, Class MI, IO, 4.00%, 4/16/45	3,344,235	610,992
Ser. 14-2, Class IL, IO, 4.00%, 1/16/44	634,414	104,024
Ser. 14-100, Class NI, IO, 4.00%, 6/20/43	2,234,116	135,390
Ser. 13-165, Class IL, IO, 4.00%, 3/20/43	1,098,350	168,113
Ser. 12-56, Class IB, IO, 4.00%, 4/20/42	3,003,687	506,816
Ser. 12-38, Class MI, IO, 4.00%, 3/20/42	5,787,678	955,430
Ser. 14-182, Class BI, IO, 4.00%, 1/20/39	5,014,354	492,067
Ser. 21-177, Class IG, IO, 3.50%, 10/20/51	16,606,790	2,214,931
Ser. 20-175, Class JI, IO, 3.50%, 11/20/50	11,924,962	2,001,691
Ser. 15-168, Class IG, IO, 3.50%, 3/20/43	1,922,431	244,288
Ser. 12-136, IO, 3.50%, 11/20/42	5,629,717	755,765
Ser. 14-102, Class IG, IO, 3.50%, 3/16/41	747,278	32,666
Ser. 15-52, Class KI, IO, 3.50%, 11/20/40	1,345,780	100,530
Ser. 21-176, Class GI, IO, 3.00%, 10/20/51	8,221,666	1,118,886
Ser. 21-188, Class IU, IO, 3.00%, 10/20/51	5,259,203	1,046,480
Ser. 21-188, Class IW, IO, 3.00%, 10/20/51	8,658,293	1,403,150
Ser. 21-76, Class NI, IO, 3.00%, 8/20/50	11,689,376	1,724,183
Ser. 14-174, Class AI, IO, 3.00%, 11/16/29	1,676,644	85,341
IFB Ser. 23-66, Class PS, ((-2.5 x US 30 Day Average SOFR) + 15.38%), 2.709%, 5/20/53	2,844,327	2,805,638
Ser. 16-H13, Class IK, IO, 2.655%, 6/20/66(WAC)	11,432,004	944,435
Ser. 17-H14, Class LI, IO, 2.501%, 6/20/67(WAC)	6,353,446	298,876
Ser. 21-7, Class MI, IO, 2.50%, 1/20/51	12,814,740	1,763,857
Ser. 21-8, Class IP, IO, 2.50%, 1/20/51	27,910,940	3,809,760
Ser. 20-162, Class UI, IO, 2.50%, 10/20/50	8,322,580	1,078,926
Ser. 20-138, Class IB, IO, 2.50%, 9/20/50	18,660,886	2,402,199
Ser. 16-H04, Class HI, IO, 2.361%, 7/20/65(WAC)	7,779,842	222,503
Ser. 16-H07, Class PI, IO, 2.292%, 3/20/66(<i>WAC</i>)	20,194,839	1,392,445
Ser. 16-H24, IO, 2.155%, 9/20/66(WAC)	12,948,495	1,003,679
IFB Ser. 23-20, Class SP, IO, ((-1 x US 30 Day Average SOFR) + 7.00%), 1.934%, 2/20/53	23,624,982	1,356,844
Ser. 15-H23, Class TI, IO, 1.921%, 9/20/65(WAC)	12,781,653	567,505
Ser. 15-H23, Class DI, IO, 1.898%, 9/20/65(WAC)	4,160,626	203,871
Ser. 17-H23, Class BI, IO, 1.861%, 11/20/67(WAC)	7,857,176	370,859
Ser. 14-H25, Class BI, IO, 1.65%, 12/20/64(WAC)	11,526,646	327,334
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IFB Ser. 13-182, Class SP, IO, ((-1 x ICE LIBOR USD 1 Month) + 6.70%), 1.554%, 12/20/43	2,872,078	278,793
IFB Ser. 11-156, Class SK, IO, ((-1 x ICE LIBOR USD 1 Month) + 6.60%), 1.454%, 4/20/38	4,229,064	445,827
FRB Ser. 11-H07, Class FI, IO, 1.229%, 2/20/61(WAC)	9,135,543	226,561
IFB Ser. 21-98, Class SK, IO, ((-1 x ICE LIBOR USD 1 Month) + 6.30%), 1.143%, 6/20/51	9,916,378	1,125,707
IFB Ser. 21-77, Class SM, IO, ((-1 x ICE LIBOR USD 1 Month) + 6.30%), 1.143%, 5/20/51	10,939,835	1,296,458
IFB Ser. 20-133, Class CS, IO, ((-1 x ICE LIBOR USD 1 Month) + 6.30%), 1.143%, 9/20/50	9,787,871	1,214,763
IFB Ser. 20-112, Class MS, IO, ((-1 x ICE LIBOR USD 1 Month) + 6.30%), 1.143%, 8/20/50	5,355,734	658,427
IFB Ser. 13-87, Class SA, IO, ((-1 x ICE LIBOR USD 1 Month) + 6.20%), 1.054%, 6/20/43	7,092,824	648,911
IFB Ser. 10-20, Class SC, IO, ((-1 x ICE LIBOR USD 1 Month) + 6.15%), 1.004%, 2/20/40	450,498	38,063
IFB Ser. 19-56, Class SK, IO, ((-1 x ICE LIBOR USD 1 Month) + 6.15%), 0.993%, 5/20/49	4,646,364	390,478
IFB Ser. 19-158, Class AS, IO, ((-1 x ICE LIBOR USD 1 Month) + 6.15%), 0.992%, 9/16/43	5,718,860	536,912
IFB Ser. 16-80, Class SD, IO, ((-1 x ICE LIBOR USD 1 Month) + 6.10%), 0.954%, 6/20/46	6,746,612	693,357
IFB Ser. 19-100, Class JS, IO, ((-1 x ICE LIBOR USD 1 Month) + 6.10%), 0.943%, 8/20/49	3,836,988	306,157
IFB Ser. 19-125, Class SG, IO, ((-1 x ICE LIBOR USD 1 Month) + 6.05%), 0.904%, 10/20/49	8,143,732	1,024,317
IFB Ser. 23-56, Class SK, IO, ((-1 x ICE LIBOR USD 1 Month) + 6.05%), 0.893%, 4/20/51	13,101,769	1,315,418
IFB Ser. 19-110, Class SQ, IO, ((-1 x ICE LIBOR USD 1 Month) + 6.05%), 0.893%, 9/20/49	6,115,752	603,610
IFB Ser. 19-121, Class SD, IO, ((-1 x ICE LIBOR USD 1 Month) + 6.00%), 0.843%, 10/20/49	8,099,812	1,110,719
IFB Ser. 20-47, Class SA, IO, ((-1 x ICE LIBOR USD 1 Month) + 6.00%), 0.843%, 5/20/44	11,333,053	918,997
IFB Ser. 23-40, Class SP, IO, ((-1 x US 30 Day Average SOFR) + 5.65%), 0.584%, 3/20/53	36,581,648	1,075,051
IFB Ser. 23-43, Class S, IO, ((-1 x US 30 Day Average SOFR) + 5.60%), 0.534%, 3/20/53	50,728,010	1,506,333
IFB Ser. 22-209, Class SG, IO, ((-1 x US 30 Day Average SOFR) + 5.60%), 0.534%, 12/20/52	34,438,945	1,862,823
IFB Ser. 14-119, Class SA, IO, ((-1 x ICE LIBOR USD 1 Month) + 5.60%), 0.454%, 8/20/44	3,183,403	240,754
Ser. 15-H14, Class AI, IO, 0.396%, 6/20/65 ^(WAC)	21,494,457	767,125
Ser. 17-H20, Class AI, IO, 0.273%, 10/20/67(WAC)	19,646,735	1,043,733
Ser. 17-H08, Class GI, IO, 0.229%, 2/20/67 ^(WAC)	8,712,321	734,429
Ser. 16-H18, Class QI, IO, 0.193%, 6/20/66(WAC)	12,587,559	583,282

Ser. 17-H03, Class KI, IO, 0.178%, 1/20/67(WAC)	15,157,294	1,176,206
FRB Ser. 15-H16, Class XI, IO, 0.11%, 7/20/65 ^(WAC)	8,167,143	387,939
Ser. 18-H01, Class XI, IO, 0.107%, 1/20/68(WAC)	11,671,060	749,370
Ser. 16-H27, Class GI, IO, 0.102%, 12/20/66(WAC)	16,799,798	817,159
Ser. 17-H25, Class CI, IO, 0.097%, 12/20/67(WAC)	13,409,383	798,757
Ser. 15-H20, Class CI, IO, 0.088%, 8/20/65(WAC)	18,783,807	931,677
Ser. 16-H24, Class JI, IO, 0.081%, 11/20/66(WAC)	3,748,279	177,347
Ser. 15-H22, Class AI, IO, 0.08%, 9/20/65(WAC)	18,685,318	842,708
Ser. 15-H13, Class AI, IO, 0.079%, 6/20/65(<i>WAC</i>)	12,159,339	473,767
FRB Ser. 16-H19, Class AI, IO, 0.076%, 9/20/66(<i>WAC</i>)	21,047,879	807,502
Ser. 15-H10, Class HI, IO, 0.075%, 4/20/65(WAC)	15,874,072	604,802
Ser. 17-H06, Class MI, IO, 0.064%, 2/20/67(WAC)	15,385,436	524,951
Ser. 18-H02, Class IM, IO, 0.059%, 2/20/68(WAC)	8,843,204	513,155
Ser. 14-H21, Class AI, IO, 0.047%, 10/20/64(WAC)	14,327,342	401,610
Ser. 17-H04, Class BI, IO, 0.037%, 2/20/67(WAC)	10,110,992	408,042
Ser. 16-H03, Class AI, IO, 0.034%, 1/20/66(WAC)	10,100,389	328,207
Ser. 17-H25, IO, 0.026%, 11/20/67 ^(WAC)	9,081,320	395,889
Ser. 16-H23, Class NI, IO, 0.026%, 10/20/66(<i>WAC</i>)	21,350,119	811,305
Ser. 15-H04, Class AI, IO, 0.023%, 12/20/64 ^(WAC)	12,741,598	349,115
Ser. 17-H10, Class MI, IO, 0.021%, 4/20/67(WAC)	11,030,806	323,203
Ser. 17-H08, Class NI, IO, 0.019%, 3/20/67 ^(WAC)	9,569,047	309,080
Ser. 17-H09, IO, 0.014%, 4/20/67(WAC)	9,656,261	249,711
Ser. 16-H06, Class DI, IO, 0.009%, 7/20/65(WAC)	12,742,290	246,971
Ser. 18-H19, Class JI, IO, 0.007%, 10/20/68 ^(WAC)	13,573,880	470,841
Ser. 18-H04, Class JI, IO, zero %, 3/20/68(WAC)	12,299,009	489,501
Ser. 16-H10, Class AI, IO, zero %, 4/20/66 ^(WAC)	17,598,507	282,966
		131,469,284
Commercial mortgage-backed securities (31.1%)		
BANK 144A Ser. 18-BN11, Class D, 3.00%, 3/15/61	839,000	480,425
Barclays Commercial Mortgage Trust 144A Ser. 19-C4, Class E, 3.25%, 8/15/52	2,034,000	1,187,295
Benchmark Mortgage Trust 144A		
FRB Ser. 18-B3, Class D, 3.176%, 4/10/51(WAC)	3,362,000	2,081,469
Ser. 19-B11, Class D, 3.00%, 5/15/52	2,608,000	1,644,928
Ser. 18-B1, Class E, 3.00%, 1/15/51(<i>WAC</i>)	1,840,000	949,054
Ser. 19-B13, Class D, 2.50%, 8/15/57	1,788,000	997,042

BWAY Mortgage Trust 144A FRB Ser. 22-26BW, Class F, 5.029%, 2/10/44(<i>WAC</i>)	2,305,000	1,415,955
CD Commercial Mortgage Trust		
FRB Ser. 17-CD3, Class C, 4.697%, 2/10/50 ^(WAC)	1,638,000	982,282
Ser. 17-CD3, Class B, 3.984%, 2/10/50(<i>WAC</i>) CD Commercial Mortgage Trust 144A	826,000	598,684
Ser. 17-CD3, Class D, 3.25%, 2/10/50	2,214,000	1,013,113
Ser. 19-CD8, Class D, 3.00%, 8/15/57 Citigroup Commercial Mortgage Trust	1,450,000	896,825
FRB Ser. 13-GC15, Class C, 5.419%, 9/10/46 ^(WAC)	1,567,000	1,545,703
FRB Ser. 15-GC27, Class C, 4.567%, 2/10/48(WAC) Citigroup Commercial Mortgage Trust 144A	1,731,000	1,489,177
FRB Ser. 12-GC8, Class C, 5.072%, 9/10/45 ^(WAC)	1,251,908	1,129,870
FRB Ser. 15-GC27, Class D, 4.567%, 2/10/48(WAC)	1,018,000	805,393
Ser. 15-P1, Class D, 3.225%, 9/15/48	2,419,000	1,879,896
Ser. 15-GC27, Class E, 3.00%, 2/10/48 COMM Mortgage Trust	1,664,000	1,239,141
FRB Ser. 14-CR16, Class C, 5.08%, 4/10/47 ^(WAC)	2,441,904	2,236,846
FRB Ser. 13-CR13, Class C, 5.032%, 11/10/46(WAC)	1,355,000	1,238,073
FRB Ser. 14-UBS3, Class C, 4.893%, 6/10/47 ^(WAC)	956,000	880,475
FRB Ser. 14-UBS4, Class C, 4.806%, 8/10/47(WAC)	1,158,060	936,313
Ser. 13-CR12, Class AM, 4.30%, 10/10/46	1,570,000	1,374,614
Ser. 15-DC1, Class B, 4.035%, 2/10/48(WAC)	1,285,000	1,110,491
FRB Ser. 15-CR26, Class D, 3.615%, 10/10/48 (WAC) COMM Mortgage Trust 144A	1,696,375	1,091,468
FRB Ser. 13-LC13, Class D, 5.436%, 8/10/46(WAC)	2,546,000	2,399,526
FRB Ser. 13-CR13, Class D, 5.032%, 11/10/46 ^(WAC)	1,906,000	1,590,253
FRB Ser. 14-CR17, Class D, 5.006%, 5/10/47(WAC)	3,623,000	3,137,806
FRB Ser. 14-UBS4, Class D, 4.868%, 8/10/47 ^(WAC)	757,000	550,372
FRB Ser. 14-CR19, Class D, 4.853%, 8/10/47(WAC)	1,317,000	1,133,584
FRB Ser. 13-CR7, Class D, 4.398%, 3/10/46 ^(WAC)	933,835	803,098
FRB Ser. 15-LC19, Class E, 4.355%, 2/10/48(WAC)	1,786,000	1,359,587
Ser. 12-CR4, Class B, 3.703%, 10/15/45	2,419,000	1,465,301
Ser. 13-LC6, Class E, 3.50%, 1/10/46	701,000	553,790
Ser. 17-COR2, Class D, 3.00%, 9/10/50	1,765,000	1,200,200
FRB Ser. 18-COR3, Class D, 2.961%, 5/10/51(WAC)	869,000	476,267
Ser. 15-LC19, Class D, 2.867%, 2/10/48 CSAIL Commercial Mortgage Trust	1,240,000	1,060,785
FRB Ser. 15-C3, Class C, 4.50%, 8/15/48(WAC)	922,000	672,806

FRB Ser. 15-C2, Class C, 4.315%, 6/15/57(WAC)	1,876,000	1,533,692
FRB Ser. 15-C2, Class D, 4.315%, 6/15/57 ^(WAC) CSAIL Commercial Mortgage Trust 144A	3,030,000	1,850,742
FRB Ser. 18-C14, Class D, 5.064%, 11/15/51(WAC)	1,300,000	839,305
Ser. 19-C17, Class D, 2.50%, 9/15/52	1,828,000	980,710
DBUBS Mortgage Trust 144A FRB Ser. 11-LC3A, Class D, 5.538%, 8/10/44(WAC)	3,135,288	2,719,204
Federal Home Loan Mortgage Corporation 144A		
Multifamily Structured Credit Risk FRB Ser. 21-MN3, Class M2, 9.067%, 11/25/51	2,289,000	2,076,416
Multifamily Structured Agency Credit Risk FRB Ser. 21-MN1, Class M2, 8.817%, 1/25/51	1,423,000	1,281,645
GS Mortgage Securities Corp., II 144A FRB Ser. 13-GC10, Class D, 4.688%, 2/10/46(<i>WAC</i>) GS Mortgage Securities Trust	2,209,000	1,865,271
FRB Ser. 14-GC18, Class C, 5.223%, 1/10/47 ^(WAC)	4,153,000	2,284,150
FRB Ser. 14-GC22, Class C, 4.842%, 6/10/47(WAC)	1,431,000	1,153,645
GS Mortgage Securities Trust 144A		
FRB Ser. 10-C1, Class D, 6.569%, 8/10/43 ^(WAC)	742,000	584,442
FRB Ser. 14-GC24, Class D, 4.657%, 9/10/47(WAC)	4,747,000	2,023,894
Ser. 17-GS5, Class D, 3.509%, 3/10/50 ^(WAC) JPMBB Commercial Mortgage Securities Trust FRB Ser.	1,021,000	589,060
14-C22, Class C, 4.698%, 9/15/47 ^(WAC) JPMBB Commercial Mortgage Securities Trust 144A	2,294,000	1,915,586
FRB Ser. 14-C19, Class C19, 4.783%, 4/15/47(WAC)	732,000	683,211
FRB Ser. C14, Class D, 4.43%, 8/15/46(WAC)	4,088,000	2,147,757
FRB Ser. 13-C12, Class E, 4.165%, 7/15/45(WAC)	1,235,000	958,604
JPMCC Commercial Mortgage Securities Trust 144A FRB Ser. 17-JP7, Class D, 4.527%, 9/15/50(WAC)	1,453,000	978,147
JPMDB Commercial Mortgage Securities Trust	1,433,000	370,147
FRB Ser. 18-C8, Class C, 4.971%, 6/15/51(WAC)	504,000	407,182
Ser. 17-C5, Class C, 4.512%, 3/15/50(WAC)	1,858,000	1,310,815
JPMDB Commercial Mortgage Securities Trust 144A FRB Ser. 16-C2, Class D, 3.482%, 6/15/49(WAC)	2,330,000	1,372,390
JPMorgan Chase Commercial Mortgage Securities Trust	2,330,000	1,372,390
Ser. 06-LDP9, Class AMS, 5.337%, 5/15/47	1,734,672	1,620,817
FRB Ser. 13-LC11, Class D, 4.307%, 4/15/46(WAC)	2,891,000	1,927,204
FRB Ser. 13-C10, Class C, 4.263%, 12/15/47(WAC)	1,197,685	1,126,146
Ser. 13-LC11, Class B, 3.499%, 4/15/46	725,000	632,295
JPMorgan Chase Commercial Mortgage Securities Trust 144A		
FRB Ser. 11-C3, Class D, 5.71%, 2/15/46 ^(WAC)	2,164,000	1,525,566
FRB Ser. 11-C3, Class E, 5.71%, 2/15/46 ^(WAC)	1,629,000	676,380

FRB Ser. 13-C16, Class D, 5.182%, 12/15/46(WAC)	1,295,000	1,238,836
Morgan Stanley Bank of America Merrill Lynch Trust		
FRB Ser. 15-C25, Class C, 4.668%, 10/15/48 ^(WAC)	1,824,000	1,570,575
FRB Ser. 14-C16, Class B, 4.439%, 6/15/47 ^(WAC)	1,695,000	1,551,349
FRB Ser. 15-C22, Class C, 4.341%, 4/15/48 ^(WAC)	1,539,000	1,344,426
FRB Ser. 17-C34, Class C, 4.314%, 11/15/52 ^(WAC)	751,000	608,814
FRB Ser. 13-C9, Class C, 3.935%, 5/15/46 ^(WAC) Morgan Stanley Bank of America Merrill Lynch Trust 144A	946,000	758,692
FRB Ser. 13-C12, Class D, 5.102%, 10/15/46(WAC)	479,000	396,887
FRB Ser. 13-C12, Class E, 5.102%, 10/15/46 ^(WAC)	2,040,618	1,554,033
FRB Ser. 12-C6, Class E, 4.673%, 11/15/45(WAC)	1,677,000	1,180,608
FRB Ser. 12-C6, Class G, 4.50%, 11/15/45 ^(WAC)	1,288,000	890,910
FRB Ser. 15-C24, Class E, 4.469%, 5/15/48(WAC)	1,780,000	1,318,624
FRB Ser. 15-C23, Class D, 4.277%, 7/15/50(WAC)	2,268,000	1,866,657
FRB Ser. 13-C10, Class F, 4.20%, 7/15/46 ^(WAC)	2,316,000	116,394
FRB Ser. 13-C9, Class D, 4.023%, 5/15/46(WAC)	1,234,000	1,014,525
Ser. 14-C19, Class D, 3.25%, 12/15/47 Morgan Stanley Capital I Trust 144A	1,810,000	1,442,762
FRB Ser. 12-C4, Class E, 5.336%, 3/15/45(WAC)	2,436,000	1,756,843
FRB Ser. 11-C3, Class E, 5.251%, 7/15/49(WAC)	2,864,549	2,533,140
Multifamily Connecticut Avenue Securities Trust 144A FRB Ser. 19-01, Class M10, 8.40%, 10/25/49	5,880,349	5,674,537
PFP, Ltd. 144A FRB Ser. 21-8, Class A, 6.158%, 8/9/37 (Cayman Islands)	940,475	914,084
Ready Capital Mortgage Financing, LLC 144A FRB Ser. 22-FL9, Class A, 7.556%, 6/25/37	1,213,884	1,210,608
UBS Commercial Mortgage Trust		
FRB Ser. 18-C11, Class C, 5.035%, 6/15/51 ^(WAC)	1,439,000	1,130,398
FRB Ser. 17-C3, Class C, 4.536%, 8/15/50(WAC) UBS Commercial Mortgage Trust 144A	3,138,000	2,514,671
FRB Ser. 12-C1, Class E, 5.00%, 5/10/45 ^(WAC)	1,752,380	1,165,333
FRB Ser. 18-C11, Class D, 3.00%, 6/15/51(WAC) Wells Fargo Commercial Mortgage Trust	2,564,000	1,522,003
FRB Ser. 16-NXS5, Class D, 5.144%, 1/15/59(WAC)	1,174,000	609,638
FRB Ser. 18-C46, Class C, 5.141%, 8/15/51(WAC)	823,000	671,516
FRB Ser. 15-C31, Class C, 4.748%, 11/15/48(WAC)	1,373,000	1,190,206
FRB Ser. 15-SG1, Class B, 4.601%, 9/15/48(WAC)	2,091,000	1,813,913
FRB Ser. 15-C29, Class D, 4.359%, 6/15/48(WAC)	1,407,000	1,176,567
FRB Ser. 20-C57, Class C, 4.157%, 8/15/53(WAC)	525,000	408,857
Ser. 15-C31, Class D, 3.852%, 11/15/48	1,248,000	932,840

Ser. 16-BNK1, Class C, 3.071%, 8/15/49 ^(WAC) Wells Fargo Commercial Mortgage Trust 144A	790,000	474,337
FRB Ser. 15-C31, Class E, 4.748%, 11/15/48 ^(WAC)	1,550,000	959,298
FRB Ser. 15-C30, Class D, 4.648%, 9/15/58(WAC)	522,500	410,942
Ser. 17-RB1, Class D, 3.401%, 3/15/50	1,983,000	1,193,102
Ser. 16-C33, Class D, 3.123%, 3/15/59	2,673,000	2,079,682
Ser. 20-C55, Class D, 2.50%, 2/15/53	1,091,000	573,460
WF-RBS Commercial Mortgage Trust Ser. 14-C21, Class C, 4.234%, 8/15/47 ^(WAC)	2,558,000	2,107,393
WF-RBS Commercial Mortgage Trust 144A		
Ser. 11-C4, Class E, 4.992%, 6/15/44(WAC)	1,659,568	1,220,821
FRB Ser. 12-C9, Class D, 4.876%, 11/15/45 ^(WAC)	1,507,446	1,389,756
FRB Ser. 12-C9, Class E, 4.876%, 11/15/45(WAC)	730,000	630,440
FRB Ser. 13-C11, Class D, 4.197%, 3/15/45(WAC)	2,116,000	1,476,977
		137,267,637
Residential mortgage-backed securities (non-agency) (21.9%)		
American Home Mortgage Investment Trust FRB Ser. 07-1, Class GA1C, (ICE LIBOR USD 1 Month + 0.19%),		
5.34%, 5/25/47	5,168,820	2,819,934
Arroyo Mortgage Trust 144A Ser. 19-3, Class M1, 4.204%, 10/25/48(<i>WAC</i>)	750,000	633,318
Bayview Financial Mortgage Pass-Through Trust Ser. 06-C, Class 1A3, 6.528%, 11/28/36	3,974,098	3,695,167
Bear Stearns Alt-A Trust	0,014,000	0,000,101
FRB Ser. 05-10, Class 11A1, (ICE LIBOR USD 1 Month + 0.50%), 5.65%, 1/25/36	229,108	202,865
FRB Ser. 05-8, Class 21A1, 4.117%, 10/25/35 ^(WAC)	370,706	300,319
Carrington Mortgage Loan Trust FRB Ser. 06-NC2, Class A4, (ICE LIBOR USD 1 Month + 0.48%), 5.63%, 6/25/36	3,124,613	2,947,532
Countrywide Alternative Loan Trust FRB Ser. 06-OA19, Class A1, (ICE LIBOR USD 1 Month + 0.18%), 5.337%,		
2/20/47	1,914,982	1,484,137
Countrywide Asset-Backed Certificates FRB Ser. 07-10, Class 1A1, (ICE LIBOR USD 1 Month + 0.18%), 5.33%,		
6/25/47	3,861,743	3,588,461
CSMC Trust 144A FRB Ser. 20-RPL2, Class A12, 3.496%, 2/25/60(WAC)	1,937,448	1,933,752
Eagle Re, Ltd. 144A FRB Ser. 20-1, Class B1, (ICE LIBOR USD 1 Month + 2.85%), 8.00%, 1/25/30	765,000	773,097
Federal Home Loan Mortgage Corporation		
Structured Agency Credit Risk Debt FRN Ser. 15-DNA3, Class B, (ICE LIBOR USD 1 Month + 9.35%), 14.50%, 4/25/28	329,413	353,725
Structured Agency Credit Risk Debt FRN Ser. 15-HQA1,	523,413	JJJ,1 ZJ
Class B, (ICE LIBOR USD 1 Month + 8.80%), 13.95%,	0.740.505	0.005.040
3/25/28	2,713,587 2,491,693	2,805,246 2,662,611
Structured Agency Credit Risk Debt FRN Ser. 16-DNA3, Class M3, (ICE LIBOR USD 1 Month + 5.00%), 10.15%,	2,701,000	2,002,011

12/25/28

Federal Home Loan Mortgage Corporation 144A

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Structured Agency Credit Risk Trust FRB Ser. 19-HQA2, Class B2, (ICE LIBOR USD 1 Month + 11.25%), 16.40%, 4/25/49	637,000	747,012
Structured Agency Credit Risk Trust FRB Ser. 18-HQA2, Class B2, (ICE LIBOR USD 1 Month + 11.00%), 16.15%, 10/25/48	2,108,000	2,518,202
Structured Agency Credit Risk Trust FRB Ser. 19-DNA1, Class B2, (ICE LIBOR USD 1 Month + 10.75%), 15.90%, 1/25/49	4,520,000	5,344,695
Structured Agency Credit Risk Trust FRB Ser. 19-DNA2, Class B2, (ICE LIBOR USD 1 Month + 10.50%), 15.65%, 3/25/49	282,000	326,458
Structured Agency Credit Risk Trust REMICs FRB Ser. 20-DNA4, Class B2, (ICE LIBOR USD 1 Month + 10.00%), 15.15%, 8/25/50	2,647,000	3,353,418
Structured Agency Credit Risk Trust REMICs FRB Ser. 20-HQA3, Class B2, (ICE LIBOR USD 1 Month + 10.00%), 15.15%, 7/25/50	916,000	1,088,037
Structured Agency Credit Risk Trust REMICs FRB Ser. 20-HQA2, Class B2, (ICE LIBOR USD 1 Month + 7.60%), 12.75%, 3/25/50	1,000,000	1,039,457
Structured Agency Credit Risk Trust FRB Ser. 19-DNA4, Class B2, (ICE LIBOR USD 1 Month + 6.25%), 11.40%, 10/25/49	1,070,000	1,090,069
Structured Agency Credit Risk Trust REMICs FRB Ser. 20-HQA3, Class B1, (ICE LIBOR USD 1 Month + 5.75%), 10.90%, 7/25/50	1,907,470	2,063,623
Structured Agency Credit Risk Trust REMICs FRB Ser. 20-HQA4, Class B1, (ICE LIBOR USD 1 Month + 5.25%), 10.40%, 9/25/50	793,203	845,420
Structured Agency Credit Risk Trust FRB Ser. 19-FTR3, Class FTR3, (ICE LIBOR USD 1 Month + 4.80%), 9.938%, 9/25/47	371,000	339,929
Structured Agency Credit Risk Trust REMICs FRB Ser. 20-DNA5, Class B1, (US 30 Day Average SOFR + 4.80%), 9.867%, 10/25/50	3,100,000	3,320,875
Structured Agency Credit Risk Trust REMICs FRB Ser. 21-DNA1, Class B2, (US 30 Day Average SOFR + 4.75%), 9.817%, 1/25/51	1,330,000	1,179,544
Structured Agency Credit Risk Trust FRB Ser. 19-DNA1, Class B1, (ICE LIBOR USD 1 Month + 4.65%), 9.80%, 1/25/49	1,575,000	1,706,914
Structured Agency Credit Risk Trust FRB Ser. 19-DNA2, Class B1, (ICE LIBOR USD 1 Month + 4.35%), 9.50%, 3/25/49	3,079,000	3,284,126
Structured Agency Credit Risk Trust REMICs FRB Ser. 20-HQA2, Class B1, (ICE LIBOR USD 1 Month + 4.10%), 9.25%, 3/25/50	3,276,000	3,387,984
Seasoned Credit Risk Transfer Trust Ser. 19-2, Class M, 4.75%, 8/25/58(WAC)	1,129,000	982,584

Seasoned Credit Risk Transfer Trust FRB Ser. 18-3, Class 3, 4.75%, 8/25/57 ^(WAC)	876,000	748,024
Seasoned Credit Risk Transfer Trust Ser. 19-4, Class M, 4.50%, 2/25/59 ^(WAC)	485,000	404,139
Federal National Mortgage Association		
Connecticut Avenue Securities FRB Ser. 16-C03, Class 2B, (ICE LIBOR USD 1 Month + 12.75%), 17.90%, 10/25/28	466,843	543,997
Connecticut Avenue Securities FRB Ser. 16-C03, Class 1B, (ICE LIBOR USD 1 Month + 11.75%), 16.90%, 10/25/28	2,821,134	3,188,242
Connecticut Avenue Securities FRB Ser. 16-C04, Class 1B, (ICE LIBOR USD 1 Month + 10.25%), 15.40%, 1/25/29	780,040	849,492
Connecticut Avenue Securities FRB Ser. 16-C06, Class 1B, (ICE LIBOR USD 1 Month + 9.25%), 14.40%, 4/25/29	505,401	535,702
Connecticut Avenue Securities FRB Ser. 17-C02, Class 2B1, (ICE LIBOR USD 1 Month + 5.50%), 10.65%, 9/25/29	1,518,000	1,681,381
	1,010,000	1,001,001
Connecticut Avenue Securities FRB Ser. 16-C03, Class 1M2, (ICE LIBOR USD 1 Month + 5.30%), 10.45%, 10/25/28	395,163	420,144
Connecticut Avenue Securities FRB Ser. 17-C07, Class 2B1, (ICE LIBOR USD 1 Month + 4.45%), 9.60%, 5/25/30	2,739,000	2,969,532
Connecticut Avenue Securities FRB Ser. 17-C06, Class 1B1, (ICE LIBOR USD 1 Month + 4.15%), 9.30%, 2/25/30	3,742,000	4,015,738
Connecticut Avenue Securities FRB Ser. 17-C07, Class 1B1, (ICE LIBOR USD 1 Month + 4.00%), 9.15%, 5/25/30	3,800,000	4,064,844
Connecticut Avenue Securities FRB Ser. 18-C06, Class 1B1, (ICE LIBOR USD 1 Month + 3.75%), 8.90%, 3/25/31	1,687,000	1,778,769
Federal National Mortgage Association 144A	1,007,000	1,770,700
Connecticut Avenue Securities Trust FRB Ser. 20-SBT1, Class 1B1, (ICE LIBOR USD 1 Month + 6.75%), 11.90%, 2/25/40	3,455,000	3,298,837
Connecticut Avenue Securities Trust FRB Ser. 19-R01, Class 2B1, (ICE LIBOR USD 1 Month + 4.35%), 9.50%,		3,290,037
7/25/31	3,187,000	3,362,285
Connecticut Avenue Securities Trust FRB Ser. 19-R03, Class 1B1, (ICE LIBOR USD 1 Month + 4.10%), 9.25%, 9/25/31	947,000	991,692
Connecticut Avenue Securities Trust FRB Ser. 20-SBT1, Class 1M2, (ICE LIBOR USD 1 Month + 3.65%), 8.80%, 2/25/40	1,887,000	1,948,561
Connecticut Avenue Securities Trust FRB Ser. 20-R01, Class 1B1, (ICE LIBOR USD 1 Month + 3.25%), 8.40%, 1/25/40	347,000	343,046
	347,000	298,154
Connecticut Avenue Securities Trust FRB Ser. 20-R02, Class 2B1, (ICE LIBOR USD 1 Month + 3.00%), 8.15%,	011,000	200,104

1/25/40

Total mortgage-backed securities (cost \$415,562,553)		\$365,713,824
		96,976,903
Wells Fargo Home Equity Asset-Backed Securities Trust FRB Ser. 07-2, Class A3, (ICE LIBOR USD 1 Month + 0.46%), 5.61%, 4/25/37	649,812	628,331
WaMu Mortgage Pass-Through Certificates Trust FRB Ser. 05-AR8, Class 2AC2, (ICE LIBOR USD 1 Month + 0.92%), 6.07%, 7/25/45	558,714	497,932
Towd Point Mortgage Trust 144A Ser. 19-2, Class A2, 3.75%, 12/25/58 (WAC)	862,000	753,182
Structured Asset Mortgage Investments II Trust FRB Ser. 06-AR7, Class A1BG, (ICE LIBOR USD 1 Month + 0.12%), 5.27%, 8/25/36	223,879	188,668
Radnor Re, Ltd. 144A Mortgage Insurance-Linked FRN Ser. 20-1, Class B1, (ICE LIBOR USD 1 Month + 3.00%), 8.15%, 1/25/30	430,000	430,346
FRB Ser. 19-1A, Class B1A, (ICE LIBOR USD 1 Month + 3.50%), 8.65%, 7/25/29 (Bermuda)	574,000	571,249
FRB Ser. 19-1A, Class B1B, (ICE LIBOR USD 1 Month + 4.35%), 9.50%, 7/25/29 (Bermuda)	695,000	706,238
Oaktown Re III, Ltd. 144A	211,201	100,011
Morgan Stanley ABS Capital I, Inc. Trust FRB Ser. 04- HE9, Class M2, (ICE LIBOR USD 1 Month + 0.93%), 6.08%, 11/25/34	211,201	199,311
LHOME Mortgage Trust 144A Ser. 21-RTL1, Class A1, 2.09%, 2/25/26 ^(WAC)	275,475	265,834
JPMorgan Alternative Loan Trust FRB Ser. 06-A6, Class 1A1, (ICE LIBOR USD 1 Month + 0.32%), 5.47%, 11/25/36	1,250,978	1,037,506
Home Re, Ltd. 144A FRB Ser. 21-2, Class B1, (US 30 Day Average SOFR + 4.15%), 9.217%, 1/25/34 (Bermuda)	1,000,000	934,612
HarborView Mortgage Loan Trust FRB Ser. 05-2, Class 1A, (ICE LIBOR USD 1 Month + 0.52%), 5.677%, 5/19/35	961,601	315,118
Connecticut Avenue Securities Trust FRB Ser. 19-R01, Class 2M2, (ICE LIBOR USD 1 Month + 2.45%), 7.60%, 7/25/31	9,366	9,404
Connecticut Avenue Securities Trust FRB Ser. 22-R02, Class 2M2, (US 30 Day Average SOFR + 3.00%), 8.067%, 1/25/42	2,198,000	2,178,082
5,		

ASSET-BACKED SECURITIES $(0.9\%)^{(a)}$

	Principal amount	Value
Mello Warehouse Securitization Trust 144A		
FRB Ser. 21-3, Class E, (ICE LIBOR USD 1 Month		
+ 3.25%), 8.40%, 10/22/24	\$1,271,000	\$1,241,904

Total asset-backed securities (cost \$3,970,004)		\$3,983,854
Station Place Securitization Trust 144A FRB Ser. 23-2, Class A1, (CME Term SOFR 1 Month + 0.95%), 6.103%, 6/29/24	1,375,000	1,373,184
FRB Ser. 21-3, Class D, (ICE LIBOR USD 1 Month + 2.00%), 7.15%, 10/22/24	1,410,000	1,368,766

SHORT-TERM INVESTMENTS (15.3%)^(a)

	aı	Principal mount/shares	Value
Putnam Short Term Investment Fund Class P 5.23%(AFF)	Shares	38,295,500	\$38,295,500
State Street Institutional U.S. Government Money Market			
Fund, Premier Class 5.03% ^(P)	Shares	15,664,000	15,664,000
U.S. Treasury Bills 4.995%, 11/2/23(SEG)(SEGSF)		\$7,480,000	7,348,107
U.S. Treasury Bills 5.323%, 11/16/23 ^(SEG) (SEGSF)		5,200,000	5,098,242
U.S. Treasury Bills 5.454%, 10/26/23(SEGSF)		1,000,000	983,389
Total short-term investments (cost \$67,396,869)			\$67,389,238
TOTAL INVESTMENTS			
Total investments (cost \$2,105,619,972)		\$	52,048,176,545

FUTURES CONTRACTS OUTSTANDING at 6/30/23 (Unaudited)

	Number of contracts	Notional amount	Value	Expiration date	Unrealized appreciation/ (depreciation)
U.S. Treasury Note 2 yr (Short)	684	\$139,087,125	\$139,087,125	Sep-23	\$1,807,773
Unrealized appreciation					1,807,773
Unrealized (depreciation)					
Total					\$1,807,773

FORWARD PREMIUM SWAP OPTION CONTRACTS OUTSTANDING at 6/30/23 (Unaudited)

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.				
(0.7988)/US SOFR/Apr-34 (Written)	Apr- 24/0.7988	\$115,721,600	\$142,892	\$107,621
(3.63)/US SOFR/Mar-26 (Written)	Mar- 24/3.63 Mar-	64,065,500	797,615	387,596
3.63/US SOFR/Mar-26 (Written)	24/3.63	64,065,500	797,615	(164,648)
1.8838/US SOFR/Apr-34 (Purchased)	Apr- 24/1.8838	57,860,800	(423,202)	(260,952)
(3.073)/US SOFR/Jun-37 (Written)	Jun- 27/3.073	53,614,900	3,900,484	776,344
3.073/US SOFR/Jun-37 (Written)	Jun- 27/3.073	53,614,900	3,900,484	270,219
3.32/US SOFR/Oct-39 (Purchased)	Oct-29/3.32	39,112,600	(3,109,452)	(155,277)
(3.32)/US SOFR/Oct-39 (Purchased)	Oct-29/3.32	39,112,600	(3,109,452)	(350,840)
(3.17)/US SOFR/Dec-35 (Purchased)	Dec- 25/3.17	32,653,500	(1,697,982)	26,449
2.67/US SOFR/Dec-35 (Purchased)	Dec- 25/2.67	32,653,500	(1,665,329)	(575,028)
(3.18)/US SOFR/Dec-35 (Purchased)	Dec- 25/3.18	31,673,900	(1,599,532)	56,696
2.68/US SOFR/Dec-35 (Purchased)	Dec- 25/2.68	31,673,900	(1,599,532)	(534,339)
(3.1625)/US SOFR/Mar-37 (Written)	Mar- 27/3.1625	30,797,700	2,125,041	275,023
3.1625/US SOFR/Mar-37 (Written)	Mar- 27/3.1625	30,797,700	2,125,041	195,257
(1.0035)/US SOFR/Mar-34 (Written)	Mar- 24/1.0035	28,930,400	43,826	35,006
3.49/US SOFR/May-40 (Purchased)	May- 30/3.49	23,214,700	(1,729,495)	180,378
(3.49)/US SOFR/May-40 (Purchased)	May- 30/3.49	23,214,700	(1,729,495)	(178,521)
(3.101)/US SOFR/Jun-39 (Written)	Jun- 29/3.101	21,231,500	1,658,180	248,409
3.101/US SOFR/Jun-39 (Written)	Jun- 29/3.101	21,231,500	1,658,180	45,648
2.0035/US SOFR/Mar-34 (Purchased)	Mar- 24/2.0035	20,251,300	(157,277)	(103,889)
3.343/US SOFR/Dec-35 (Purchased)	Dec- 25/3.343	19,953,000	(1,293,952)	(97,171)

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(3.343)/US SOFR/Dec-35 (Purchased)	Dec- 25/3.343	19,953,000	(1,293,952)	(325,234)
(3.03)/US SOFR/Feb-33 (Written)	Feb- 28/3.03	19,485,700	740,457	28,644
3.03/US SOFR/Feb-33 (Written)	Feb- 28/3.03	19,485,700	740,457	(49,104)
(3.03)/US SOFR/Mar-36 (Purchased)	Mar- 26/3.03	13,654,800	(873,224)	(41,374)
3.03/US SOFR/Mar-36 (Purchased)	Mar- 26/3.03	13,654,800	(873,224)	(208,236)
(0.9876)/US SOFR/Mar-50 (Purchased)	Mar- 30/0.9876	12,942,000	(4,179,735)	(20,966)
0.9876/US SOFR/Mar-50 (Purchased)	Mar- 30/0.9876	12,942,000	(281,122)	(33,908)
(3.095)/US SOFR/Mar-36 (Written)	Mar- 26/3.095	12,807,700	847,870	189,042
3.095/US SOFR/Mar-36 (Written)	Mar- 26/3.095	12,807,700	847,870	95,802
(2.558)/US SOFR/Dec-57 (Purchased)	Dec- 27/2.558	12,352,300	(1,825,670)	74,855
2.558/US SOFR/Dec-57 (Purchased)	Dec- 27/2.558	12,352,300	(1,825,670)	(565,735)
(2.47)/US SOFR/Dec-57 (Purchased)	Dec- 27/2.47	9,034,500	(1,341,623)	124,676
2.47/US SOFR/Dec-57 (Purchased)	Dec- 27/2.47	9,034,500	(1,341,623)	(475,666)
(1.405)/US SOFR/Dec-58 (Purchased)	Dec- 28/1.405	2,526,100	(387,441)	336,502
1.405/US SOFR/Dec-58 (Purchased)	Dec- 28/1.405	2,526,100	(387,441)	(243,592)
Barclays Bank PLC				
1.945/US SOFR/Jun-51 (Purchased)	Jun- 31/1.945	12,539,500	(675,879)	(21,066)
(1.945)/US SOFR/Jun-51 (Purchased)	Jun- 31/1.945	12,539,500	(2,658,374)	(56,428)
(3.09)/US SOFR/Dec-42 (Purchased)	Dec- 32/3.09	4,715,100	(383,573)	9,619
3.09/US SOFR/Dec-42 (Purchased)	Dec- 32/3.09	4,715,100	(383,573)	(39,088)
Citibank, N.A.				
(1.99)/US SOFR/Feb-42 (Purchased)	Feb- 32/1.99	23,191,700	(1,826,346)	1,043,627
1.99/US SOFR/Feb-42 (Purchased)	Feb- 32/1.99	23,191,700	(1,826,346)	(819,827)
2.394/US SOFR/Sep-33 (Purchased)	Sep- 23/2.394	22,133,600	(267,817)	(249,003)
(1.826)/US SOFR/Jan-42 (Purchased)	Jan- 32/1.826	17,079,100	(1,261,292)	961,212
1.826/US SOFR/Jan-42 (Purchased)	Jan- 32/1.826	17,079,100	(1,261,292)	(591,449)
(1.34)/US SOFR/Jan-61 (Purchased)	Jan-41/1.34	14,080,100	(3,291,364)	2,816
1.34/US SOFR/Jan-61 (Purchased)	Jan-41/1.34	14,080,100	(1,175,688)	(73,357)
(3.20)/US SOFR/Jul-33 (Purchased)	Jul-23/3.20	10,393,400	(164,735)	141,142
3.58/US SOFR/Jul-33 (Written)	Jul-23/3.58	10,393,400	59,242	(21,410)
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3.39/US SOFR/Jul-33 (Written)	Jul-23/3.39	10,393,400	98,737	(75,560)
(2.00)/US SOFR/Mar-51 (Purchased)	Mar- 41/2.00	8,587,600	(999,597)	(6,612)
2.00/US SOFR/Mar-51 (Purchased)	Mar- 41/2.00	8,587,600	(563,347)	(24,045)
(2.14)/US SOFR/Jun-41 (Purchased)	Jun-31/2.14	6,879,800	(887,769)	3,715
2.14/US SOFR/Jun-41 (Purchased)	Jun-31/2.14	6,879,800	(266,936)	(26,900)
Deutsche Bank AG				
(2.98)/US SOFR/Mar-35 (Written)	Mar- 30/2.98	68,872,500	3,188,797	491,750
2.98/US SOFR/Mar-35 (Written)	Mar- 30/2.98	68,872,500	3,188,797	(61,985)
(3.19)/US SOFR/Mar-38 (Written)	Mar- 28/3.19	5,530,300	385,185	25,661
3.19/US SOFR/Mar-38 (Written)	Mar- 28/3.19	5,530,300	385,185	13,881
Goldman Sachs International				
(3.123)/US SOFR/Jul-33 (Purchased)	Jul- 23/3.123	46,244,100	(915,633)	709,384
3.123/US SOFR/Jul-33 (Purchased)	Jul- 23/3.123	46,244,100	(915,633)	(866,614)
(2.525)/US SOFR/Mar-47 (Purchased)	Mar- 27/2.525	4,497,500	(634,148)	(4,183)
2.525/US SOFR/Mar-47 (Purchased)	Mar- 27/2.525	4,497,500	(264,678)	(22,622)
JPMorgan Chase Bank N.A.				
(1.70)/US SOFR/Jan-29 (Written)	Jan-24/1.70	27,464,600	586,026	550,391
1.70/US SOFR/Jan-29 (Written)	Jan-24/1.70	27,464,600	586,026	(1,789,593)
(3.0175)/US SOFR/Dec-42 (Purchased)	Dec- 32/3.0175	24,704,500	(2,081,354)	52,126
3.0175/US SOFR/Dec-42 (Purchased)	Dec- 32/3.0175	24,704,500	(2,081,354)	(311,771)
(3.115)/US SOFR/Mar-43 (Written)	Mar- 33/3.115	18,773,300	1,584,467	170,649
3.115/US SOFR/Mar-43 (Written)	Mar- 33/3.115 Feb-	18,773,300	1,584,467	13,705
1.75/US SOFR/Feb-41 (Purchased)	31/1.75	18,355,000	(453,369)	(6,057)
(1.75)/US SOFR/Feb-41 (Purchased)	Feb- 31/1.75	18,355,000	(2,861,545)	(33,957)
(3.0925)/US SOFR/Mar-43 (Written)	Mar- 33/3.0925	13,402,000	1,125,768	127,587
3.0925/US SOFR/Mar-43 (Written)	Mar- 33/3.0925	13,402,000	1,125,768	(2,680)
(3.1525)/US SOFR/Mar-40 (Written)	Mar- 30/3.1525	5,166,700	409,461	46,707
3.1525/US SOFR/Mar-40 (Written)	Mar- 30/3.1525	5,166,700	409,461	11,470
(1.81)/US SOFR/Jan-37 (Written)	Jan-27/1.81	4,234,200	250,241	157,597
1.81/US SOFR/Jan-37 (Written)	Jan-27/1.81	4,234,200	250,241	(276,366)
Toronto-Dominion Bank				

2.118/US SOFR/Mar-41 (Purchased)	Mar- 31/2.118	2,820,300	(93,916)	(1,269)
(2.118)/US SOFR/Mar-41 (Purchased)	Mar- 31/2.118	2,820,300	(373,938)	(4,264)
Unrealized appreciation				7,987,206
Unrealized (depreciation)				(9,770,586)
Total				\$(1,783,380)

TBA SALE COMMITMENTS OUTSTANDING at 6/30/23 (proceeds receivable \$1,005,683,693) (Unaudited)

Agency	Principal amount	Settlement date	Value
Uniform Mortgage-Backed Securities, 6.00%, 7/1/53	\$34,400,000	7/13/23	\$34,703,683
Uniform Mortgage-Backed Securities, 5.50%, 7/1/53	142,000,000	7/13/23	141,312,152
Uniform Mortgage-Backed Securities, 5.00%, 8/1/53	22,000,000	8/14/23	21,561,720
Uniform Mortgage-Backed Securities, 5.00%, 7/1/53	247,000,000	7/13/23	241,992,470
Uniform Mortgage-Backed Securities, 4.50%, 7/1/53	120,000,000	7/13/23	115,368,720
Uniform Mortgage-Backed Securities, 4.00%, 7/1/53	72,000,000	7/13/23	67,564,656
Uniform Mortgage-Backed Securities, 3.50%, 7/1/53	67,000,000	7/13/23	61,051,137
Uniform Mortgage-Backed Securities, 3.00%, 7/1/53	84,000,000	7/13/23	73,696,896
Uniform Mortgage-Backed Securities, 2.50%, 7/1/53	165,000,000	7/13/23	139,901,850
Uniform Mortgage-Backed Securities, 2.00%, 7/1/53	128,000,000	7/13/23	104,375,040
Total			1,001,528,324

OTC INTEREST RATE SWAP CONTRACTS OUTSTANDING at 6/30/23 (Unaudited)

Swap counterparty/ notional amount	Value	Upfront premium received (paid)	Termi- nation date	Payments made by fund	Payments received by fund	Unrealized appreciation/ (depreciation)
Morgan Stanlov &	Co. Internation	nal DI C				

Morgan Stanley & Co. International PLC

\$50,000,000 \$1,429,500 \$1,162,857 9/21/27 3.30% — US SOFR — \$2,964,825

	otal \$3,36		J	Total	\$15,977,485	
Upfront premium (p	aid)			Unrealized (depreciation)		
Upfront premium rece	ved 3,364	4,743	I	Unrealized appreciation		
370,000,000 8,154	,800 2,20	1,886 9/21/2	4 3.40% — Annually	US SOFR — Annually	13,012,660	
			Annually	Annually		

CENTRALLY CLEARED INTEREST RATE SWAP CONTRACTS OUTSTANDING at 6/30/23 (Unaudited)

Notional amount	Value	Upfront premium received (paid)	Termi- nation date	Payments made by fund	Payments received by fund	Unrealized appreciation/ (depreciation)
\$6,576,000	\$115,475	\$(53)	1/6/28	3.5615% — Annually	US SOFR — Annually	\$153,583
3,461,000	120,547	(118)	1/25/53	3.007% — Annually	US SOFR — Annually	147,357
7,521,000	42,343	(99)	2/23/33	US SOFR — Annually	3.6405% — Annually	9,558
2,147,000	26,494	(28)	3/3/33	US SOFR — Annually	3.723% — Annually	18,195
7,298,000	197,265	(96)	3/15/33	3.234% — Annually	US SOFR — Annually	233,805
3,775,000	82,597	(50)	3/24/33	US SOFR — Annually	3.2975% — Annually	(99,631)
7,266,000	307,788	(96)	4/6/33	3.45% — Annually	US SOFR — Annually	341,167
6,831,000	157,045	(90)	4/20/33	US SOFR — Annually	3.283% — Annually	(180,472)
5,621,000	142,773	(74)	5/3/33	3.253% — Annually	US SOFR — Annually	159,209
6,065,000	177,341	(49)	5/17/28	US SOFR — Annually	3.261% — Annually	(191,091)
9,009,000	161,712	(103)	5/23/30	US SOFR — Annually	3.4095% — Annually	(177,988)
53,527,000	202,332 <i>(E)</i>	(81,863)	9/20/25	4.40% — Annually	US SOFR — Annually	120,469
199,005,000	1,723,383 <i>(E)</i>	2,775,414	9/20/28	4.00% — Annually	US SOFR — Annually	1,052,031
13,668,000	107,841 <i>(E)</i>	186,782	9/20/33	3.60% — Annually	US SOFR — Annually	78,942
3,155,000	27,701 <i>(E)</i>	(33,156)	9/20/53	US SOFR — Annually	3.20% — Annually	(5,456)
213,450,000	738,537	(65,537)	6/23/25	US SOFR — Annually	4.625% — Annually	(824,339)

192,994,000	1,370,257	102,327	6/23/28	3.753% — Annually	US SOFR — Annually	1,528,305
26,232,000	181,263	41,175	6/23/33	3.475% — Annually	US SOFR — Annually	231,633
38,696,000	102,157	(174,079)	6/23/53	US SOFR — Annually	3.17% — Annually	(292,422)
16,025,000	44,710	(60)	6/30/25	US SOFR — Annually	4.65% — Annually	(44,948)
12,466,000	12,591	(117)	7/5/28	3.9255% — Annually	US SOFR — Annually	(12,708)
14,148,000	3,678	(53)	7/5/25	US SOFR — Annually	4.7985% — Annually	3,625
5,899,000	3,834	(77)	7/5/33	US SOFR — Annually	3.5625% — Annually	3,757
		\$2,749,900				\$2,252,581

(E) Extended effective date.

Total

OTC CREDIT DEFAULT CONTRACTS OUTSTANDING — PROTECTION SOLD at 6/30/23 (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 Mark	ets, Inc.						
CMBX NA BB.11 Index	BB-/P	\$42,375	\$75,000	\$30,218	11/18/54	500 bp — Monthly	\$12,220
CMBX NA BB.13 Index	BB-/P	75,581	756,000	330,070	12/16/72	500 bp — Monthly	(253,859)
CMBX NA BB.13 Index	BB-/P	78,819	865,000	377,659	12/16/72	500 bp — Monthly	(298,120)
CMBX NA BB.13 Index	BB-/P	82,147	901,000	393,377	12/16/72	500 bp — Monthly	(310,479)
CMBX NA BB.13 Index	BB-/P	129,386	1,371,000	598,579	12/16/72	500 bp — Monthly	(468,050)
CMBX NA BB.14 Index	BB/P	169,285	1,544,000	669,633	12/16/72	500 bp — Monthly	(499,062)
CMBX NA BB.6 Index	B/P	617,410	1,038,435	417,243	5/11/63	500 bp — Monthly	201,032
CMBX NA BB.9 Index	B/P	36,851	181,000	75,477	9/17/58	500 bp — Monthly	(38,475)
CMBX NA BB.9 Index	B/P	287,137	1,406,000	586,302	9/17/58	500 bp — Monthly	(297,993)
CMBX NA BB.9 Index	B/P	1,102,022	1,964,000	818,988	9/17/58	500 bp — Monthly	284,671

CMBX NA BBB10 Index	BB+/P	89,090	718,000	218,057	11/17/59	300 bp — Monthly	(128,607)
CMBX NA BBB10 Index	BB+/P	96,874	888,000	269,686	11/17/59	300 bp — Monthly	(172,367)
CMBX NA BBB11 Index	BBB-/P	59,693	953,000	231,103	11/18/54	300 bp — Monthly	(170,933)
CMBX NA BBB13 Index	BBB-/P	57,739	314,000	96,838	12/16/72	300 bp — Monthly	(38,941)
CMBX NA BBB15 Index	BBB-/P	940	9,000	2,605	11/18/64	300 bp — Monthly	(1,660)
CMBX NA BBB15 Index	BBB-/P	224,895	842,000	243,675	11/18/64	300 bp — Monthly	(18,359)
CMBX NA BBB16 Index	BBB-/P	209,811	923,000	265,916	4/17/65	300 bp — Monthly	(55,643)
Credit Suisse Internati	onal						
CMBX NA BB.7 Index	B-/P	36,784	275,000	114,153	1/17/47	500 bp — Monthly	(77,139)
Goldman Sachs Intern	ational						
CMBX NA A.7 Index	BBB/P	(1,645)	1,045,853	83,041	1/17/47	200 bp — Monthly	(84,309)
CMBX NA BB.14 Index	BB/P	135,911	873,000	378,620	12/16/72	500 bp — Monthly	(241,982)
CMBX NA BB.6 Index	B/P	334,697	661,068	265,617	5/11/63	500 bp — Monthly	69,631
CMBX NA BB.7 Index	B-/P	59,391	175,000	72,643	1/17/47	500 bp — Monthly	(13,106)
CMBX NA BB.7 Index	B-/P	77,674	231,000	95,888	1/17/47	500 bp — Monthly	(18,022)
CMBX NA BB.7 Index	B-/P	131,040	416,000	172,682	1/17/47	500 bp — Monthly	(41,295)
CMBX NA BBB11 Index	BBB-/P	64	1,000	243	11/18/54	300 bp — Monthly	(178)
CMBX NA BBB13 Index	BBB-/P	13,523	79,000	24,364	12/16/72	300 bp — Monthly	(10,801)
CMBX NA BBB14 Index	BBB-/P	7,748	51,000	14,775	12/16/72	300 bp — Monthly	(7,001)
CMBX NA BBB15 Index	BBB-/P	26,714	430,000	124,442	11/18/64	300 bp — Monthly	(97,513)
CMBX NA BBB15 Index	BBB-/P	55,090	596,000	172,482	11/18/64	300 bp — Monthly	(117,095)
CMBX NA BBB15 Index	BBB-/P	53,068	596,000	172,482	11/18/64	300 bp — Monthly	(119,117)
CMBX NA BBB16 Index	BBB-/P	150,416	625,000	180,063	4/17/65	300 bp — Monthly	(29,334)
CMBX NA BBB16 Index	BBB-/P	209,040	804,000	231,632	4/17/65	300 bp — Monthly	(22,190)
JPMorgan Securities L	.LC						
CMBX NA BB.10	B/P	28,886	360,000	164,448	5/11/63	500 bp — Monthly	(135,262)

Index							
CMBX NA BB.7 Index	B-/P	16,440	48,000	19,925	1/17/47	500 bp — Monthly	(3,445)
CMBX NA BB.7 Index	B-/P	158,648	324,000	134,492	1/17/47	500 bp — Monthly	24,426
CMBX NA BBB8 Index	BB-/P	103,543	664,000	132,866	10/17/57	300 bp — Monthly	(28,992)
Merrill Lynch Internation	onal						
CMBX NA A.13 Index	A-/P	132,031	1,013,000	123,485	12/16/72	200 bp — Monthly	8,884
CMBX NA A.13 Index	A-/P	134,846	1,013,000	123,485	12/16/72	200 bp — Monthly	11,699
CMBX NA BB.6 Index	B/P	186,736	1,125,365	452,172	5/11/63	500 bp — Monthly	(264,497)
CMBX NA BB.7 Index	B-/P	20,331	168,000	69,737	1/17/47	500 bp — Monthly	(49,266)
Morgan Stanley & Co.	Internati	onal PLC					
CMBX NA A.14 Index	A-/P	(667)	53,000	7,097	12/16/72	200 bp — Monthly	(7,746)
CMBX NA A.14 Index	A-/P	(1,323)	225,000	30,128	12/16/72	200 bp — Monthly	(31,376)
CMBX NA A.14 Index	A-/P	(3,557)	267,000	35,751	12/16/72	200 bp — Monthly	(39,220)
CMBX NA A.15 Index	A-/P	1,311	64,000	9,197	11/18/64	200 bp — Monthly	(7,865)
CMBX NA A.6 Index	A/P	(2,510)	124,269	17,746	5/11/63	200 bp — Monthly	(20,214)
CMBX NA BB.13 Index	BB-/P	575	6,000	2,620	12/16/72	500 bp — Monthly	(2,039)
CMBX NA BB.13 Index	BB-/P	14,044	151,000	65,927	12/16/72	500 bp — Monthly	(51,756)
CMBX NA BB.13 Index	BB-/P	14,439	153,000	66,800	12/16/72	500 bp — Monthly	(52,233)
CMBX NA BB.13 Index	BB-/P	26,993	294,000	128,360	12/16/72	500 bp — Monthly	(101,122)
CMBX NA BB.13 Index	BB-/P	55,818	301,000	131,417	12/16/72	500 bp — Monthly	(75,348)
CMBX NA BB.13 Index	BB-/P	33,293	363,000	158,486	12/16/72	500 bp — Monthly	(124,890)
CMBX NA BB.13 Index	BB-/P	61,324	673,000	293,832	12/16/72	500 bp — Monthly	(231,947)
CMBX NA BB.13 Index	BB-/P	80,638	873,000	381,152	12/16/72	500 bp — Monthly	(299,787)
CMBX NA BB.6 Index	B/P	8,315	30,998	12,455	5/11/63	500 bp — Monthly	(4,115)
CMBX NA BB.6 Index	B/P	24,114	77,495	31,138	5/11/63	500 bp — Monthly	(6,959)
CMBX NA BB.6 Index	B/P	67,200	107,819	43,322	5/11/63	500 bp — Monthly	23,968

otal	\$6,601,572				Total	\$(4,934,851)
Upfront premium (paid)	(9,702)			Unrealized	d (depreciation)	(5,571,382)
Upfront premium received	6,611,274			Unrealiz	ed appreciation	636,531
CMBX NA BBB9 BB+/P Index	47,282	487,000	116,247	9/17/58	300 bp — Monthly	(68,721)
CMBX NA BBB7 BB-/P Index	9,392	138,000	27,586	1/17/47	300 bp — Monthly	(18,126)
CMBX NA BBB16 BBB-/P Index	153,210	674,000	194,179	4/17/65	300 bp — Monthly	(40,632)
CMBX NA BBB15 BBB-/P Index	152,377	897,000	259,592	11/18/64	300 bp — Monthly	(106,767)
CMBX NA BBB15 BBB-/P Index	46,631	508,000	147,015	11/18/64	300 bp — Monthly	(100,130)
CMBX NA BBB14 BBB-/P Index	25,668	156,000	45,193	12/16/72	300 bp — Monthly	(19,447)
CMBX NA BBB14 BBB-/P Index	1,128	7,000	2,028	12/16/72	300 bp — Monthly	(897)
CMBX NA BBB13 BBB-/P Index	206,939	709,000	218,656	12/16/72	300 bp — Monthly	(11,362)
CMBX NA BBB13 BBB-/P Index	1,016	5,000	1,542	12/16/72	300 bp — Monthly	(524)
CMBX NA BBB13 BBB-/P Index	223	3,000	925	12/16/72	300 bp — Monthly	(701)
CMBX NA BB.7 B-/P Index	146,668	437,000	181,399	1/17/47	500 bp — Monthly	(34,366)

^{*} Payments related to the referenced debt are made upon a credit default event.

OTC CREDIT DEFAULT CONTRACTS OUTSTANDING — PROTECTION PURCHASED at 6/30/23 (Unaudited)

Swap counterparty/referenced debt*	Upfront premium received (paid)**	Notional amount	Value	Termi- nation date	Payments (paid) by fund	Unrealized appreciation/ (depreciation)
Citigroup Global Markets, Inc. CMBX NA A.6 Index	\$(20,929)	\$95,767	\$13,676	5/11/63	(200 bp) — Monthly	\$(7,285)

^{**} Upfront premium is based on the difference between the original spread on issue and the market spread on day of execution.

^{***} 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 June 30, 2023. Securities rated by Fitch are indicated by "/F." Securities rated by Putnam are indicated by "/P." The Putnam rating categories are comparable to the Standard & Poor's classifications.

CMBX NA A.6 Index	(2,545)	11,781	1,682	5/11/63	(200 bp) —	(867)
CMBX NA A.6 Index	(1,459)	6,841	977	5/11/63	Monthly (200 bp) —	(484)
CMBX NA A.6 Index	(821)	3,800	543	5/11/63	Monthly (200 bp) —	(280)
CMBX NA A.6 Index	(821)	3,800	543	5/11/63	Monthly (200 bp) —	(280)
CMBX NA A.6 Index	(483)	2,280	326	5/11/63	Monthly (200 bp) — Monthly	(158)
CMBX NA BB.10 Index	(15,241)	139,000	63,495	11/17/59	(500 bp) — Monthly	48,138
CMBX NA BB.10 Index	(11,793)	113,000	51,618	11/17/59	(500 bp) — Monthly	39,731
CMBX NA BB.11 Index	(4,242)	45,000	18,131	11/18/54	(500 bp) — Monthly	13,851
CMBX NA BB.11 Index	(3,887)	30,000	12,087	11/18/54	(500 bp) — Monthly	8,175
CMBX NA BB.6 Index	(11,333)	53,236	21,390	5/11/63	(500 bp) — Monthly	10,013
CMBX NA BB.7 Index	(105,844)	2,074,000	860,917	1/17/47	(500 bp) — Monthly	753,345
CMBX NA BB.8 Index	(155,393)	435,831	201,397	10/17/57	(500 bp) — Monthly	45,642
CMBX NA BBB10 Index	(486,410)	2,829,000	859,167	11/17/59	(300 bp) — Monthly	371,343
CMBX NA BBB10 Index	(326,142)	1,405,000	426,699	11/17/59	(300 bp) — Monthly	99,854
CMBX NA BBB10 Index	(234,757)	984,000	298,841	11/17/59	(300 bp) — Monthly	63,592
CMBX NA BBB10 Index	(143,198)	656,000	199,227	11/17/59	(300 bp) — Monthly	55,701
CMBX NA BBB10 Index	(136,239)	626,000	190,116	11/17/59	(300 bp) — Monthly	53,564
CMBX NA BBB10 Index	(62,719)	492,000	149,420	11/17/59	(300 bp) — Monthly	86,456
CMBX NA BBB10 Index	(115,406)	469,000	142,435	11/17/59	(300 bp) — Monthly	26,795
CMBX NA BBB10 Index	(97,719)	328,000	99,614	11/17/59	(300 bp) — Monthly	1,731
CMBX NA BBB10 Index	(12,748)	100,000	30,370	11/17/59	(300 bp) — Monthly	17,572
CMBX NA BBB10 Index	(2,569)	21,000	6,378	11/17/59	(300 bp) — Monthly	3,798
CMBX NA BBB11 Index	(159,306)	497,000	120,523	11/18/54	(300 bp) — Monthly	(39,032)
CMBX NA BBB11 Index	(48,685)	149,000	36,133	11/18/54	(300 bp) — Monthly	(12,627)
CMBX NA BBB11 Index	(21,489)	146,000	35,405	11/18/54	(300 bp) — Monthly	13,843
CMBX NA BBB12 Index	(540,439)	1,618,000	516,789	8/17/61	(300 bp) — Monthly	(24,459)
CMBX NA BBB12 Index	(529,327)	1,502,000	479,739	8/17/61	(300 bp) — Monthly	(50,339)
CMBX NA BBB12 Index	(206,461)	915,000	292,251	8/17/61	(300 bp) — Monthly	85,332

CMBX NA BBB12 Index	(53,286)	888,000 283,627	8/17/61	(300 bp) — Monthly	229,897
CMBX NA BBB12 Index	(74,917)	441,000 140,855	8/17/61	(300 bp) — Monthly	65,718
CMBX NA BBB8 Index	(199,245)	1,436,000 287,344	10/17/57	(300 bp) — Monthly	87,381
CMBX NA BBB8 Index	(99,623)	718,000 143,672	10/17/57	(300 bp) — Monthly	43,690
CMBX NA BBB8 Index	(108,544)	684,000 136,868	10/17/57	(300 bp) — Monthly	27,982
CMBX NA BBB8 Index	(105,625)	676,000 135,268	10/17/57	(300 bp) — Monthly	29,305
CMBX NA BBB8 Index	(52,318)	393,000 78,639	10/17/57	(300 bp) — Monthly	26,125
CMBX NA BBB9 Index	(251,259)	1,062,000 253,499	9/17/58	(300 bp) — Monthly	1,709
Credit Suisse International					
CMBX NA BB.10 Index	(46,565)	349,000 159,423	11/17/59	(500 bp) — Monthly	112,567
CMBX NA BB.10 Index	(41,383)	348,000 158,966	11/17/59	(500 bp) — Monthly	117,293
CMBX NA BB.10 Index	(22,747)	183,000 83,594	11/17/59	(500 bp) — Monthly	60,695
Goldman Sachs International					
CMBX NA BB.8 Index	(47,893)	125,627 58,052	10/17/57	(500 bp) — Monthly	10,055
CMBX NA BB.9 Index	(301,266)	1,891,000 788,547	9/17/58	(500 bp) — Monthly	485,705
CMBX NA BB.9 Index	(208,068)	1,317,000 549,189	9/17/58	(500 bp) — Monthly	340,023
CMBX NA BB.9 Index	(43,422)	271,000 113,007	9/17/58	(500 bp) — Monthly	69,360
CMBX NA BB.9 Index	(22,287)	140,000 58,380	9/17/58	(500 bp) — Monthly	35,976
CMBX NA BBB12 Index	(294,496)	1,649,000 526,691	8/17/61	(300 bp) — Monthly	231,370
CMBX NA BBB12 Index	(26,169)	146,000 46,632	8/17/61	(300 bp) — Monthly	20,391
JPMorgan Securities LLC					
CMBX NA BB.11 Index	(111,197)	145,556 58,484	5/11/63	(500 bp) — Monthly	(52,833)
Merrill Lynch International					
CMBX NA BB.10 Index	(9,047)	159,000 72,631	11/17/59	(500 bp) — Monthly	63,452
Mannan Official Co. 1 ()	I DI O				
Morgan Stanley & Co. Internation		647,000,005,550	11/17/50	(E00 ba)	00.404
CMBX NA BB.10 Index	(196,526)	647,000 295,550	11/17/59	(500 bp) — Monthly	98,484
CMBX NA BB.8 Index	(397,971)	1,109,387 512,648	10/17/57	(500 bp) — Monthly	113,752
CMBX NA BB.8 Index	(234,901)	643,599 297,407	10/17/57	(500 bp) — Monthly	61,970
CMBX NA BB.8 Index	(111,807)	306,338 141,559	10/17/57	(500 bp) — Monthly	29,496

Total	\$(7,445,351)				Total	\$4,573,397
Upfront premium (paid)	(7,445,351)				Unrealized (depreciation)	(188,644)
Upfront premium received	_			Unrealiz	ed appreciation	4,762,041
CMBX NA BBB8 Index	(2,054)	15,000	3,002	10/17/57	(300 bp) — Monthly	941
CMBX NA BBB8 Index	(6,487)	51,000	10,205	10/17/57	(300 bp) — Monthly	3,693
CMBX NA BBB8 Index	(93,274)	602,000	120,460	10/17/57	(300 bp) — Monthly	26,885
CMBX NA BBB8 Index	(84,840)	606,000	121,261	10/17/57	(300 bp) — Monthly	36,118
CMBX NA BBB12 Index	(11,747)	38,000	12,137	8/17/61	(300 bp) — Monthly	371
CMBX NA BBB12 Index	(50,930)	246,000	78,572	8/17/61	(300 bp) — Monthly	27,519
CMBX NA BBB12 Index	(54,047)	259,000	82,725	8/17/61	(300 bp) — Monthly	28,549
CMBX NA BBB12 Index	(68,165)	300,000	95,820	8/17/61	(300 bp) — Monthly	27,505
CMBX NA BBB11 Index	(25,498)	162,000	39,285	11/18/54	(300 bp) — Monthly	13,706
CMBX NA BBB10 Index	(13,217)	126,000	38,266	11/17/59	(300 bp) — Monthly	24,986
CMBX NA BBB10 Index	(36,186)	153,000	46,466	11/17/59	(300 bp) — Monthly	10,203
CMBX NA BBB10 Index	(23,716)	187,000	56,792	11/17/59	(300 bp) — Monthly	32,982
CMBX NA BBB10 Index	(43,032)	199,000	60,436	11/17/59	(300 bp) — Monthly	17,304
CMBX NA BBB10 Index	(49,002)	226,000	68,636	11/17/59	(300 bp) — Monthly	19,521
CMBX NA BBB10 Index	(151,882)	623,000	189,205	11/17/59	(300 bp) — Monthly	37,011
CMBX NA BBB10 Index	(196,183)	1,590,000	482,883	11/17/59	(300 bp) — Monthly	283,191
CMBX NA BB.9 Index	(3,804)	28,000	11,676	9/17/58	(500 bp) — Monthly	7,849
CMBX NA BB.8 Index	(12,320)	32,856	15,183	10/17/57	(500 bp) — Monthly	2,835

^{*} Payments related to the referenced debt are made upon a credit default event.

^{**} 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

- bp Basis Points
- CME Chicago Mercantile Exchange
- 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
 - OTC Over-the-counter
 - 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 October 1, 2022 through June 30, 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 \$441,755,166.
- (AFF) Affiliated company. For investments in Putnam Government Money Market Fund and 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 9/30/22	Purchase cost	Sale proceeds	Investment income	Shares outstanding and fair value as of 6/30/23
Short-term investments					
Putnam Government Money Market Fund*	\$10,000	\$—	\$10,000	\$123	\$—
Putnam Short Term Investment Fund**	8,479,918	290,080,088	260,264,506	968,872	38,295,500

Total Short-term investments

\$8,489,918 \$290,080,088 \$260,274,506 \$968,995 \$38,295,500

^{*} Management fees incurred through investment in Putnam Government Money Market Fund have been waived by the fund. There were no realized or unrealized gains or losses during the period.

^{**} 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

- (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 \$1,082,791.
- (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 \$3,875,539.
 - (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.

Debt obligations are considered secured unless otherwise indicated.

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.

Investments, including mortgage backed securities and short-term investments with remaining maturities of 60 days or less, are valued on the basis of valuations provided by an independent pricing service approved by the Trustees or dealers selected by Putnam Management. Such service providers use information with respect to transactions in bonds, quotations from bond dealers, market transactions in comparable securities and various relationships between securities in determining value. These securities will generally be categorized as Level 2.

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.

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 to hedge 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, to hedge 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.

At close of the reporting period, the fund has deposited cash valued at \$9,126,289 in a segregated account to cover margin requirements on open centrally cleared interest rate swap contracts.

Credit default contracts: The fund entered into OTC and/or centrally cleared credit default contracts to hedge credit risk, to hedge market risk and to gain 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 \$3,452,649 on open derivative contracts subject to the Master Agreements. Collateral posted by the fund at period end for these agreements totaled \$3,875,539 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	\$—	\$3,983,854	\$ —
Mortgage-backed securities	_	365,713,824	_
U.S. government and agency mortgage obligations	_	1,611,089,629	_
Short-term investments	15,664,000	51,725,238	
Totals by level	\$15,664,000	\$2,032,512,545	

Valuation inputs

		-	
Other financial instruments:	Level 1	Level 2	Level 3
Futures contracts	\$1,807,773	\$ —	\$—
Forward premium swap option contracts	_	(1,783,380)	_
TBA sale commitments	_	(1,001,528,324)	_
Interest rate swap contracts	_	12,115,423	_
Credit default contracts	_	482,325	_
Totals by level	\$1,807,773	\$(990,713,956)	\$—

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 swap option contracts (contract amount)	\$1,344,800,000		
Written swap option contracts (contract amount)	\$778,800,000		
Futures contracts (number of contracts)	\$800		
OTC interest rate swap contracts (notional)	\$420,000,000		
Centrally cleared interest rate swap contracts			
(notional)	\$2,461,800,000		
OTC credit default contracts (notional)	\$83,500,000		

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