

Table ZPR-1
ZPR Analysis 2023-7-31
Positions and Basic Data

Ticker	Current Yield Bid	Yield-to-Worst (at Bid)	DBRS Rating	Average Trading Value	Holdings bid price	Holdings weight	Holdings units	Market Value	Modified Duration YTW	FixedReset Spread	Floating Rate Start Date
FixedReset – Discount											
BIK.PR.A	6.43%	8.70%	NOT RATED	25,364	22.75	0.22%	141,404	3,216,941	10.75	396	2024-03-31
BIP.PR.B	6.49%	9.43%	NOT RATED	31,760	21.20	0.35%	244,080	5,174,496	10.57	453	2025-12-31
BIP.PR.E	7.72%	8.11%	NOT RATED	86,950	21.50	0.55%	382,080	8,214,720	11.35	300	2028-03-31
BIP.PR.F	5.97%	8.12%	NOT RATED	102,461	21.35	0.69%	477,127	10,186,661	11.33	292	2023-12-31
BMO.PR.E	5.57%	7.65%	Pfd-2	156,386	21.75	1.35%	917,420	19,953,885	11.82	268	2023-11-25
BMO.PR.F	5.28%	7.64%	Pfd-2	68,186	24.15	1.32%	812,343	19,618,083	11.92	351	2024-05-25
BMO.PR.S	5.30%	8.55%	Pfd-2	123,551	18.16	0.78%	634,888	11,529,566	11.04	233	2024-05-25
BMO.PR.T	5.25%	8.78%	Pfd-2	83,189	17.25	0.62%	531,001	9,159,767	10.91	224	2024-08-25
BMO.PR.W	5.66%	8.83%	Pfd-2	69,900	17.00	0.46%	401,368	6,823,256	10.91	222	2024-11-25
BMO.PR.Y	4.22%	8.51%	Pfd-2	34,330	18.11	0.51%	414,360	7,504,060	11.60	271	2025-08-25
BN.PF.A	6.12%	8.46%	Pfd-2(low)	95,216	20.67	0.71%	508,511	10,510,922	10.88	290	2023-09-30
BN.PF.B	6.46%	9.57%	Pfd-2(low)	79,876	17.17	0.40%	341,588	5,865,066	10.05	263	2024-03-31
BN.PF.E	5.95%	10.25%	Pfd-2(low)	27,389	15.00	0.40%	398,507	5,977,605	9.89	255	2025-03-31
BN.PF.F	6.17%	10.25%	Pfd-2(low)	70,555	16.32	0.42%	384,382	6,273,114	9.63	286	2024-09-30
BN.PF.G	5.33%	10.39%	Pfd-2(low)	63,334	15.25	0.63%	608,955	9,286,564	9.89	284	2025-06-30
BN.PF.H	6.16%	9.36%	Pfd-2(low)	111,496	20.30	0.71%	516,511	10,485,173	10.69	417	2025-12-31
BN.PF.I	6.98%	9.34%	Pfd-2(low)	87,603	19.28	0.70%	534,416	10,303,540	10.75	385	2027-03-31
BN.PF.J	7.88%	8.74%	Pfd-2(low)	122,165	19.75	0.51%	380,298	7,510,886	10.88	310	2027-12-31
BN.PR.R	5.81%	10.10%	Pfd-2(low)	59,815	13.93	0.57%	608,303	8,473,661	10.35	230	2026-06-30
BN.PR.T	6.80%	9.91%	Pfd-2(low)	45,646	14.15	0.31%	327,408	4,632,823	10.48	231	2027-03-31
BN.PR.X	7.65%	9.17%	Pfd-2(low)	33,592	15.05	0.29%	286,750	4,315,588	10.65	180	2027-06-30
BN.PR.Z	8.10%	8.99%	Pfd-2(low)	80,837	18.80	0.39%	309,322	5,815,254	10.66	296	2027-12-31
BNS.PR.I	6.00%	7.96%	Pfd-2	66,800	20.20	0.57%	414,833	8,379,627	11.50	243	2024-01-27
CM.PR.O	5.19%	8.56%	Pfd-2	73,842	17.90	0.76%	626,028	11,205,901	11.13	232	2024-07-31
CM.PR.P	5.76%	8.80%	Pfd-2	49,754	16.97	0.91%	792,778	13,453,443	11.00	224	2025-01-31
CM.PR.Q	4.32%	8.56%	Pfd-2	53,727	18.17	0.85%	690,197	12,540,879	11.58	279	2025-07-31
CM.PR.S	7.15%	7.67%	Pfd-2	213,207	20.56	1.42%	1,023,000	21,032,880	11.97	245	2028-01-31
CM.PR.T	5.66%	7.84%	Pfd-2	85,887	22.95	1.01%	649,031	14,895,261	11.68	331	2024-04-30
CM.PR.Y	5.36%	7.76%	Pfd-2	100,667	24.00	1.12%	688,355	16,520,520	11.86	362	2024-07-31
CU.PR.C	7.10%	8.44%	Pfd-2	84,524	18.30	0.93%	751,647	13,755,140	11.22	240	2027-06-01
CU.PR.I	4.97%	8.00%	Pfd-2	71,011	22.65	1.14%	746,992	16,919,369	11.86	369	2025-12-01

ZPR Analysis: July 31, 2023 (con't)

Ticker	Current Yield Bid	Yield-to-Worst (at Bid)	DBRS Rating	Average Trading Value	Holdings bid price	Holdings weight	Holdings units	Market Value	Modified Duration YTW	FixedReset Spread	Floating Rate Start Date
FixedReset – Discount (con't)											
FTS.PR.G	5.70%	8.10%	Pfd-2(low)	119,805	19.28	0.57%	436,356	8,412,944	11.19	213	2023-09-01
FTS.PR.H	3.49%	9.47%	Pfd-2(low)	26,069	13.15	0.47%	532,553	7,003,072	10.73	145	2025-06-01
FTS.PR.K	5.89%	9.11%	Pfd-2(low)	49,592	16.69	0.36%	322,388	5,380,656	10.33	205	2024-03-01
FTS.PR.M	5.76%	9.32%	Pfd-2(low)	107,690	16.97	0.89%	775,074	13,153,006	10.37	248	2024-12-01
IFC.PR.C	4.80%	8.31%	Pfd-2	58,699	18.00	1.15%	946,580	17,038,440	11.95	266	2026-09-30
NA.PR.E	7.08%	7.73%	Pfd-2	109,641	20.55	0.85%	613,695	12,611,432	12.00	258	2028-05-15
NA.PR.G	5.67%	7.76%	Pfd-2	66,212	21.81	0.75%	510,189	11,127,222	11.68	277	2023-11-15
NA.PR.S	5.61%	8.78%	Pfd-2	123,739	17.95	0.57%	468,478	8,409,180	10.80	240	2024-05-15
NA.PR.W	5.68%	8.87%	Pfd-2	88,635	16.90	0.70%	617,369	10,433,536	10.92	225	2025-02-15
PWF.PR.T	5.64%	8.49%	Pfd-2(high)	30,980	18.70	0.33%	264,042	4,937,585	10.97	237	2024-01-31
RY.PR.H	5.14%	8.56%	Pfd-2(high)	146,977	17.76	0.73%	611,287	10,856,457	11.11	226	2024-08-24
RY.PR.J	4.29%	8.43%	Pfd-2(high)	214,052	18.65	1.64%	1,300,845	24,260,759	11.57	274	2025-05-24
RY.PR.M	4.19%	8.40%	Pfd-2(high)	52,545	17.91	0.82%	678,992	12,160,747	11.79	262	2025-11-24
RY.PR.S	6.00%	7.92%	Pfd-2(high)	142,542	20.01	0.81%	595,778	11,921,518	11.59	238	2024-02-24
RY.PR.Z	5.19%	8.54%	Pfd-2(high)	198,368	17.83	1.05%	875,066	15,602,427	11.06	221	2024-05-24
TD.PF.A	5.15%	8.50%	Pfd-2(high)	214,148	17.78	0.95%	791,975	14,081,316	11.19	224	2024-10-31
TD.PF.B	5.11%	8.51%	Pfd-2(high)	209,192	18.00	1.06%	875,308	15,755,544	11.11	227	2024-07-31
TD.PF.C	5.51%	8.56%	Pfd-2(high)	159,083	17.60	1.43%	1,202,279	21,160,110	11.17	225	2025-01-31
TD.PF.D	4.33%	8.50%	Pfd-2(high)	64,058	18.50	1.05%	837,731	15,498,024	11.53	279	2025-07-31
TD.PF.E	4.37%	8.49%	Pfd-2(high)	83,335	18.55	0.52%	414,172	7,682,891	11.63	287	2025-10-31
TD.PF.I	6.56%	7.08%	Pfd-2(high)	212,698	24.02	1.34%	825,317	19,824,114	12.56	301	2027-10-31
TD.PF.J	6.86%	7.67%	Pfd-2(high)	139,440	20.95	1.16%	819,888	17,176,654	12.09	270	2028-04-30
TD.PF.K	5.37%	7.46%	Pfd-2(high)	284,796	22.12	1.18%	790,743	17,491,235	11.98	259	2023-10-31
TD.PF.L	5.59%	7.73%	Pfd-2(high)	96,214	23.26	1.21%	768,328	17,871,309	11.75	327	2024-04-30
TD.PF.M	5.37%	7.82%	Pfd-2(high)	101,597	23.75	1.39%	866,655	20,583,056	11.73	356	2024-07-31
FixedReset – Premium											
NA.PR.C	7.01%	6.94%	Pfd-2	251,720	25.06	1.50%	884,626	22,168,728	3.69	343	2027-11-15

ZPR Analysis: July 31, 2023 (con't)

Ticker	Current Yield Bid	Yield-to-Worst (at Bid)	DBRS Rating	Average Trading Value	Holdings bid price	Holdings weight	Holdings units	Market Value	Modified Duration YTW	FixedReset Spread	Floating Rate Start Date
FixedReset – Insurance											
GWO.PR.N	3.52%	9.25%	Pfd-2(high)	30,640	12.41	0.43%	516,813	6,413,649	11.32	130	2025-12-31
IFC.PR.A	7.04%	8.00%	Pfd-2	62,052	17.20	0.45%	388,739	6,686,311	11.70	172	2027-12-31
IFC.PR.G	7.40%	7.95%	Pfd-2	174,825	20.30	0.68%	498,612	10,121,824	11.59	255	2028-06-30
MFC.PR.I	7.11%	7.97%	Pfd-2(high)	119,477	21.03	0.45%	314,016	6,603,756	11.63	286	2027-09-19
MFC.PR.J	7.41%	7.90%	Pfd-2(high)	180,521	20.78	0.50%	354,807	7,372,889	11.58	261	2028-03-19
MFC.PR.K	5.59%	7.99%	Pfd-2(high)	58,875	19.75	0.74%	557,291	11,006,497	11.35	222	2023-09-19
MFC.PR.L	5.53%	8.91%	Pfd-2(high)	39,697	17.12	0.28%	244,823	4,191,370	10.64	216	2024-06-19
MFC.PR.M	5.64%	9.16%	Pfd-2(high)	51,478	16.85	0.49%	429,383	7,235,104	10.55	236	2024-12-19
MFC.PR.N	5.56%	9.15%	Pfd-2(high)	32,197	16.53	0.59%	530,783	8,773,843	10.64	230	2025-03-19
MFC.PR.Q	7.34%	7.97%	Pfd-2(high)	192,297	20.23	0.61%	445,405	9,010,543	11.58	255	2028-06-19
Scraps – FixedFloater											
BCE.PR.A	7.33%	9.50%	Pfd-3	178,991	16.85	0.55%	480,625	8,098,531	11.24	No Sol.	2027-09-01
BCE.PR.C	7.26%	9.16%	Pfd-3	64,729	17.50	0.54%	459,565	8,042,388	11.51	No Sol.	2028-03-01
BCE.PR.F	6.00%	10.42%	Pfd-3	58,371	16.10	0.24%	224,362	3,612,228	10.20	No Sol.	2025-02-01
BCE.PR.G	5.62%	10.37%	Pfd-3	25,543	15.00	0.77%	759,222	11,388,330	10.89	No Sol.	2026-05-03
BCE.PR.I	5.73%	10.51%	Pfd-3	20,251	14.80	0.48%	475,856	7,042,669	10.79	No Sol.	2026-08-01
BCE.PR.R	5.03%	10.53%	Pfd-3	38,183	14.99	0.41%	409,825	6,143,277	10.69	No Sol.	2025-12-01
BCE.PR.T	7.00%	7.44%	Pfd-3	112,350	17.83	0.72%	599,057	10,681,186	12.94	No Sol.	2026-11-01
Scraps – FixedReset – Discount											
ALA.PR.A	5.06%	10.05%	NOT RATED	42,419	15.13	0.16%	159,127	2,407,592	10.25	266	2025-09-30
ALA.PR.E	6.47%	8.62%	NOT RATED	54,509	20.85	0.59%	419,051	8,737,213	10.81	317	2023-12-31
ALA.PR.G	6.04%	9.83%	NOT RATED	51,248	17.55	0.25%	207,634	3,643,977	9.95	306	2024-09-30
AQN.PR.A	6.68%	9.00%	Pfd-3	35,038	19.33	0.30%	232,361	4,491,538	10.46	294	2023-12-31
AQN.PR.D	6.66%	9.47%	Pfd-3	28,065	19.10	0.12%	89,889	1,716,880	10.11	328	2024-03-31
AX.PR.I	9.37%	10.25%	Pfd-3(low)	75,786	18.65	0.31%	247,393	4,613,879	9.65	393	2028-04-30
BCE.PR.K	5.72%	9.03%	Pfd-3	146,268	14.45	1.58%	1,614,459	23,328,933	11.29	188	2026-12-31
BCE.PR.M	4.99%	9.21%	Pfd-3	36,476	14.73	0.88%	887,326	13,070,312	11.13	209	2026-03-31
BCE.PR.Q	5.68%	7.93%	Pfd-3	80,292	21.19	0.65%	453,785	9,615,704	11.43	264	2023-09-30
BEP.PR.G	6.47%	9.34%	Pfd-3 (high)	54,760	21.25	0.42%	292,600	6,217,750	10.65	447	2026-01-31
BEP.PR.M	7.65%	8.51%	Pfd-3 (high)	67,904	19.76	0.61%	458,056	9,051,187	11.20	300	2028-05-01
BEP.PR.O	6.36%	8.71%	Pfd-3 (high)	62,015	22.60	0.34%	225,051	5,086,153	10.76	394	2024-04-30

ZPR Analysis: July 31, 2023 (con't)

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Scraps – FixedReset – Discount (con't)											
BIP.PR.A	5.86%	10.42%	NOT RATED	24,778	16.96	0.15%	129,458	2,195,608	9.79	356	2025-06-30
BPO.PR.A	10.17%	14.80%	Pfd-3(low)	101,805	11.57	0.35%	444,353	5,141,164	7.10	315	2024-12-31
BPO.PR.C	9.59%	13.24%	Pfd-3(low)	75,285	15.96	0.37%	342,748	5,470,258	8.05	518	2026-06-30
BPO.PR.E	11.12%	14.42%	Pfd-3(low)	92,077	12.36	0.30%	355,561	4,394,734	7.56	396	2027-03-31
BPO.PR.G	11.33%	12.90%	Pfd-3(low)	72,620	14.45	0.36%	367,703	5,313,308	7.93	374	2027-06-30
BPO.PR.I	11.52%	12.70%	Pfd-3(low)	80,531	13.80	0.32%	347,868	4,800,578	7.99	323	2027-12-31
BPO.PR.N	9.87%	15.29%	Pfd-3(low)	62,871	10.15	0.56%	819,210	8,314,982	7.33	307	2026-06-30
BPO.PR.P	10.78%	14.58%	Pfd-3(low)	84,331	10.52	0.41%	579,327	6,094,520	7.60	300	2027-03-31
BPO.PR.R	9.68%	14.72%	Pfd-3(low)	63,537	11.10	0.27%	358,555	3,979,961	7.61	348	2026-09-30
BPO.PR.T	9.28%	12.42%	Pfd-3(low)	113,978	14.50	0.47%	479,377	6,950,967	7.98	316	2023-12-31
BRF.PR.A	5.35%	10.48%	Pfd-3 (high)	17,274	14.66	0.34%	339,294	4,974,050	9.79	262	2025-04-30
BRF.PR.C	6.40%	10.00%	Pfd-3 (high)	43,947	17.00	0.38%	327,583	5,568,911	9.79	294	2024-07-31
CPX.PR.C	6.45%	8.58%	Pfd-3(low)	46,692	21.12	0.44%	307,827	6,501,306	10.85	323	2023-12-31
CPX.PR.E	8.07%	8.60%	Pfd-3(low)	79,203	20.55	0.47%	339,194	6,970,437	10.90	315	2028-06-30
CPX.PR.K	6.07%	8.54%	Pfd-3(low)	50,989	23.67	0.27%	169,197	4,004,893	10.92	415	2024-06-30
CVE.PR.A	5.25%	10.23%	Pfd-3 (high)	65,925	12.26	0.88%	1,057,408	12,963,822	10.39	173	2026-03-31
CVE.PR.C	6.28%	9.25%	Pfd-3 (high)	55,263	18.66	0.51%	401,193	7,486,261	10.50	313	2024-12-31
CVE.PR.E	5.83%	9.16%	Pfd-3 (high)	48,208	19.70	0.63%	476,080	9,378,776	10.70	357	2025-03-31
CVE.PR.G	4.96%	8.91%	Pfd-3 (high)	53,040	19.85	0.48%	355,917	7,064,952	11.03	352	2025-06-30
CWB.PR.B	6.22%	9.67%	Pfd-3	37,607	17.28	0.13%	107,955	1,865,462	9.98	276	2024-04-30
CWB.PR.D	6.12%	8.14%	Pfd-3	62,709	24.50	0.29%	176,723	4,329,714	11.31	404	2024-04-30
EFN.PR.A	7.03%	8.86%	Pfd-3 (high)	27,349	24.67	0.33%	195,432	4,821,307	10.53	471	2023-12-31
EFN.PR.C	6.31%	8.73%	Pfd-3 (high)	34,566	24.60	0.27%	163,133	4,013,072	0.88	481	2024-06-30
EFN.PR.E	6.11%	8.89%	Pfd-3 (high)	26,249	24.15	0.20%	125,641	3,034,230	10.67	472	2024-09-30
EMA.PR.C	5.72%	8.06%	NOT RATED	118,771	20.63	0.60%	430,864	8,888,724	11.39	265	2023-08-15
EMA.PR.F	6.14%	9.29%	NOT RATED	35,075	17.12	0.48%	418,143	7,158,608	10.54	263	2025-02-15
EMA.PR.H	5.80%	7.74%	NOT RATED	99,999	21.12	0.75%	526,228	11,113,935	11.74	254	2023-08-15
EMA.PR.J	5.13%	8.07%	NOT RATED	51,145	20.70	1.21%	866,935	17,945,555	12.04	328	2026-05-15

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Scraps – FixedReset – Discount (con't)											
ENB.PF.A	6.65%	10.56%	Pfd-3 (high)	58,641	15.40	0.37%	355,849	5,480,075	9.38	266	2024-12-01
ENB.PF.C	6.56%	10.66%	Pfd-3 (high)	72,527	15.00	1.13%	1,116,131	16,741,965	9.39	264	2025-03-01
ENB.PF.E	5.39%	10.95%	Pfd-3 (high)	73,469	14.12	0.74%	771,210	10,889,485	9.45	266	2025-06-01
ENB.PF.G	5.33%	10.91%	Pfd-3 (high)	46,036	13.99	0.53%	558,110	7,807,959	9.59	268	2025-09-01
ENB.PF.K	7.43%	8.37%	Pfd-3 (high)	156,705	20.90	1.47%	1,041,129	21,759,596	11.21	317	2028-03-01
ENB.PR.B	7.98%	9.47%	Pfd-3 (high)	187,160	16.30	0.94%	857,674	13,980,086	10.28	240	2027-06-01
ENB.PR.D	8.03%	9.16%	Pfd-3 (high)	164,166	16.85	1.01%	883,221	14,882,274	10.50	237	2028-03-01
ENB.PR.F	8.12%	9.23%	Pfd-3 (high)	70,998	17.05	1.08%	938,818	16,006,847	10.45	251	2028-06-01
ENB.PR.H	6.22%	8.88%	Pfd-3 (high)	130,217	17.60	0.67%	566,007	9,961,723	10.41	212	2023-09-01
ENB.PR.J	6.78%	10.10%	Pfd-3 (high)	91,981	16.40	0.34%	310,567	5,093,299	9.49	257	2024-03-01
ENB.PR.N	7.02%	9.34%	Pfd-3 (high)	161,152	18.10	1.13%	925,530	16,752,093	10.04	265	2023-12-01
ENB.PR.P	6.74%	10.08%	Pfd-3 (high)	74,734	16.25	0.57%	517,148	8,403,655	9.51	250	2024-03-01
ENB.PR.T	6.53%	10.38%	Pfd-3 (high)	75,144	15.60	0.54%	516,810	8,062,236	9.37	250	2024-06-01
ENB.PR.Y	6.31%	10.59%	Pfd-3 (high)	126,078	14.80	0.78%	777,786	11,511,233	9.31	238	2024-09-01
FFH.PR.C	6.40%	9.42%	Pfd-3 (high)	64,496	18.38	0.25%	200,102	3,677,875	10.36	315	2024-12-31
FFH.PR.G	5.19%	10.46%	Pfd-3 (high)	57,123	14.26	0.29%	299,931	4,277,016	9.96	256	2025-09-30
FFH.PR.I	5.47%	10.10%	Pfd-3 (high)	61,638	15.21	0.54%	523,474	7,962,040	10.33	285	2025-12-31
FFH.PR.K	6.91%	9.39%	Pfd-3 (high)	63,429	18.25	0.37%	297,909	5,436,839	10.74	351	2027-03-31
FFH.PR.M	6.14%	9.37%	Pfd-3 (high)	50,310	20.37	0.65%	472,803	9,630,997	10.49	398	2025-03-31
LB.PR.H	6.17%	9.73%	Pfd-3	46,820	16.70	0.08%	67,189	1,122,056	9.90	255	2024-06-15
PPL.PF.A	7.87%	8.66%	Pfd-3 (high)	150,331	20.03	1.01%	748,612	14,994,698	11.10	326	2028-03-01
PPL.PF.E	7.72%	8.58%	Pfd-3 (high)	91,253	20.98	0.67%	474,486	9,954,716	11.16	351	2028-02-15
PPL.PR.A	6.81%	8.97%	Pfd-3 (high)	68,097	18.00	0.58%	474,861	8,547,498	10.52	247	2023-12-01
PPL.PR.C	6.49%	9.47%	Pfd-3 (high)	26,020	17.25	0.22%	187,273	3,230,459	10.14	260	2024-03-01
PPL.PR.E	6.50%	9.76%	Pfd-3 (high)	45,295	17.60	0.43%	363,372	6,395,347	9.97	300	2024-06-01
PPL.PR.G	6.43%	9.82%	Pfd-3 (high)	56,440	17.02	0.35%	304,664	5,185,381	10.06	294	2024-12-01
PPL.PR.I	5.62%	9.47%	Pfd-3 (high)	58,721	19.15	0.26%	202,575	3,879,311	10.71	391	2025-12-01
PPL.PR.O	7.94%	8.74%	Pfd-3 (high)	85,839	19.41	0.47%	356,464	6,918,966	10.84	292	2027-09-30
PPL.PR.Q	6.54%	9.45%	Pfd-3 (high)	35,666	18.42	0.24%	195,418	3,599,600	10.14	301	2024-03-31
PPL.PR.S	5.71%	9.54%	Pfd-3 (high)	33,609	20.50	0.57%	408,940	8,383,270	10.43	427	2025-06-30
PWF.PR.P	4.10%	10.01%	Pfd-2(high)	20,695	12.18	0.49%	593,863	7,233,251	10.61	160	2026-01-31

ZPR Analysis: July 31, 2023 (con't)

Ticker	Current Yield Bid	Yield-to-Worst (at Bid)	DBRS Rating	Average Trading Value	Holdings bid price	Holdings weight	Holdings units	Market Value	Modified Duration YTW	FixedReset Spread	Floating Rate Start Date
Scraps – FixedReset – Discount (con't)											
TA.PR.D	5.90%	10.85%	Pfd-3(low)	41,024	12.20	1.20%	1,459,800	17,809,560	9.88	203	2026-03-31
TA.PR.F	8.11%	9.45%	Pfd-3(low)	46,225	18.05	0.49%	405,150	7,312,958	10.33	310	2027-06-30
TA.PR.H	8.20%	8.96%	Pfd-3(low)	74,715	21.01	0.47%	334,400	7,025,744	10.61	365	2027-09-30
TA.PR.J	6.34%	9.73%	Pfd-3(low)	52,043	19.66	0.30%	224,999	4,423,480	9.99	380	2024-09-30
TRP.PR.A	6.44%	10.47%	Pfd-3 (high)	114,761	13.50	0.38%	415,113	5,604,026	9.61	192	2024-12-31
TRP.PR.B	4.03%	11.22%	Pfd-3 (high)	56,942	10.50	0.42%	586,103	6,154,082	9.54	128	2025-06-30
TRP.PR.C	4.47%	10.96%	Pfd-3 (high)	56,823	10.90	0.64%	869,980	9,482,782	9.96	154	2026-01-30
TRP.PR.D	6.40%	10.33%	Pfd-3 (high)	190,742	15.25	0.80%	776,228	11,837,477	9.47	238	2024-04-30
TRP.PR.E	6.44%	10.49%	Pfd-3 (high)	98,357	14.61	0.59%	597,833	8,734,340	9.50	235	2024-10-30
TRP.PR.G	5.33%	10.01%	Pfd-3 (high)	42,222	15.73	0.54%	511,970	8,053,288	10.33	296	2025-11-30
Scraps – FixedReset – Insurance											
MFC.PR.F	4.67%	9.47%	Pfd-2(high)	17,542	12.56	0.33%	389,013	4,886,003	10.99	141	2026-06-19
SLF.PR.G	3.50%	9.43%	Pfd-2(high)	24,533	13.02	0.27%	311,902	4,060,964	10.84	141	2025-06-30
SLF.PR.H	5.08%	9.30%	Pfd-2(high)	20,473	14.60	0.86%	873,500	12,753,100	11.13	217	2026-09-30
Cash						0.50%		7,450,046			
Total or Average	6.15%	8.98%		99,041		100.00%		1,480,631,918	10.67		

Table ZPR-1 Notes

Notes on holdings:

Table ZPR-1A ZPR Analysis 2023-7-31 BN Group Components	
BEP	1.37%
BIK	0.22%
BIP	1.74%
BN	6.04%
BPO	3.41%
BRF	0.72%
Total	13.5%

Issuer exposures that raise my eyebrows are:

Table ZPR-1B ZPR Analysis 2023-7-31 Issuer Concentration Concerns	
BCE	6.82%
BPO	3.41%
CVE	2.50%
EMA	3.04%
ENB	11.30%
FFH	2.10%
PPL	3.12%
TA	2.46%
TD	11.29%
TRP	3.37%

And

BN Group

Table ZPR-2
ZPR Analysis 2023-7-31
HIMIPref Subindex Analysis

Subindex Group	Total Weight	Average YTW	Average ModDur
Ratchet	0.00%	No Sol!	No Sol!
FixFloater	0.00%	No Sol!	No Sol!
Floater	0.00%	No Sol!	No Sol!
OpRet	0.00%	No Sol!	No Sol!
SplitShare	0.00%	No Sol!	No Sol!
Interest Bearing	0.00%	No Sol!	No Sol!
PerpetualPremium	0.00%	No Sol!	No Sol!
Scraps	0.00%	No Sol!	No Sol!
PerpetualDiscount	0.00	No Sol!	No Sol!
FixedReset – Discount	44.57%	8.38%	11.36
Insurance Straight	0.00	No Sol!	No Sol!
FloatingReset	0.00%	No Sol!	No Sol!
FixedReset – Premium	1.50%	6.94%	3.69%
FixedReset – Bank non-NVCC	0.00	No Sol!	No Sol!
FixedReset – Insurance non-NVCC	5.23%	8.37%	11.29
Scraps – Ratchet	0.00	No Sol!	No Sol!
Scraps – FixFloater	3.72%	9.53%	11.35
Scraps – Floater	0.00	No Sol!	No Sol!
Scraps – OpRet	0.00%	No Sol!	No Sol!
Scraps – SplitShare	0.00	No Sol!	No Sol!
Scraps – PerpPrem	0.00%	No Sol!	No Sol!
Scraps – PerpDisc	0.00	No Sol!	No Sol!
Scraps – FixedReset Discount	43.02%	9.79%	10.17%
Scraps – Insurance Straight	0.00	No Sol!	No Sol!
Scraps – FloatingReset	0.00%	No Sol!	No Sol!
Scraps – FixedReset Premium	0.00	No Sol!	No Sol!
Scraps – Bank non-NVCC	0.00%	No Sol!	No Sol!
Scraps – Insurance non-NVCC	1.47%	9.36%	11.04
XXA00001	0.50%	0.00%	0.00%

Table ZPR-3 ZPR Analysis 2023-7-31 Liquidity Analysis			
Liquidity Group	Total Weight	Average YTW	Average ModDur
< 50M	18.19%	9.58%	10.42
50M – 100M	42.93%	9.28%	10.70
100M – 200M	29.28%	8.71%	11.03
200M – 300M	9.09%	7.76%	10.44
> 300M	0.00%	No Sol!	No Sol!
Undefined	0.50%	0.00%	0.00%

Table ZPR-4 Notes

It is disappointing to see such poor credit quality in ZPR, with over 40% of the portfolio being rated in the ‘junk’ range by DBRS.

It will be noted that BMO provides a credit quality classification analysis of its own on the ZPR main page at link #1; this indicated that only 26.55% of the portfolio is in the P-3 group on September 7, 2023. Most of the discrepancy will be due to Enbridge, which is rated P-2(low) by S&P and Pfd-3(high) by DBRS; this company has a weight of 11.3% in the portfolio. However, the S&P outlook for Enbridge’s rating was revised to negative on 2023-9-6, so perhaps the ‘split rating’ of this issuer will be resolved in the near future!

Table ZPR-4 ZPR Analysis 2023-7-31 Credit Analysis			
Credit Group	Total Weight	Average YTW	Average ModDur
Pfd-1(high)	0.00%	No Sol!	No Sol!
Pfd-1	0.00%	No Sol!	No Sol!
Pfd-1(low)	0.00%	No Sol!	No Sol!
Pfd-2(high)	22.72%	8.30%	11.47
Pfd-2	20.39%	8.05%	10.98
Pfd-2(low)	8.33%	9.37%	10.49
Pfd-3(high)	26.94%	9.63%	10.15
Pfd-3	7.74%	9.19%	11.23
Pfd-3(low)	7.37%	11.62%	9.09
Pfd-4(high)	0.00%	No Sol!	No Sol!
Pfd-4	0.00%	No Sol!	No Sol!
Pfd-4(low)	0.00%	No Sol!	No Sol!
Pfd-5(high)	0.00%	No Sol!	No Sol!
Pfd-5	0.00%	No Sol!	No Sol!
Pfd-5(low)	0.00%	No Sol!	No Sol!
Undefined	6.51%	7.82%	10.36

Table ZPR-5 ZPR Analysis 2023-7-31 FixedReset Spread Analysis			
Spread Group	Total Weight	Average YTW	Average ModDur
< 100bp	0.00%	No Sol!	No Sol!
100 – 149bp	1.93%	9.79%	10.67
150 – 199bp	4.70%	9.64%	10.73
200 – 249bp	27.21%	8.95%	10.82
250 – 299bp	30.40%	8.87%	10.94
300 – 349bp	15.58%	9.07%	10.07
350 – 399bp	11.18%	8.84%	11.01
400 – 449bp	2.26%	9.15%	10.72
450 – 499bp	1.15%	9.01%	8.29
500 – 549bp	0.37%	13.24%	8.05
550 – 599bp	0.00%	No Sol!	No Sol!
> = 600bp	0.00%	No Sol!	No Sol!
Undefined	4.22%	8.40%	10.00

Table ZPR-6 Notes

This is the most interesting result of the analysis since it shows that the holdings of ZPR are heavily skewed towards relatively near-term resets, with the two nearest-term of the five annual buckets (when defined from the analysis date of 2023-7-31) just over half of the portfolio. This contradicts the stated management philosophy of the fund and its underlying index, which is to equally weight each of the annual 'buckets' of reset dates.

Arranging the buckets by calendar year doesn't help matters much:

Table ZPR-6A: Resets Effective by Calendar Year	
Calendar Year	% with Reset Effective in Calendar Year
2023 (Partial)	12.50%
2024	27.15%
2025	21.58%
2026	13.38%
2027	11.55%
2028 (Partial)	12.94%

It is clear, however, that the calendar years that are underweighted are 2026 and 2027. Readers will remember that there were substantial numbers of redemptions in 2021 and 2022 (23 FixedReset in each of the two years, by my quick and unverified count); it is possible that proceeds of these redemptions were distributed among all 'reset buckets' rather than being reinvested in the originating reset bucket. Such an action would lead to underweighting in the bucket experiencing the redemption. This appears to conflict with the assertions made on the fund's web-page at link #2:

Portfolio Strategy

BMO Laddered Preferred Share Index ETF has been designed to replicate, to the extent possible, the performance of the Solactive Laddered Canadian Preferred Share Index, net of expenses. The Fund invests in and holds the Constituent Securities of the Index in the same proportion as they are reflected in the Index.

Benchmark Info

The Solactive Laddered Canadian Preferred Share Index includes Canadian preferred shares that meet size, liquidity, listing and quality criteria. The Index uses a five year laddered structure where annual buckets are equal weighted while constituent securities within each bucket are market capitalization weighted.

I have made an inquiry to BMO about this apparent discrepancy, but at press time have not yet received a response. I have, however, been notified that the questions have been escalated for additional insight.

Table ZPR-6
ZPR Analysis 2023-7-31
Floating Rate Start Date Analysis

Undefined Group	Total Weight	Average YTW	Average ModDur
Currently Floating	0.00%	No Sol!	No Sol!
0 – 1 year	26.05%	8.56%	10.85
1 – 2 years	26.46%	9.32%	10.57
2 – 3 years	17.44%	9.70%	10.76
3 – 4 years	10.16%	9.67%	10.72
4 – 5 years	19.40%	8.31%	10.72
5 – 6 years	0.00%	No Sol!	No Sol!
More than 6 years	0.00%	No Sol!	No Sol!
Not Floating Rate	0.50%	0.00%	0.00