

Cristiana Corno Strategist

Global Markets-Trading cristiana.corno@bancaimi.com

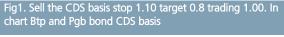
Fabrizio Ligurgo Strategist Global Markets-Trading

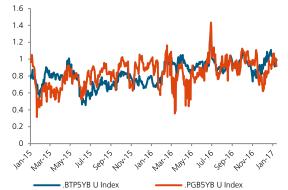
fabrizio.ligurgo@bancaimi.com

# **Govies RV**

#### Italian market overview

Bonds to be tapped today have cheapened towards surroundings: as a relative value play, we like a long in Oct23 versus shorting both Aug23 and Mar24 (fly in fig.2) due to levels and latest market preference for low coupon, not priced in the fly. The 7y sector is trading relatively rich versus 5y and 10y, but nothing to trade on. We reiterate our 105y flattening view. Given the Italian government's decree on bank guarantees, we would expect some competitive issuance on the short end of the Btp curve, which could help cheapening a rich sector. Another way to express the trade with positive carry is to sell the CDS basis in the 5y maturity (Fig. 1).





Source: Bloomberg, BANCA IMI calculations

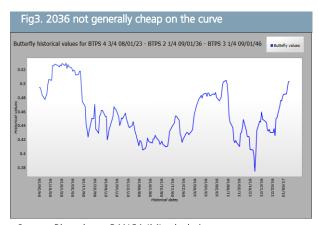




Source: Bloomberg, BANCA IMI calculations

The 3y bond has also seen some cheapening into the tap (mainly versus Apr19 and Sep20 fly) but we also like the bond versus 2021-2022 to play the auction cycle and some short end steepening.

The 20y bond has not cheapened much versus surrounding, and it is currently implying some premium for latest market preference for low coupon: the only segment toward which it looks cheap is the 6y-20y-30y fly in Fig.3, but we do not have strong view on the trade.

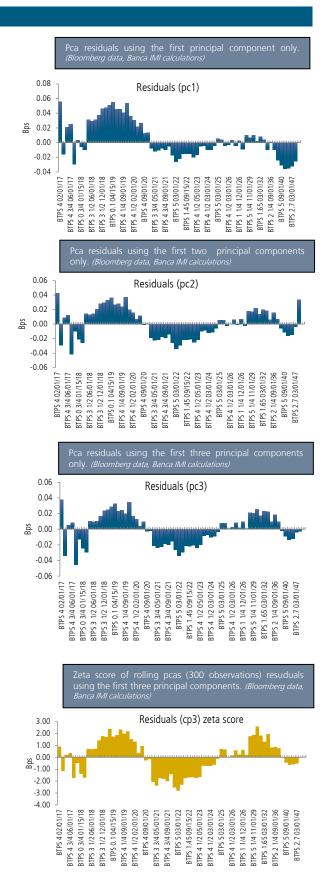


Source: Bloomberg, BANCA IMI calculations



## Yield curve principal component analysis

Bond Name	Res1	Res2	Res3	Zeta1	Zeta2	Zeta3	
BTPS 4 02/01/17 BTPS 4 3/4 05/01/17	0.06	0.04	0.04	1.22	1.08	0.92	
BTPS 1.15 05/15/17	-0.02 0.02	-0.03 0.01	-0.03 0.00	-0.29 0.77	-0.66 0.54	-1.16 0.22	
BTPS 4 3/4 06/01/17	0.02	0.01	0.01	0.88	0.67	0.36	
BTPS 5 1/4 08/01/17	-0.03	-0.04	-0.05	-0.74	-1.20	-1.73	
BTPS 3 1/2 11/01/17	0.00	-0.01	-0.01	0.29	-0.05	-0.49	
BTPS 0 3/4 01/15/18 BTPS 4 1/2 02/01/18	-0.01	-0.02	-0.02	-0.05	-0.68	-1.39	
BTPS 0 1/4 05/15/18	-0.01 0.03	-0.03 0.01	-0.03 0.01	-0.17 1.08	-0.87 0.99	-1.72 0.70	
BTPS 3 1/2 06/01/18	0.03	0.01	0.01	1.04	0.94	0.69	
BTPS 4 1/2 08/01/18	0.03	0.01	0.01	1.04	0.92	0.72	
BTPS 0.3 10/15/18	0.04	0.02	0.02	1.23	1.27	1.43	
BTPS 3 1/2 12/01/18	0.05	0.03	0.02	1.38	1.48	1.79	
BTPS 4 1/4 02/01/19 BTPS 4 1/2 03/01/19	0.05	0.03	0.03	1.36	1.49 1.74	1.73	
BTPS 0.1 04/15/19	0.05 0.05	0.03 0.04	0.03	1.50 1.45	1.74	2.40 1.74	
BTPS 2 1/2 05/01/19	0.05	0.03	0.02	1.33	1.49	1.88	
BTPS 1 1/2 08/01/19	0.05	0.03	0.02	1.44	1.66	2.34	
BTPS 4 1/4 09/01/19	0.04	0.02	0.02	1.34	1.50	2.00	
BTPS 0.05 10/15/19	0.05	0.04	0.03	1.63	2.01	2.19	
BTPS 1.05 12/01/19 BTPS 4 1/2 02/01/20	0.04	0.02	0.02	1.20 1.09	1.30 1.18	1.53	
BTPS 4 1/4 03/01/20	0.03	0.02	0.00	0.80	0.61	1.33 0.36	
BTPS 0.7 05/01/20	0.02	0.01	0.00	1.02	0.99	0.96	
BTPS 4 09/01/20	0.01	0.00	0.00	0.53	0.09	-0.26	
BTPS 0.65 11/01/20	0.01	0.00	0.00	0.60	0.21	-0.16	
BTPS 3 3/4 03/01/21 BTPS 3 3/4 05/01/21	-0.01	-0.02	-0.02	-0.31	-1.35	-2.08	
BTPS 0.45 06/01/21	-0.01 -0.01	-0.02 -0.02	-0.02 -0.02	-0.57 -0.43	-1.79 -1.42	-2.38 -1.76	
BTPS 3 3/4 08/01/21	-0.01	-0.02	-0.02	-0.43	-1.42	-1.81	
BTPS 4 3/4 09/01/21	-0.01	-0.02	-0.02	-0.56	-1.64	-2.01	
BTPS 0.35 11/01/21	0.00	-0.01	-0.02	-0.24	-1.11	-1.41	
BTPS 2.15 12/15/21	-0.02	-0.03	-0.03	-1.04	-2.33	-2.54	
BTPS 5 03/01/22 BTPS 1.35 04/15/22	-0.03 -0.02	-0.03 -0.03	-0.03 -0.03	-1.46 -1.28	-2.68 -2.23	-2.80	
BTPS 5 1/2 09/01/22	-0.02	-0.03	-0.03	-0.98	-2.23 -1.80	-2.31 -1.75	
BTPS 1.45 09/15/22	-0.02	-0.02	-0.02	-0.98	-1.71	-1.69	
BTPS 5 1/2 11/01/22	-0.02	-0.02	-0.02	-0.99	-1.73	-1.67	
BTPS 0.95 03/15/23	-0.02	-0.02	-0.02	-1.30	-1.84	-1.75	
BTPS 4 1/2 05/01/23 BTPS 4 3/4 08/01/23	-0.02	-0.02	-0.02	-1.21	-1.77	-1.66	
BTPS 0.65 10/15/23	0.00	-0.01 -0.01	-0.01 -0.01	-0.47 -0.47	-0.91 -0.94	-0.71 -0.72	
BTPS 4 1/2 03/01/24	-0.01	-0.01	-0.01	-0.72	-0.91	-0.72	
BTPS 3 3/4 09/01/24	-0.01	-0.01	-0.01	-0.76	-0.90	-0.63	
BTPS 2 1/2 12/01/24	0.00	-0.01	0.00	-0.36	-0.52	-0.12	
BTPS 5 03/01/25	0.01	0.01	0.01	0.29	0.23	0.70	
BTPS 1 1/2 06/01/25 BTPS 2 12/01/25	0.00	0.01	0.01	0.14 -0.37	0.18 -0.28	0.66 0.03	
BTPS 4 1/2 03/01/26	0.00	0.00	0.00	-0.37	-0.28 -0.18	0.03	
BTPS 1.6 06/01/26	0.00	0.01	0.01	0.07	0.16	0.60	
BTPS 7 1/4 11/01/26	0.00	0.00	0.00	-0.31	-0.20	0.24	
BTPS 1 1/4 12/01/26	0.00	0.01	0.01	0.04	0.16	0.63	
BTPS 6 1/2 11/01/27 BTPS 4 3/4 09/01/28	-0.01	0.00	0.00	-0.48	-0.30	0.22	
BTPS 5 1/4 11/01/29	0.01 0.01	0.02 0.02	0.02 0.02	0.31 0.16	0.70 0.65	1.78 1.89	
BTPS 3 1/2 03/01/30	0.01	0.02	0.02	0.10	0.86	2.59	
BTPS 6 05/01/31	0.00	0.01	0.02	0.00	0.52	1.83	
BTPS 1.65 03/01/32	0.01	0.02	0.02	0.19	0.62	1.31	
BTPS 5 3/4 02/01/33	0.00	0.02	0.02	0.03	0.68	1.95	
BTPS 5 08/01/34 BTPS 2 1/4 09/01/36	-0.01 0.00	0.01 0.02	0.01	-0.35 -0.03	0.06 0.43	0.83 0.87	
BTPS 4 02/01/37	-0.01	0.02	0.02	-0.03 -0.34	0.43	0.87	
BTPS 5 08/01/39	-0.02	-0.01	0.00	-0.68	-0.43	-0.04	
BTPS 5 09/01/40	-0.03	-0.01	-0.01	-0.82	-0.65	-0.45	
BTPS 4 3/4 09/01/44	-0.04	-0.02	-0.01	-0.92	-0.81	-0.64	
BTPS 3 1/4 09/01/46	-0.04	-0.01	-0.01	-0.87	-0.79	-0.59	
BTPS 2.7 03/01/47	-0.03	0.00	0.00	-0.88	-0.47	-0.52	
BTPS 2.8 03/01/67	-0.03	0.03	0.00	0.13	0.65	0.04	
Table1 Pca analysis' residuals and residuals' zeta score in rolling pcas (300 observations). ( <i>Bloomberg data, Banca IMI calculations</i> ).							

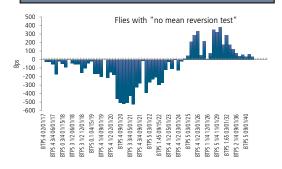




## Cash butterflies

Bond Name	Rich	Cheap	Index	Rich	Cheap	Index_test
BTPS 4 02/01/17	0	0	0	0	0	0
BTPS 4 3/4 05/01/17	25	0	-25	6	0	-6
BTPS 1.15 05/15/17	24	1	-23	0	1	1
BTPS 4 3/4 06/01/17	57	0	-57	1	0	-1
BTPS 5 1/4 08/01/17	170	0	-170	43	0	-43
BTPS 3 1/2 11/01/17	20	0	-20	0	0	0
BTPS 0 3/4 01/15/18	51	2	-49	0	2	2
BTPS 4 1/2 02/01/18	89	0	-89	4	0	-4
BTPS 0 1/4 05/15/18	14	9	-5	0	5	5
BTPS 3 1/2 06/01/18	43	0	-43	1	0	-1
BTPS 4 1/2 08/01/18	54	0	-54	1	0	-1
BTPS 0.3 10/15/18	58	0	-58	1	0	-1
BTPS 3 1/2 12/01/18	154	0	-154	4	0	-4
BTPS 4 1/4 02/01/19	101	0	-101	0	0	0
BTPS 4 1/2 03/01/19	46	4	-42	1	2	1
BTPS 0.1 04/15/19	20	0	-20	0	0	0
BTPS 2 1/2 05/01/19	168	0	-168	3	0	-3
BTPS 1 1/2 08/01/19	170	3	-167	9	3	-6
BTPS 4 1/4 09/01/19	207	5	-202	13	5	-8
BTPS 0.05 10/15/19	0	0	0	0	0	0
BTPS 1.05 12/01/19	216	3	-213	10	3	-7
BTPS 4 1/2 02/01/20	177	31	-146	3	9	6
BTPS 4 1/4 03/01/20	209	28	-181	5	2	-3
BTPS 0.7 05/01/20	462	0	-462	19	0	-19
BTPS 4 09/01/20	507	0	-507	25	0	-25
BTPS 0.65 11/01/20	517	0	-517	22	0	-22
BTPS 3 3/4 03/01/21	510	0	-510	36	0	-36
BTPS 3 3/4 05/01/21	426	1	-425	50	0	-50
BTPS 0.45 06/01/21	524	0	-524	60	0	-60
BTPS 3 3/4 08/01/21	328	0	-328	23	0	-23
BTPS 4 3/4 09/01/21	280	5	-275	27	2	-25
BTPS 0.35 11/01/21	16	0	-16	0	0	0
BTPS 2.15 12/15/21	389	0	-389	20	0	-20
BTPS 5 03/01/22	273	9	-264	45	0	-45
BTPS 1.35 04/15/22	239	5	-234	82	0	-82
BTPS 5 1/2 09/01/22	215	8	-207	23	2	-21
BTPS 1.45 09/15/22	298	1	-297	64	0	-64
BTPS 5 1/2 11/01/22	272	0	-272	59	0	-59
BTPS 0.95 03/15/23	119	0	-119	39	0	-39
BTPS 4 1/2 05/01/23	48	23	-25	4	0	-4
BTPS 4 3/4 08/01/23	111	4	-107	14	0	-14
BTPS 0.65 10/15/23	0	5	5	0	0	0
BTPS 4 1/2 03/01/24	128	3	-125	65	0	-65
BTPS 3 3/4 09/01/24	45	26	-19	32	4	-28
BTPS 2 1/2 12/01/24	24	36	12	12	4	-8
BTPS 5 03/01/25	11	58	47	6	26	20
BTPS 1 1/2 06/01/25	0	209	209	0	43	43
BTPS 2 12/01/25	0	284	284	0	79	79
BTPS 4 1/2 03/01/26	0	330	330	0	31	31
BTPS 1.6 06/01/26	0	51	51	0	14	14
BTPS 7 1/4 11/01/26	8	225	217	1	153	152
BTPS 1 1/4 12/01/26	0	1	1	0	0	0
BTPS 6 1/2 11/01/27	21	96	75	7	38	31
BTPS 4 3/4 09/01/28	0	351	351	0	46	46
BTPS 5 1/4 11/01/29	0	318	318	0	17	17
BTPS 3 1/2 03/01/30	0	379	379	0	35	35
BTPS 6 05/01/31	0	171	171	0	9	9
BTPS 1.65 03/01/32	0	288	288	0	23	23
BTPS 5 3/4 02/01/33	0	175	175	0	1	1
BTPS 5 08/01/34	4	123	119	1	2	1
BTPS 2 1/4 09/01/36	0	73	73	0	3	3
BTPS 4 02/01/37	3	40	37	0	0	0
BTPS 5 08/01/39	0	56	56	0	0	0
BTPS 5 09/01/40	0	32	32	0	0	0
BTPS 4 3/4 09/01/44	0	61	61	0	0	0
BTPS 3 1/4 09/01/46	0	33	33	0	1	1
BTPS 2.7 03/01/47	0	0	0	0	0	0
BTPS 2.8 03/01/67	0	0	0	0	0	0
Table2. Imi index:	airrerence o	i the numbe	r of rich and	u cneap t	ly centered on	each bond

Number of flies rich (zeta score <-2) or cheap (zeta score>2) on each bond <u>without testing for mean reversion</u> of the series (butterfly)



Number of flies rich (zeta score <-2) or cheap (zeta score>2) on each bond <u>which are statistically mean reverting</u>

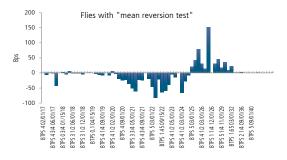
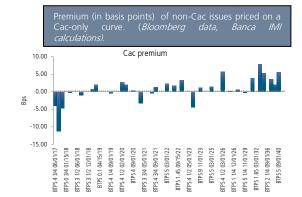


Table2. Imi index: difference of the number of rich and cheap fly centered on each bond (300 observation, zeta score >2 cheap, zeta score<-2 rich). (*Bloomberg data, Banca IMI calculations*)



## Cac premium

Bond Name	Last premium	Average	Min	Max	Std Dev	Zeta
BTPS 4 3/4 06/01/17	-3.93	0.97	-16.93	11.45	3.65	-1.34
BTPS 5 1/4 08/01/17	-11.24	-1.65	-38.37	7.30	3.65	-2.63
BTPS 3 1/2 11/01/17	-4.70	-1.64	-40.32	5.54	2.82	-1.09
BTPS 0 3/4 01/15/18	0.00	0.00	0.00	0.00	0.00	Cac
BTPS 4 1/2 02/01/18	-0.30	-0.46	-32.91	3.39	1.85	0.08
BTPS 0 1/4 05/15/18	0.00	0.00	0.00	0.00	0.00	Cac
BTPS 3 1/2 06/01/18	0.00	0.00	0.00	0.00	0.00	Cac
BTPS 4 1/2 08/01/18	-1.07	-1.26	-5.16	1.59	1.43	0.13
BTPS 0.3 10/15/18	0.00	0.00	0.00	0.00	0.00	Cac
BTPS 3 1/2 12/01/18	0.00	0.00	0.00	0.00	0.00	Cac
BTPS 4 1/4 02/01/19	0.73	-0.87	-4.78	3.24	1.61	0.99
BTPS 4 1/2 03/01/19	1.99	-1.74	-8.08	5.59	2.26	1.65
BTPS 0.1 04/15/19	0.00	0.00	0.00	0.00	0.00	Cac
BTPS 2 1/2 05/01/19	0.00	0.00	0.00	0.00	0.00	Cac
BTPS 1 1/2 08/01/19	0.00	0.00	0.00	0.00	0.00	Cac
BTPS 4 1/4 09/01/19	-0.39	-2.12	-10.53	2.08	2.22	0.78
BTPS 0.05 10/15/19	0.00	0.00	0.00	0.00	0.00	Cac
BTPS 1.05 12/01/19	0.00	0.00	0.00	0.00	0.00	Cac
BTPS 4 1/2 02/01/20	2.71	-1.80	-10.26	7.95	2.87	1.57
BTPS 4 1/4 03/01/20	2.05	-2.14	-9.86	7.11	2.86	1.47
BTPS 0.7 05/01/20	0.00	0.00	0.00	0.00	0.00	Cac
BTPS 4 09/01/20	0.31	-4.07	-15.21	1.98	2.74	1.60
BTPS 0.65 11/01/20	0.00	0.00	0.00	0.00	0.00	Cac
BTPS 3 3/4 03/01/21	-3.24	-2.51	-15.16	1.03	1.90	-0.38
BTPS 3 3/4 05/01/21	0.00	0.00	0.00	0.00	0.00	Cac
BTPS 0.45 06/01/21	0.00	0.00	0.00	0.00	0.00	Cac
BTPS 3 3/4 08/01/21	-0.46	-1.19	-19.87	3.32	2.84	0.26
BTPS 4 3/4 09/01/21 BTPS 0.35 11/01/21	1.31	-0.04	-11.46	4.09	2.09	0.65
BTPS 2.15 12/15/21	0.00	0.00	0.00	0.00	0.00	Cac
BTPS 5 03/01/22	0.00	0.00 1.59	0.00 -14.22	0.00 9.06	0.00 2.44	Cac 0.25
BTPS 1.35 04/15/22	2.20 0.00	0.00	0.00	0.00	0.00	Cac
BTPS 5 1/2 09/01/22	1.69	2.78	-6.25	11.38	2.29	-0.48
BTPS 1.45 09/15/22	0.00	0.00	0.00	0.00	0.00	Cac
BTPS 5 1/2 11/01/22	3.33	4.01	-3.13	10.56	1.94	-0.35
BTPS 0.95 03/15/23	0.00	0.00	0.00	0.00	0.00	Cac
BTPS 4 1/2 05/01/23	0.00	0.00	0.00	0.00	0.00	Cac
BTPS 4 3/4 08/01/23	-4.42	-3.00	-14.78	26.62	3.64	-0.39
BTPS 0.65 10/15/23	0.00	0.00	0.00	0.00	0.00	Cac
BTPS 9 11/01/23	1.10	-1.48	-12.26	12.11	4.33	0.60
BTPS 3 3/4 09/01/24	0.00	0.00	0.00	0.00	0.00	Cac
BTPS 2 1/2 12/01/24	0.00	0.00	0.00	0.00	0.00	Cac
BTPS 5 03/01/25	1.41	2.84	-7.54	11.75	2.62	-0.55
BTPS 1 1/2 06/01/25	0.00	0.00	0.00	0.00	0.00	Cac
BTPS 2 12/01/25	0.00	0.00	0.00	0.00	0.00	Cac
BTPS 4 1/2 03/01/26	5.64	-0.07	-13.88	7.79	4.19	1.36
BTPS 1.6 06/01/26	0.00	0.00	0.00	0.00	0.00	Cac
BTPS 7 1/4 11/01/26	0.10	-0.24	-8.27	11.37	3.61	0.09
BTPS 1 1/4 12/01/26	0.00	0.00	0.00	0.00	0.00	Cac
BTPS 6 1/2 11/01/27	0.62	1.53	-5.84	10.69	3.68	-0.25
BTPS 4 3/4 09/01/28	0.00	0.00	0.00	0.00	0.00	Cac
BTPS 5 1/4 11/01/29	-0.31	1.50	-3.86	18.38	2.48	-0.73
BTPS 3 1/2 03/01/30	0.00	0.00	0.00	0.00	0.00	Cac
BTPS 6 05/01/31	3.86	2.00	-7.88	20.42	5.73	0.32
BTPS 1.65 03/01/32	0.00	0.00	0.00	0.00	0.00	Cac
BTPS 5 3/4 02/01/33	7.88	2.04	-11.47	22.76	7.36	0.79
BTPS 5 08/01/34	5.29	2.13	-10.82	17.89	6.52	0.49
BTPS 2 1/4 09/01/36 BTPS 4 02/01/37	0.00	0.00	0.00	0.00	0.00	Cac
	3.59	-0.24	-22.68	16.54	10.82	0.35
BTPS 5 08/01/39	2.01	1.15	-8.53	12.27	4.62	0.19
BTPS 5 09/01/40 BTPS 4 3/4 09/01/44	5.54	3.87	-4.83	11.76	3.75	0.45
BTPS 4 3/4 09/01/44 BTPS 3 1/4 09/01/46	0.00	0.00	0.00	0.00	0.00	Cac
BTPS 2.7 03/01/46	0.00	0.00	0.00	0.00	0.00	Cac Cac
BTPS 2.7 03/01/47 BTPS 2.8 03/01/67	0.00 0.00	0.00 0.00	0.00	0.00 0.00	0.00 0.00	Cac
511 5 2.0 03/01/07	0.00	0.00	0.00	0.00	0.00	Cac



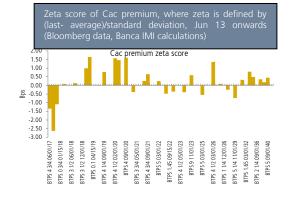


Table3. Premium (in basis points) of non-Cac issues priced on a Cac-only curve. (*Bloomberg data, Banca IMI calculations*).



## Summary

Julilinary								
Bond Name	PCA yield	PCA asw	Yield test	ASW test	BY vs level	CAC	Average	
BTPS 4 02/01/17	0.92	0.87	-0.60	0.49	0.40	0.00		0.35
BTPS 4 3/4 05/01/17	-1.16	-1.75	-0.70	0.49	0.40	0.00		-0.45
BTPS 1.15 05/15/17	0.22	-0.02	-0.58	0.51	0.41	0.00	Ì	0.09
BTPS 4 3/4 06/01/17	0.36	-0.18	-0.62	0.51	0.42	-1.62	0	-0.19
BTPS 5 1/4 08/01/17	-1.73	-1.57	-1.33	0.29	0.33	-2.96		-1.16
BTPS 3 1/2 11/01/17	-0.49	-0.66	-0.60	0.49	0.40	-1.45		-0.38
BTPS 0 3/4 01/15/18	-1.39	-0.52	-0.56	0.40	-0.50	0.00		-0.43
BTPS 4 1/2 02/01/18	-1.72	-0.88	-0.67	0.10	-0.78	0.38		-0.59
BTPS 0 1/4 05/15/18	0.70	1.39	-0.51	0.54	0.20	0.00		0.39
BTPS 3 1/2 06/01/18	0.69	1.02	-0.62	0.27	-0.30	0.00	ji i	0.18
BTPS 4 1/2 08/01/18	0.72	1.24	-0.62	0.37	0.06	-0.15	in .	0.27
BTPS 0.3 10/15/18	1.43	1.76	-0.62	0.28	-0.59	0.00		0.38
BTPS 3 1/2 12/01/18	1.79	2.31	-0.67	0.08	-0.50	0.00		0.50
BTPS 4 1/4 02/01/19	1.73	2.12	-0.60	0.49	-0.14	1.11		0.79
BTPS 4 1/2 03/01/19	2.40	2.56	-0.58	0.53	0.02	1.72		1.11
BTPS 0.1 04/15/19	1.74	2.21	-0.60	0.41	-0.11	0.00		0.61
BTPS 2 1/2 05/01/19	1.88	1.66	-0.65	0.31	-0.67	0.00		0.42
BTPS 1 1/2 08/01/19	2.34	2.48	-0.70	0.59	-0.15	0.00		0.76
BTPS 4 1/4 09/01/19	2.00	1.78	-0.74	0.52	-0.39	0.97		0.69
BTPS 0.05 10/15/19	2.19	2.51	-0.60	0.49	0.56	0.00		0.86
BTPS 1.05 12/01/19	1.53	1.29	-0.72	0.45	-0.09	0.00		0.41
BTPS 4 1/2 02/01/20	1.33	1.10	-0.50	0.57	-0.16	1.61		0.66
BTPS 4 1/4 03/01/20	0.36	0.19	-0.65	0.49	-0.25	1.66		0.30
BTPS 0.7 05/01/20	0.96	0.43	-0.92	0.35	-1.10	0.00	Ē	-0.05
BTPS 4 09/01/20	-0.26	-0.58	-1.03	0.02	-1.47	1.61	ni ni	-0.28
BTPS 0.65 11/01/20	-0.26	-0.56	-0.97	0.02	-1.50	0.00		-0.51
BTPS 3 3/4 03/01/21	-2.08	-2.28	-1.21	0.13	-1.76	-0.13		-1.21
BTPS 3 3/4 05/01/21	-2.38	-2.40	-1.45	-0.31	-1.25	0.00		-1.30
BTPS 0.45 06/01/21	-1.76	-1.27	-1.62	-2.00	-2.00	0.00		-1.44
BTPS 3 3/4 08/01/21	-1.70	-1.60	-0.99	0.27	-1.15	0.50		-0.80
BTPS 4 3/4 09/01/21	-2.01	-2.04	-0.99	0.27	-0.84	0.50		-0.76
BTPS 0.35 11/01/21							-	-0.76
BTPS 2.15 12/15/21	-1.41	-0.72	-0.60	-0.17	0.27	0.00		
	-2.54	-2.44	-0.94	-0.06	-1.62	0.00		-1.27
BTPS 5 03/01/22	-2.80	-2.84	-1.37	0.33	-0.93	0.52		-1.18
BTPS 1.35 04/15/22 BTPS 5 1/2 09/01/22	-2.31	-2.51	-2.00	0.37	-0.58	0.00		-1.17 -0.78
	-1.75 1.60	-1.66 1.30	-0.96	0.54	-0.36	-0.46		
BTPS 1.45 09/15/22	-1.69	-1.39	-1.69	-0.01	-0.86	0.00		-0.94
BTPS 5 1/2 11/01/22	-1.67	-1.63	-1.61	0.44	-0.98	-0.10	-	-0.92
BTPS 0.95 03/15/23	-1.75	-0.90	-1.26	0.29	0.01	0.00		-0.60
BTPS 4 1/2 05/01/23	-1.66	-1.61	-0.67	0.51	0.66	0.00		-0.46
BTPS 4 3/4 08/01/23	-0.71	-0.77	-0.84	0.62	0.15	-0.11	4	-0.28
BTPS 0.65 10/15/23	-0.72	-0.13	-0.60	0.49	0.55	0.00		-0.07
BTPS 4 1/2 03/01/24	-0.72	-1.15	-1.71	0.37	0.07	0.00	<b></b>	-0.52
BTPS 3 3/4 09/01/24	-0.63	-0.95	-1.08	0.59	0.59	0.00	<u>"</u>	-0.25
BTPS 2 1/2 12/01/24	-0.12	-0.30	-0.74	1.20	0.81	0.00		0.14
BTPS 5 03/01/25	0.70	0.34	-0.26	1.70	0.95	-0.41		0.50
BTPS 1 1/2 06/01/25	0.66	0.35	0.14	0.99	1.18	0.00		0.55
BTPS 2 12/01/25	0.03	-0.02	0.75	0.92	1.23	0.00		0.49
BTPS 4 1/2 03/01/26	0.15	-0.13	-0.07	0.63	0.81	1.49		0.48
BTPS 1.6 06/01/26	0.60	0.88	-0.36	0.85	0.47	0.00		0.41
BTPS 7 1/4 11/01/26	0.24	0.37	2.00	2.00	1.35	0.28		1.04
BTPS 1 1/4 12/01/26	0.63	0.73	-0.60	0.56	0.47	0.00	<u> </u>	0.30
BTPS 6 1/2 11/01/27	0.22	-0.02	-0.07	1.36	0.78	-0.06		0.37
BTPS 4 3/4 09/01/28	1.78	1.94	0.19	1.07	1.94	0.00		1.15
BTPS 5 1/4 11/01/29	1.89	2.24	-0.31	0.97	1.87	-0.80		0.98
BTPS 3 1/2 03/01/30	2.59	2.91	0.00	0.83	2.00	0.00		1.39
BTPS 6 05/01/31	1.83	1.27	-0.44	0.82	1.33	0.44		0.87
BTPS 1.65 03/01/32	1.31	1.07	-0.21	0.98	1.60	0.00		0.79
BTPS 5 3/4 02/01/33	1.95	1.63	-0.58	0.51	1.16	0.87		0.92
BTPS 5 08/01/34	0.83	0.48	-0.58	0.51	0.87	0.58		0.45
BTPS 2 1/4 09/01/36	0.87	0.53	-0.55	0.84	0.79	0.00		0.41
BTPS 4 02/01/37	0.77	0.27	-0.60	0.56	0.69	0.44		0.35
BTPS 5 08/01/39	-0.04	-0.05	-0.60	0.49	0.49	0.35		0.11
BTPS 5 09/01/40	-0.45	-0.89	-0.60	0.49	0.50	0.61	- 1	-0.05
BTPS 4 3/4 09/01/44	-0.64	-0.79	-0.60	0.55	0.55	0.00	Œ	-0.15
BTPS 3 1/4 09/01/46	-0.59	-0.27	-0.58	0.65	0.53	0.00		-0.04
BTPS 2.7 03/01/47	-0.52	-0.88	-0.60	0.49	0.41	0.00	<b>q</b>	-0.18
BTPS 2.8 03/01/67	0.04	0.27	-0.60	0.49	0.40	0.00		0.10
<del></del>					•	•		

Table4. Summary of different analysis on the curve: pca analysis on yield (first column) and asset swap (second column) with zeta score of errors using first 3 principal components (weekly data) as fit, index built analyzing yield (third column) and asset swap (fourth column) flies tested for mean reversion, butterlies regressed versus yield level (fifth column) and finally Cac premium (sixth column). All the results are expressed in zeta scores. The last column is simply the average of the six different analysis.



#### Disclaimer

This marketing communication has been prepared by the Trading Strategist department and is distributed by Banca IMI, a bank belonging to the Intesa Sanpaolo Banking Group which is authorized to carry out investment services in Italy and is regulated by the Bank of Italy and Consob.

The information contained in this document:

- constitutes a marketing communication and, as such, it has not been prepared in accordance with the legal requirements designed to
  promote the independence of investment research and is not subject to any prohibition on dealing ahead of the dissemination of
  investment research;
- may differ from the recommendations prepared by financial analysts of the Direzione Studi e Ricerche of Intesa Sanpaolo and distributed by Banca IMI.

The information contained herein does not constitute investment research within in the meaning of applicable regulatory rules in EU, or a solicitation or invitation, or investment advice, and does not purport to offer legal, tax or any other advice. Neither the Intesa Sanpaolo Banking Group, nor any officer, representative or employee thereof accepts any liability (for negligence or otherwise) for any direct or consequential losses arising from any use of information including, without limitation, the reliance on any such information contained in this communication.

The information and views contained in this communication are based on sources believed to be reliable and in good faith. No representation or warranty is made as to their accuracy or correctness. The views, forecasts and estimates contained in this communication reflect the personal view of the author as of the date of its publication. The views may differ from those of others within the Intesa Sanpaolo Banking Group.

All prices and rates included herein are shown for indication only and should not be relied upon to re-evaluate any positions held by any recipient of this document. For specific quotations, please contact your Banca IMI usual contact. There is no guarantee that the future results or any other future events will be consistent with the views, forecasts and estimates contained in this communication. Furthermore, any information included herein is subject to change by the author after the date of its publication without any notice by Banca IMI to the person to whom this communication has been distributed.

Information about the basic elements and the methodology used for the purposes of evaluation are available on the website at <a href="https://www.bancaimi.com/bancaimi/Banca-IMI-Global-Strategy-reports#GoviesRV">https://www.bancaimi.com/bancaimi/Banca-IMI-Global-Strategy-reports#GoviesRV</a>

This document is intended for distribution in Italy and in the Member States of the European Union only to professional clients and eligible counterparties, as defined in the MiFID Directive 2004/39/EC, either as a printed document and/or electronic form.

#### **Trading Strategist Certification**

The Trading Strategist who prepared this report, and whose names and roles appear on the first page, certify that:

- 1. The views expressed on companies mentioned herein accurately reflect independent, fair and balanced personal views;
- 2. No direct or indirect compensation has been or will be received in exchange for any views expressed.

Other information

Neither the Trading Strategist nor any member of the Trading Strategist's household has a financial interest in the securities.

#### **Conflicts of interest**

Banca IMI S.p.A. and the other companies belonging to Intesa Sanpaolo Banking Group (jointly, the "Intesa Sanpaolo Group") provide all services in the lending and securities industry, carrying out in particular – through its companies in possession of the necessary authorizations, where required – investment banking, corporate finance and finance and investment activities – through merchant banking activities and proprietary trading – financial advisory, investment research and financial analysis or other forms of general recommendation regarding transactions on financial instruments, securities issuance, placement activities, reception and transmission of orders, execution of orders for clients and dealing for own account in financial instruments, portfolio management, including the management of collective investment schemes and the management of multilateral trading facilities.

The Intesa Sanpaolo Banking Group is involved in a wide range of commercial and investment banking and other activities (including investment management, sales and trading of securities related activities) out of which may from time to time arise an interest in the issuers and in the financial instruments, including related financial instruments, or transactions referred to in this communication. Such interests may include i) having, at any time, significant directional positions, long or short, trading activity which could be also contrary to the views expressed herein; ii) holding financial instruments under pledge; iii) trading, on behalf of themselves or of their clients, the financial instruments, including related financial instruments, or financial instruments whose value is dependent upon, or is linked to, the financial instruments, issuers, parameters or indices referred to herein; iv) granting loans to companies whose securities are discussed herein; v) holding significant shareholdings and possibly appointing board members and/or other corporate bodies member, and participating in shareholders' agreements; vi) providing banking, credit or other financial services to the issuers of the financial instruments referred to herein, including their controlling companies or other companies belonging to the issuer's group. Banca IMI may act in the capacity of sponsor, specialist, listing partner, market maker, corporate broking and/or liquidity provider or in any other similar capacity with regard to the financial instruments, including related financial instruments, referred to herein.

In consideration of the above, Banca IMI S.p.A. states that has adopted written guidelines "Modello di Organizzazione, Gestione e Controllo" pursuant to Legislative Decree June 8, 2001 n. 231 (available at the Intesa Sanpaolo website, webpage http://www.group.intesasanpaolo.com/scriptlsir0/si09/governance/ita\_wp\_governance/isp, along with a summary sheet, webpage https://www.bancaimi.com/en/bancaimi/chisiamo/documentazione/mifid.) setting forth practices and procedures, in accordance with applicable regulations by the competent Italian authorities and best international practice, including those known as Chinese Walls, to restrict the flow of information, namely inside and/or confidential information, to prevent misuse of such information and to prevent any conflicts of interest may adversely affect the interests of the customer in accordance with current regulations.

Furthermore, in relation to the government securities potentially mentioned within this marketing communication, we disclose that Banca IMI 5.p.A. acts as market maker in the wholesale markets for the government securities of the main European countries and also acts as Government Bond Specialist, or comparable assignment, for the government securities issued by the Republic of Italy, by the Federal Republic of Germany, by the Hellenic Republic, by the European Stability Mechanism and by the European Financial Stability Facility.

This communication is for exclusive use by the person to whom has been distributed by Banca IMI and may not be reproduced or redistributed, directly or indirectly, to any other person or published, fully or partially, for any reason whatsoever, without the prior written consent of Banca IMI. The copyright and any other intellectual rights on data, information, opinions and estimates referred to herein belong to the Intesa Sanpaolo Banking Group, unless otherwise stated. Such data, information, opinions and estimates may not be fully or partially distributed or reproduced in any form, and by any means, without the prior written consent of Banca IMI.

Document produced on 12 January 2017 at 10:22 and disseminated for the first time on 12 January 2017 at 10:25