

26 MAR 2019

# Inversion of the US Treasury Yield Curve

## Indonesia's Sovereign Rating

S & P	BBB-
Moody's	Baa2
Fitch	BBB

## Key Market Indicator as of 25-Mar-19

BI 7-Day RR Rate	6.0%
JCI	6,525
IDR	14.205
Inflation (y-o-y)-Feb-19	3.06%

## Domestic Bonds Outstanding

Gov't Bonds as of 22-Mar-19	IDR 2,481.9 bn
Corp Bonds as of 28-Feb-19	IDR 433.4 bn

## Previous Week Trading Volume

Government Bonds	IDR 91.24 tn
Corporate Bonds	IDR 6.87 tn

## Benchmark Yield as of 25-Mar-19

FR0077 (5 year)	7.022%
FR0078 (10 year)	7.542%
FR0068 (15 year)	7.975%
FR0079 (20 year)	8.076%

Source : Bloomberg, Mid YTM

## Government Bond Indices as of 25-Mar-19

Price Index (Bloomberg : DGBIIDPR)	127.67
Yield Index (Bloomberg : DGBIIDYD)	7.54%
TR Index (Bloomberg : DGBIIDTR)	591.83

## Calendar of Event

03-Apr-19	
Italy General Government Cumulative Deficit to GDP	
(Survey :NA; Prior : 1.9%)	

04-Apr-19	
US Initial Jobless Claims SA	
(Survey :225k; Prior :229k)	

04-Apr-19	
UK Industrial Production YoY SA	
(Survey :-1.3%; Prior :-0.9%)	

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## Keeping interest rates unchanged

On Thursday, 21 March, Jerome Powell said that US interest rates would be kept unchanged for some time because global interest rates weighed on the economic outlook and inflation. According to a survey conducted by Bloomberg, economists believe that the Fed's interest rate will not be raised this year, and some economists even see that there is a chance that the Fed will cut interest rates this year or early next year. In addition, the US recorded its biggest monthly budget deficit in February 2019 amid a 20% reduction in corporate tax revenues and a boost in spending in the current fiscal year. The deficit widened to \$ 234 billion in February.

Meanwhile, at the Bank Indonesia Board of Governors' Meeting held on 20 and 21 March 2019 it was decided to keep the BI 7D RRR at 6%. This decision was made in an effort to improve external stability, specifically to keep the current account deficit within safe limits and maintain the attractiveness of domestic financial assets. Interest and exchange rate policies remain focused on ensuring external stability given that global economic growth has slowed while uncertainty in the financial markets has declined.

## Mempertahankan tingkat suku bunga

Pada hari Kamis tanggal 21 Maret, Jerome Powell mengatakan bahwa suku bunga akan ditahan untuk beberapa waktu karena adanya risiko global yang membebani prospek ekonomi dan inflasi. Menurut survei yang dilakukan oleh Bloomberg, para ekonom memperkirakan tidak adanya peningkatan suku bunga The Fed di tahun ini, bahkan ada yang memperkirakan bahwa terdapat peluang adanya penurunan suku bunga The Fed di tahun ini atau di awal tahun depan. Sebagai tambahan, AS mencatatkan defisit bulanan terbesarnya di bulan Februari 2019 di tengah penurunan 20% pajak pendapatan korporasi dan peningkatan pengeluaran di tahun fiskal ini. Defisit melebar menjadi \$234 miliar di bulan Februari.

Sementara itu, Rapat Dewan Gubernur Bank Indonesia pada 20-21 Maret 2019 memutuskan untuk mempertahankan BI 7D RRR sebesar 6%. Keputusan ini dibuat dalam upaya untuk memperkuat stabilitas eksternal perekonomian, khususnya untuk mengendalikan defisit transaksi berjalan dalam batas yang aman dan mempertahankan daya tarik aset keuangan domestik. Kebijakan suku bunga dan nilai tukar tetap difokuskan pada stabilitas eksternal mengingat pertumbuhan ekonomi global melambat disertai ketidakpastian pasar keuangan yang berkurang.

## The yield curve of US Treasuries is inverted

As a result of the dovish signal given by the Fed, US Treasury yields experienced a significant decline. The US 10-year Treasury registered a decline of 15bps from 2.59% on 15 March 2019 to 2.44% on 22 March 2019, thus causing US Treasury yields to be inverted for the first time since 2007. On 27 August 2007, the 10-year US Treasury yields stood at 4.6% while the 3-month US Treasury yield stood at 4.63% with the Fed Funds Rate at 5.25%. On Friday, 22 March 2019, the 3-month US Treasury yield stood at 2.46%, while the 10-year US Treasury yield was 2.44% with the Fed Funds Rate standing at 2.5%.

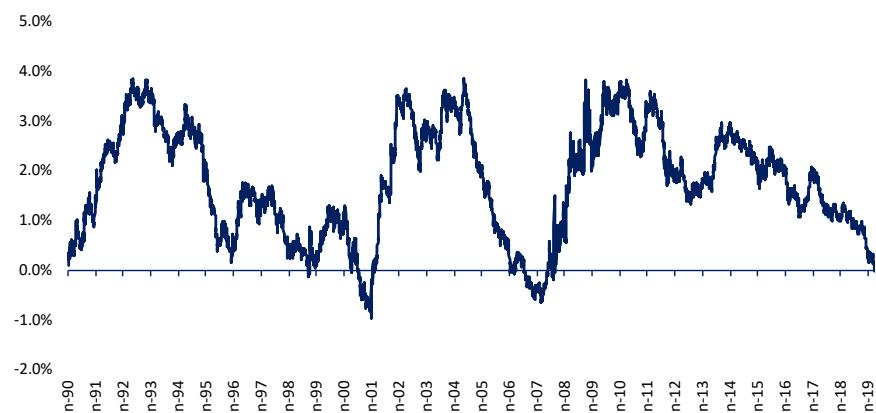
## Kurva yield US Treasury inverted

Akibat dari adanya sinyal dovish yang diisyaratkan oleh The Fed, yield US Treasury mengalami penurunan yang signifikan. US Treasury 10-tahun tercatat bergerak menurun sebesar 15bps dari 2,59% pada 15 Maret 2019, menjadi 2,44% di 22 Maret 2019, sehingga menyebabkan yield US Treasury inverted untuk pertama kalinya sejak tahun 2007. Pada tanggal 27 Agustus 2007, yield US Treasury 10-tahun tercatat sebesar 4,6% sementara yield US Treasury 3-bulan tercatat sebesar 4,63% dengan Fed Fund Rate di level 5,25%. Pada jumat tanggal 22 Maret 2019, kurva yield US Treasury 3-bulan tercatat di level 2,46%, sementara yield US Treasury 10-tahun di level 2,44% dengan Fed Fund Rate di level 2,5%.

## Exhibit 1. Yield UST vs Fed Funds Rate

Date	Yield UST		Fed Funds Rate
	3 month	10 yr	
27-Aug-07	4.63%	4.60%	5.25%
22-Mar-19	2.46%	2.44%	2.50%

Source: DJPPR

**Exhibit 2. US Treasury Spread 10-yrs vs 3-month**

Source: Bloomberg

**Exhibit 3. WIRP**

United States		Instrument	Futures: Fed Funds - Effective	Fed Effective Rate 2.41				
1) Overview		2) Future Implied Probability						
Current Implied Probabilities								
Dates	Meeting	Calculation	Calculated 03/25/2019	Based on rate	2.25-2.50			
Meeting	Hike Prob	Cut Prob	1.25-1.5	1.5-1.75	1.75-2	2-2.25	2.25-2.5	Fwd Rate
05/01/2019	0.0%	5.2%	0.0%	0.0%	0.0%	5.2%	94.8%	2.39
06/19/2019	0.0%	17.5%	0.0%	0.0%	0.7%	16.8%	82.5%	2.36
07/31/2019	0.0%	26.4%	0.0%	0.1%	2.4%	23.9%	73.6%	2.33
09/18/2019	0.0%	44.3%	0.0%	0.6%	7.7%	36.0%	55.7%	2.27
10/30/2019	0.0%	49.7%	0.1%	1.3%	10.4%	37.9%	50.3%	2.25
12/11/2019	0.0%	61.4%	0.4%	3.4%	16.8%	40.8%	38.6%	2.19
01/29/2020	0.0%	69.4%	1.0%	6.2%	21.8%	40.3%	30.6%	2.14

Source: Bloomberg

**Indonesian government bond yields moved down significantly**

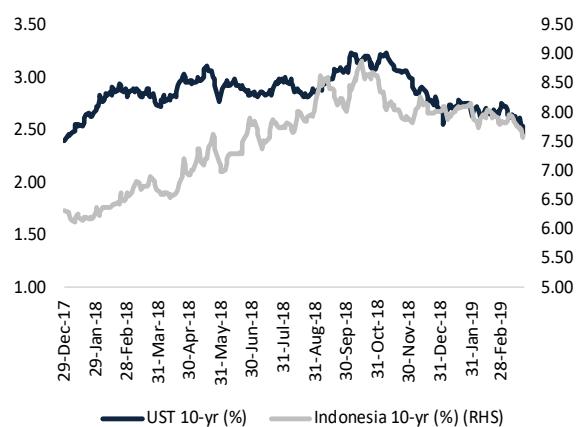
The 10-year Indonesian Government bond (BTMM ID) yield moved in line with the decline in 10-yr US Treasury yields over the past week. As of 22 March 2019, the yield of 10-year Indonesian Government bonds was at the level of 7.61%, or down by 16bps compared to the previous week's closing.

Meanwhile, as of 22 March 2019, the 5-year Indonesian CDS was at 104bps while the 10-year was at 177bps, or slightly up compared to the previous week's closing level of 98bps (5-year CDS) and 175bps (CDS 10-year).

**Yield obligasi Pemerintah Indonesia bergerak turun signifikan**

Yield obligasi Pemerintah Indonesia 10-tahun (BTMM ID) bergerak searah dengan penurunan yield US Treasury 10-yr selama minggu lalu. Per 22 Maret 2019, yield obligasi Pemerintah Indonesia 10-tahun tercatat di level 7,61%, atau menurun sebesar 16bps dibandingkan penutupan minggu sebelumnya.

Sementara itu, per 22 Maret 2019, CDS Indonesia 5-tahun berada di level 104bps sementara 10-tahun berada di level 177bps, atau sedikit meningkat dibandingkan penutupan minggu sebelumnya yang berada di level 98bps (CDS 5-tahun) dan 175bps (CDS 10-tahun).

**Exhibit 4. Yield**

Source: Bloomberg

**Exhibit 5. CDS 10- year (bps)**

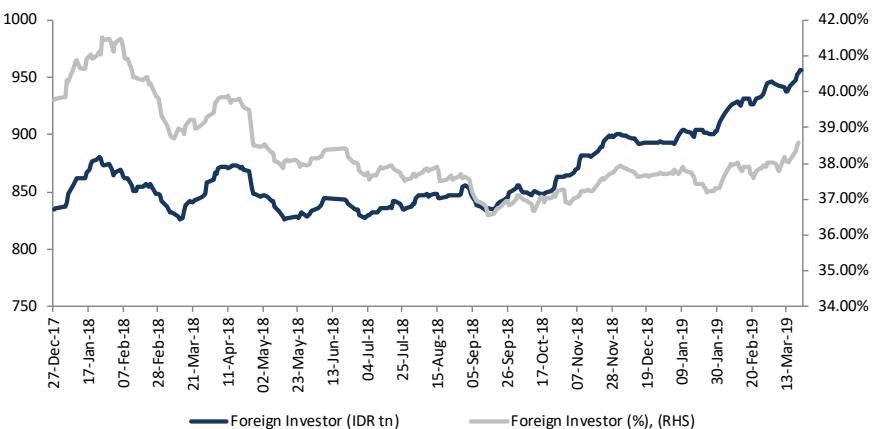
Source: Bloomberg

**Foreign ownership increased further**

Foreign ownership of tradable SBN continued to increase last week. As of 22 March 2019, foreign ownership was recorded at IDR956.72 trillion or an increase of IDR14.05 trillion compared to 15 March 2019. Compared to the end of 2018, foreign ownership is up by IDR63.47 trillion. Meanwhile, the proportion of foreign ownership of total tradable SBN as of 22 March 2019 increased to 38.55%.

**Kepemilikan asing kembali meningkat**

Di sisi lain, kepemilikan asing terhadap SBN yang dapat diperdagangkan pada minggu lalu kembali meningkat. Per 22 Maret 2019, kepemilikan asing tercatat sebesar Rp956.72 triliun atau meningkat sebesar Rp14.05 triliun dibandingkan dengan 15 Maret 2019. Dibandingkan dengan akhir tahun 2018, kepemilikan asing telah meningkat sebesar Rp63.47 triliun. Sementara itu, proporsi kepemilikan asing terhadap total SBN yang diperdagangkan tercatat per 22 Maret 2019 juga kembali meningkat menjadi sebesar 38,55%.

**Exhibit 6. Foreign Ownership of IDR Tradable Government Securities**

Source: DJPPR

### Government bonds auction

In the first quarter of 2019, the Government's auction target is IDR185 trillion. As of 19 March 2019, bond issuances through auctions reached IDR195.67 trillion or exceeding the issuance target for the first quarter. Another auction will be held on 26 March 2019 for SUN.

Based on data released by DJPPR, until 20 March 2019, the issuances of Government bonds amounted to 34.40% of what is needed in 2019 or amounting to IDR284.07 trillion from IDR825.70 trillion needed. Of the new issuances, 67.68% or IDR192.26 trillion are conventional bonds while the remaining IDR91.42 trillion are sukuk.

The Government conducted its latest auction on 19 March 2019 for the SBSN series, namely SPNS20092019, PBS014, PBS019, PBS021, PBS022, and PBS015. At the auction, the amount of incoming bids reached IDR29.70 trillion or higher than in the previous SBSN auction on 5 March 2019 (IDR23.18 trillion). The largest amount of incoming bids was for the PBS014 series (IDR13.91 trillion), followed by SPNS20092019 (IDR7.67 trillion). Meanwhile, the total amount of winning bids was IDR8.98 trillion or slightly higher than in the previous SBSN auction when the amount of winning bids reached IDR8.90 trillion. The largest amount of winning bids was for the PBS014 series (IDR4.8 trillion), followed by SPNS20092019 (IDR1.40 trillion), PBS015 (IDR1.32 trillion), PBS019 (IDR0.18 trillion), and PBS022 (IDR0.03 trillion).

### Lelang obligasi Pemerintah

Di kuartal pertama tahun 2019, Pemerintah menargetkan penerbitan melalui lelang sebesar Rp185 triliun. Per 19 Maret 2019, penerbitan surat utang melalui lelang tercatat sebesar Rp195,67 triliun atau telah melebihi target kuartal pertama. Di bulan Maret 2019, lelang dijadwalkan akan dilaksanakan sekali lagi yaitu pada tanggal 26 Maret 2019 untuk seri SUN.

Berdasarkan data yang dirilis oleh DJPPR, hingga 20 Maret 2019, realisasi penerbitan surat utang Pemerintah sebesar 34,40% dari yang dibutuhkan di tahun 2019 atau sebesar Rp284,07 triliun dari Rp825,70 triliun yang dibutuhkan. Lebih detail, dari total realisasi tersebut, sebesar 67,68% atau sebesar Rp192,26 triliun adalah obligasi konvensional sementara sisanya sebesar Rp91,42 triliun merupakan sukuk.

Pemerintah melakukan lelang terakhir pada 19 Maret 2019 untuk seri SBSN yaitu seri SPNS20092019, PBS014, PBS019, PBS021, PBS022, dan PBS015. Pada lelang tersebut, jumlah penawaran yang masuk adalah sebesar Rp29,70 triliun atau meningkat dibandingkan dengan lelang SBSN sebelumnya di tanggal 5 Maret 2019 sebesar Rp23,18 triliun. Penawaran masuk terbesar adalah untuk seri PBS014 yaitu sebesar Rp13,91 triliun, diikuti oleh seri SPNS20092019 sebesar Rp7,67 triliun. Sementara itu, jumlah lelang yang dimenangkan mencapai Rp8,98 triliun atau sedikit lebih tinggi dibandingkan lelang SBSN sebelumnya yang sebesar Rp8,90 triliun. Jumlah terbesar lelang yang dimenangkan adalah untuk seri PBS014 yaitu sebesar Rp4,80 triliun, diikuti oleh SPNS20092019 sebesar Rp1,40 triliun, PBS015 sebesar Rp1,32 triliun, PBS019 sebesar Rp0,18 triliun, dan PBS022 sebesar Rp0,03 triliun.

### Exhibit 7. Auction Result 19 Mar 2019

	SPNS20092019	PBS014	PBS019	PBS021	PBS022	PBS015
Maturity date	20-Sep-19	15-May-21	15-Sep-23	15-Nov-26	15-Apr-34	15-Jul-47
Incoming bids (IDR tn)	7.67	13.91	2.05	1.51	2.09	2.48
Highest incoming yield (%)	7.13	7.50	7.63	8.13	8.72	9.28125
Winning bids (IDR tn)	1.40	4.80	0.18	1.25	0.03	1.32
Average winning yield (%)	6.39955	7.28995	7.37822	7.6562	8.30208	8.82447
Bid to cover ratio	5.48	2.9	11.38	1.21	69.6	1.88

Source: DJPPR

### Exhibit 8. Government Issuances Needed

	IDR Bn
Target Auction 1Q18	185,00
Realization as of 19-Mar-19	195,67

Source: DJPPR

## APPENDICES

Appendix 1. Government Bonds Trading 18-22 Mar 2019

Last Trade Data	Bonds	Maturity	Coupon	Tenor	Last Done Price	Freq	Vol (IDR bn)	Yield	Tenor Class	Modified Duration
22-Mar-19	SPN03190406	06-Apr-19	-	0.03	99.83	4.00	1,095.00	0.17	< 1yr	-
20-Mar-19	SPNS11042019	11-Apr-19	-	0.04	99.69	1.00	200.00	0.31	< 1yr	-
22-Mar-19	FR0069	15-Apr-19	7.88	0.06	100.12	3.00	1,551.19	5.85	< 1yr	0.06
22-Mar-19	SPNS08052019	08-May-19	-	0.12	99.33	1.00	200.00	0.67	< 1yr	-
21-Mar-19	SPN03190513	13-May-19	-	0.13	99.24	1.00	100.00	0.77	< 1yr	-
22-Mar-19	PBS013	15-May-19	6.25	0.14	100.07	2.00	1,422.00	5.65	< 1yr	0.15
21-Mar-19	SPN03190527	27-May-19	-	0.17	99.03	3.00	204.00	0.98	< 1yr	-
19-Mar-19	FR0036	15-Sep-19	11.50	0.47	102.02	2.00	38.00	7.22	< 1yr	0.47
22-Mar-19	ORI013	15-Oct-19	6.60	0.56	100.15	17.00	161.33	6.59	< 1yr	-
19-Mar-19	SPN12200106	06-Jan-20	-	0.78	95.46	1.00	207.20	4.76	< 1yr	-
22-Mar-19	SR009	10-Mar-20	6.90	0.96	99.60	9.00	116.96	6.93	< 1yr	-
20-Mar-19	PBS016	15-Mar-20	7.50	0.97	99.55	4.00	577.40	7.98	< 1yr	0.93
22-Mar-19	PBS006	15-Sep-20	8.25	1.47	101.99	2.00	150.18	6.82	1yr - 5yr	1.38
22-Mar-19	ORI014	15-Oct-20	5.85	1.56	98.10	12.00	687.79	5.96	1yr - 5yr	-
22-Mar-19	FR0031	15-Nov-20	11.00	1.64	106.49	3.00	20.88	6.76	1yr - 5yr	1.46
22-Mar-19	SR010	10-Mar-21	5.90	1.96	97.00	11.00	409.91	6.08	1yr - 5yr	-
22-Mar-19	PBS014	15-May-21	6.50	2.14	98.90	14.00	5,339.99	7.05	1yr - 5yr	1.93
22-Mar-19	FR0034	15-Jun-21	12.80	2.22	112.00	6.00	113.57	6.90	1yr - 5yr	1.90
22-Mar-19	FR0053	15-Jul-21	8.25	2.31	103.10	24.00	2,930.45	6.77	1yr - 5yr	2.06
22-Mar-19	ORI015	15-Oct-21	8.25	2.56	102.40	60.00	2,093.77	8.06	1yr - 5yr	-
20-Mar-19	PBS002	15-Jan-22	5.45	2.81	95.25	2.00	68.00	7.34	1yr - 5yr	2.53
22-Mar-19	FR0061	15-May-22	7.00	3.14	100.20	11.00	1,680.34	6.92	1yr - 5yr	2.72
22-Mar-19	FR0035	15-Jun-22	12.90	3.22	116.24	3.00	3.01	7.17	1yr - 5yr	2.61
22-Mar-19	FR0043	15-Jul-22	10.25	3.31	108.84	6.00	186.72	7.20	1yr - 5yr	2.77
22-Mar-19	FR0063	15-May-23	5.63	4.14	95.24	15.00	726.09	6.96	1yr - 5yr	3.55
22-Mar-19	FR0046	15-Jul-23	9.50	4.31	107.79	3.00	40.00	7.36	1yr - 5yr	3.49
22-Mar-19	FR0039	15-Aug-23	11.75	4.39	116.00	4.00	18.00	7.42	1yr - 5yr	3.47
21-Mar-19	PBS011	15-Aug-23	8.75	4.39	105.77	2.00	9.20	7.20	1yr - 5yr	3.61
21-Mar-19	PBS019	15-Sep-23	8.25	4.47	103.71	14.00	347.43	7.27	1yr - 5yr	3.71
22-Mar-19	FR0070	15-Mar-24	8.38	4.97	104.80	30.00	3,989.76	7.21	1yr - 5yr	4.04
22-Mar-19	FR0077	15-May-24	8.13	5.14	104.25	16.00	13,724.53	7.12	5yr - 10yr	4.07
21-Mar-19	FR0044	15-Sep-24	5.19	5.47	111.05	7.00	161.00	7.50	5yr - 10yr	4.62
21-Mar-19	FR0040	15-Sep-25	11.00	6.47	117.75	2.00	304.96	7.49	5yr - 10yr	4.76
22-Mar-19	FR0056	15-Sep-26	8.38	7.47	104.95	2.00	2,459.50	7.50	5yr - 10yr	5.54
20-Mar-19	FR0037	15-Sep-26	12.00	7.47	123.70	1.00	2.00	7.77	5yr - 10yr	5.19
22-Mar-19	FR0059	15-May-27	7.00	8.14	96.40	21.00	2,752.89	7.60	5yr - 10yr	5.93
22-Mar-19	FR0042	15-Jul-27	10.25	8.31	115.24	1.00	180.00	7.73	5yr - 10yr	5.67
22-Mar-19	FR0047	15-Feb-28	10.00	8.89	113.90	2.00	625.00	7.80	5yr - 10yr	6.00
22-Mar-19	FR0064	15-May-28	6.13	9.14	91.00	14.00	2,049.36	7.50	5yr - 10yr	6.62
22-Mar-19	FR0071	15-Mar-29	9.00	9.97	108.75	18.00	7,803.27	7.73	5yr - 10yr	6.66
22-Mar-19	FR0078	15-May-29	8.25	10.14	104.70	45.00	15,533.55	7.58	> 10yr	6.70
21-Mar-19	IFR0006	15-Mar-30	10.25	10.97	116.00	2.00	8.00	8.03	> 10yr	6.86
20-Mar-19	FR0052	15-Aug-30	10.50	11.39	119.50	4.00	165.00	7.88	> 10yr	6.98
22-Mar-19	FR0073	15-May-31	8.75	12.14	107.00	2.00	2,597.14	7.84	> 10yr	7.37
18-Mar-19	FR0054	15-Jul-31	9.50	12.31	110.50	3.00	9.44	8.13	> 10yr	7.35
22-Mar-19	PBS012	15-Nov-31	8.88	12.64	102.98	3.00	186.20	8.48	> 10yr	7.38
22-Mar-19	FR0058	15-Jun-32	8.25	13.22	101.65	3.00	274.34	8.04	> 10yr	7.85
22-Mar-19	FR0074	15-Aug-32	7.50	13.39	97.75	9.00	131.26	7.77	> 10yr	8.24
22-Mar-19	FR0065	15-May-33	6.63	14.14	88.50	17.00	1,055.73	8.00	> 10yr	8.50
22-Mar-19	FR0068	15-Mar-34	8.38	14.97	103.70	41.00	5,810.96	7.95	> 10yr	8.56

Sources: IDX, Danareksa Estimates

## APPENDICES

**Appendix 2. Government Bonds Trading 18 -22 Mar 2019 (cont'd)**

Last Trade Data	Bonds	Maturity	Coupon	Tenor	Last Done Price	Freq	Vol (IDR bn)	Yield	Tenor Class	Modified Duration
19-Mar-19	PBS022	15-Apr-34	8.63	15.06	102.35	4.00	61.12	8.35	> 10yr	8.14
22-Mar-19	FR0072	15-May-36	8.25	17.14	102.00	82.00	1,678.77	8.03	> 10yr	8.92
18-Mar-19	FR0045	15-May-37	9.75	18.14	112.80	2.00	20.00	8.36	> 10yr	8.73
22-Mar-19	FR0075	15-May-38	7.50	19.14	94.50	98.00	2,429.87	8.07	> 10yr	9.55
21-Mar-19	FR0050	15-Jul-38	10.50	19.31	121.98	4.00	42.21	8.21	> 10yr	9.04
22-Mar-19	FR0079	15-Apr-39	8.38	20.06	102.75	89.00	4,632.27	8.10	> 10yr	9.44
19-Mar-19	FR0057	15-May-41	9.50	22.14	111.25	1.00	2.41	8.37	> 10yr	9.51
22-Mar-19	FR0062	15-Apr-42	6.38	23.06	80.25	9.00	92.85	8.31	> 10yr	10.37
22-Mar-19	PBS005	15-Apr-43	6.75	24.06	82.62	6.00	275.00	8.45	> 10yr	10.28
21-Mar-19	FR0067	15-Feb-44	8.75	24.89	103.55	3.00	96.09	8.41	> 10yr	10.22
22-Mar-19	PBS015	15-Jul-47	8.00	28.31	93.62	7.00	1,125.95	8.60	> 10yr	10.51
22-Mar-19	FR0076	15-May-48	7.38	29.14	88.75	6.00	261.68	8.41	> 10yr	10.72

Sources: IDX, Danareksa Estimates

## APPENDICES

Appendix 3. Corporate Bonds Trading 18 -22 Mar 2019

Last Trade Data	Bonds	Maturity	Coupon	Tenor	Rating	Last Done Price	Freq	Vol (IDR bn)	Yield	Modified Duration
18-Mar-19	SMADMF03ACN2	01-Apr-19	6.10	0.02	idAAA(sy)	100.00	2.00	5.00	6.10	0.04
22-Mar-19	FIFA02BCN3	05-Apr-19	9.15	0.03	idAAA	100.03	1.00	2.50	9.15	0.04
19-Mar-19	AISA01	05-Apr-19	10.25	0.03	idD	85.50	2.00	13.00	11.99	0.04
19-Mar-19	SIAISA01	05-Apr-19	10.25	0.03	idD(sy)	80.57	1.00	10.00	12.72	0.04
22-Mar-19	ASDF03BCN1	11-May-19	8.50	0.13	AAA(idn)	98.75	1.00	46.64	8.61	0.13
18-Mar-19	BAFI02A	20-May-19	6.20	0.15	idAA	99.80	2.00	130.00	6.21	0.17
20-Mar-19	PJAA01ACN2	23-May-19	6.30	0.16	idAA-	99.72	1.00	10.00	6.32	0.17
22-Mar-19	SMFP04ACN4	28-May-19	6.05	0.18	idAAA	99.75	1.00	30.00	6.07	0.19
21-Mar-19	BEXI03BCN1	08-Jun-19	8.20	0.20	idAAA	100.26	1.00	5.00	8.18	0.21
20-Mar-19	SANF02BCN1	09-Jun-19	9.00	0.21	idAA-	100.01	2.00	20.00	9.00	0.21
18-Mar-19	WSKT02CN1	10-Jun-19	9.25	0.21	idA-	100.20	2.00	10.00	9.23	0.22
18-Mar-19	INDF07	13-Jun-19	10.13	0.22	idAA+	100.67	2.00	16.00	10.06	0.23
18-Mar-19	SMFP03BCN5	17-Jun-19	8.20	0.23	idAAA	100.00	4.00	20.00	8.20	0.24
21-Mar-19	PIGN01A	21-Jun-19	8.25	0.24	idAA	100.10	2.00	4.00	8.24	0.24
18-Mar-19	BCAF02BCN2	21-Jun-19	8.15	0.24	idAAA	100.24	2.00	80.00	8.13	0.25
21-Mar-19	TAXI01	24-Jun-19	12.50	0.25	idBB+	10.10	3.00	3.00	123.76	0.19
21-Mar-19	ISAT08A	27-Jun-19	8.63	0.26	idAAA	100.23	4.00	20.00	8.61	0.26
21-Mar-19	BSDE01CCN1	04-Jul-19	9.50	0.28	idAA-	100.35	2.00	6.00	9.47	0.27
18-Mar-19	MFIN03ACN1	10-Jul-19	8.75	0.29	idA	100.03	8.00	24.00	8.75	0.30
18-Mar-19	MEDC02ACN1	15-Jul-19	10.80	0.31	idA+	100.73	4.00	20.00	10.72	0.31
21-Mar-19	IIFI01A	19-Jul-19	8.25	0.32	idAAA	100.69	3.00	90.00	8.19	0.32
19-Mar-19	SMFP04ACN5	24-Aug-19	7.50	0.41	idAAA	99.90	4.00	104.00	7.51	0.42
21-Mar-19	BEXI03BCN2	25-Aug-19	7.95	0.42	idAAA	100.21	1.00	35.00	7.93	0.41
19-Mar-19	ADMF04ACN3	26-Aug-19	7.50	0.42	idAAA	100.03	2.00	334.00	7.50	0.42
18-Mar-19	ISAT01BCN4	02-Sep-19	8.00	0.44	idAAA	100.22	4.00	40.00	7.98	0.44
18-Mar-19	FIFA02BCN4	27-Sep-19	7.95	0.51	idAAA	100.23	2.00	17.00	7.93	0.50
22-Mar-19	BEXI02CCN3	16-Oct-19	9.75	0.56	idAAA	101.35	2.00	25.00	9.62	0.54
22-Mar-19	SIEXCL02ACN1	26-Oct-19	8.25	0.59	AAA(idn)	100.66	2.00	20.00	8.20	0.57
21-Mar-19	SMFP04ACN6	29-Oct-19	8.25	0.59	idAAA	100.45	2.00	2.00	8.21	0.58
21-Mar-19	BNII01SBCN2	31-Oct-19	9.25	0.60	idAA+	100.43	2.00	6.00	9.21	0.58
18-Mar-19	BIIF01ACN3	03-Nov-19	8.30	0.61	AA+(idn)	99.50	2.00	10.00	8.34	0.60
22-Mar-19	IMFI02CCN2	06-Nov-19	11.00	0.61	idA	101.20	2.00	6.00	10.87	0.59
18-Mar-19	ADMF02CCN4	12-Nov-19	10.75	0.63	idAAA	102.13	2.00	2.00	10.53	0.61
20-Mar-19	JPFA02ACN1	01-Dec-19	9.25	0.68	AA-(idn)	101.10	3.00	12.00	9.15	0.67
21-Mar-19	SIISAT01BCN1	12-Dec-19	10.30	0.71	idAAA(sy)	101.55	2.00	3.00	10.14	0.69
20-Mar-19	ISAT01BCN1	12-Dec-19	10.30	0.71	idAAA	101.70	5.00	27.95	10.13	0.69
22-Mar-19	BNLI01SBCN2	19-Dec-19	9.40	0.73	idAA+	100.62	2.00	20.00	9.34	0.71
22-Mar-19	APLN01CN3	19-Dec-19	12.50	0.73	idA-	102.40	4.00	26.00	12.21	0.70
21-Mar-19	PNBN01SBCN1	20-Dec-19	9.40	0.74	idAA-	101.04	1.00	41.70	9.30	0.71
20-Mar-19	AKRA01B	21-Dec-19	8.75	0.74	idAA-	100.45	2.00	16.25	8.71	0.71
22-Mar-19	TPIA01A	22-Dec-19	10.80	0.74	idAA-	101.85	5.00	10.00	10.60	0.71
19-Mar-19	WOMF03ACN1	30-Dec-19	9.25	0.76	AA-(idn)	100.70	1.00	50.00	9.19	0.73
20-Mar-19	SMADMF03ACN3	03-Feb-20	8.05	0.86	idAAA(sy)	100.75	2.00	2.00	7.99	0.82
18-Mar-19	ADMF04ACN4	03-Feb-20	8.05	0.86	idAAA	100.30	1.00	10.00	8.03	0.83
19-Mar-19	TAFS02BCN2	14-Feb-20	8.50	0.89	AAA(idn)	100.72	2.00	58.00	8.44	0.85
20-Mar-19	EXCL01ACN2	18-Feb-20	7.90	0.90	AAA(idn)	100.17	2.00	56.00	7.89	0.87
19-Mar-19	SIEXCL02ACN2	18-Feb-20	7.90	0.90	AAA(idn)	98.52	2.00	4.60	8.02	0.87
21-Mar-19	BEXI03BCN4	23-Feb-20	8.40	0.91	idAAA	100.05	2.00	37.50	8.40	0.87
20-Mar-19	ASDF04ACN2	23-Feb-20	8.00	0.91	AAA(idn)	100.21	4.00	210.00	7.98	0.88
19-Mar-19	BFIN03BCN2	02-Mar-20	9.15	0.94	AA-(idn)	100.60	2.00	2.00	9.10	0.90

Sources: IDX, Danareksa Estimates

## APPENDICES

Appendix 4. Corporate Bonds Trading 18-22 Mar 2019 (cont'd)

Last Trade Data	Bonds	Maturity	Coupon	Tenor	Rating	Last Done Price	Freq	Vol (IDR bn)	Yield	Modified Duration
18-Mar-19	BFIN04ACN2	02-Mar-20	9.00	0.94	AA-(idn)	100.04	10.00	219.00	9.00	0.90
18-Mar-19	SMFP03BCN7	02-Mar-20	8.40	0.94	idAAA	100.70	1.00	27.80	8.34	0.91
19-Mar-19	ASDF03BCN3	03-Mar-20	8.50	0.94	AAA(idn)	100.66	2.00	10.00	8.44	0.91
19-Mar-19	ISAT03ACN1	15-Mar-20	8.25	0.97	idAAA	100.40	1.00	306.00	8.22	0.94
18-Mar-19	SIISAT03ACN1	15-Mar-20	8.25	0.97	idAAA(sy)	100.02	15.00	282.00	8.25	0.94
22-Mar-19	ADHI01BCN2	15-Mar-20	8.50	0.97	idA-	100.40	5.00	60.00	8.47	0.93
19-Mar-19	IMFI02CCN3	16-Mar-20	10.65	0.98	idA	102.12	1.00	0.40	10.43	0.93
22-Mar-19	FIFA03ACN5	22-Mar-20	8.00	0.99	AAA(idn)	100.07	9.00	197.00	7.99	0.95
22-Mar-19	ADMF03BCN5	22-Mar-20	8.60	0.99	idAAA	100.84	4.00	31.00	8.53	0.95
22-Mar-19	SMFP04ACN8	02-Apr-20	7.75	1.02	idAAA	100.00	4.00	60.00	7.75	0.96
21-Mar-19	BBRI02BCN2	11-Apr-20	8.10	1.04	idAAA	100.30	1.00	52.50	7.80	0.99
19-Mar-19	ISAT02BCN1	31-May-20	8.15	1.18	idAAA	99.10	2.00	2.00	8.95	1.12
20-Mar-19	TUFI03ACN2	06-Jun-20	8.50	1.20	idAA+	100.30	1.00	10.00	8.23	1.14
19-Mar-19	SIAGII01ACN1	06-Jun-20	9.90	1.20	A-(idn)	98.84	2.00	3.00	10.93	1.12
19-Mar-19	SMFP04BCN1	20-Jun-20	7.80	1.24	idAAA	99.30	2.00	50.00	8.39	1.16
19-Mar-19	TELE01BCN3	22-Jun-20	10.50	1.24	idA	98.47	2.00	3.00	11.83	1.13
19-Mar-19	PTHK01C	28-Jun-20	9.50	1.26	idA-	100.09	2.00	6.00	9.42	1.16
19-Mar-19	TLKM02B	06-Jul-20	10.20	1.28	idAAA	102.40	2.00	4.00	8.23	1.18
22-Mar-19	IMFI03BCN1	07-Jul-20	8.60	1.28	idA	99.15	2.00	3.00	9.30	1.19
20-Mar-19	AKRA01ACN1	07-Jul-20	8.50	1.28	idAA-	100.30	6.00	76.00	8.25	1.20
20-Mar-19	BBTN03ACN1	13-Jul-20	8.30	1.30	idAA+	99.02	1.00	0.10	9.09	1.21
22-Mar-19	ADMF03BCN6	14-Jul-20	8.10	1.30	idAAA	100.97	1.00	0.10	7.32	1.22
19-Mar-19	BAFI01B	03-Nov-20	7.75	1.61	idAA	99.05	2.00	4.00	8.38	1.49
21-Mar-19	SMII01BCN2	15-Nov-20	7.40	1.64	idAAA	97.80	1.00	0.10	8.84	1.52
18-Mar-19	BIIF01ACN4	15-Nov-20	7.65	1.64	AA+(idn)	98.50	1.00	0.10	8.62	1.53
21-Mar-19	SIAGII01ACN2	05-Dec-20	9.50	1.69	A-(idn)	99.22	2.00	34.00	10.00	1.55
22-Mar-19	WOMF02BCN3	06-Dec-20	8.45	1.70	AA-(idn)	99.40	5.00	145.60	8.83	1.57
19-Mar-19	ADMF04BCN1	12-Dec-20	7.45	1.71	idAAA	98.49	1.00	15.00	8.40	1.60
19-Mar-19	BSBR07	08-Jan-21	10.95	1.79	idA	101.84	4.00	62.00	9.82	1.59
21-Mar-19	IMFI03BCN2	15-Feb-21	7.90	1.89	idA	93.80	1.00	2.10	11.57	1.71
21-Mar-19	BEXI02CCN7	19-Feb-21	9.60	1.90	idAAA	102.10	1.00	2.00	8.40	1.72
19-Mar-19	ADMF04CCN2	21-Mar-21	7.40	1.99	idAAA	98.09	1.00	25.00	8.45	1.81
19-Mar-19	WOMF02CCN4	06-Apr-21	8.15	2.03	AA-(idn)	99.92	2.00	6.00	8.19	1.84
22-Mar-19	FIFA03BCN3	11-Apr-21	7.45	2.04	idAAA	100.00	1.00	15.80	7.45	1.86
18-Mar-19	BAFI02B	15-May-21	7.90	2.14	idAA	98.63	2.00	6.00	8.60	1.95
21-Mar-19	BBIA01SB	28-May-21	11.35	2.18	AAA(idn)	103.05	5.00	30.00	9.78	1.92
19-Mar-19	TUFI02BCN2	01-Jun-21	9.25	2.18	idAA+	101.50	1.00	10.00	8.49	1.97
21-Mar-19	BEXI04ACN1	06-Jun-21	7.50	2.20	idAAA	98.44	4.00	160.00	8.28	2.01
22-Mar-19	BEXI03CCN1	08-Jun-21	8.70	2.20	idAAA	101.35	1.00	10.10	8.03	1.99
22-Mar-19	BFIN04BCN1	26-Jun-21	7.75	2.25	AA-(idn)	99.46	1.00	225.00	8.01	2.02
21-Mar-19	APIA01A	30-Jun-21	8.60	2.26	idAAA	100.95	4.00	20.00	8.14	2.01
19-Mar-19	PPRO01B	01-Jul-21	9.90	2.27	idBBB	98.00	2.00	20.00	10.90	1.97
21-Mar-19	ADMF04CCN3	16-Aug-21	8.50	2.39	idAAA	100.15	7.00	33.00	8.43	2.14
20-Mar-19	BNGA02BCN4	20-Sep-21	8.50	2.49	idAAA	100.70	1.00	10.00	8.19	2.23
22-Mar-19	SSIA01BCN1	22-Sep-21	10.50	2.49	idA	101.20	3.00	8.00	9.95	2.18
21-Mar-19	FIFA03BCN4	25-Sep-21	8.75	2.50	idAAA	100.05	2.00	10.00	8.73	2.19
22-Mar-19	WSKT03ACN3	28-Sep-21	9.00	2.51	A-(idn)	100.73	2.00	22.00	8.67	2.19
20-Mar-19	SMLPPI01A	10-Oct-21	10.00	2.54	idA+(sy)	100.00	2.00	30.00	10.00	2.19
19-Mar-19	EXCL01BCN1	16-Oct-21	9.10	2.56	AAA(idn)	101.60	3.00	11.00	8.40	2.24
20-Mar-19	BIIF01BCN3	03-Nov-21	8.80	2.61	AA+(idn)	100.02	2.00	30.00	8.79	2.29
18-Mar-19	ISAT01CCN1	12-Dec-21	10.50	2.71	idAAA	104.94	2.00	4.00	8.46	2.37

Sources: IDX, Danareksa Estimates

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Appendix 5. Corporate Bonds Trading 18-22 Mar 2019 (cont'd)

Last Trade Data	Bonds	Maturity	Coupon	Tenor	Rating	Last Done Price	Freq	Vol (IDR bn)	Yield	Modified Duration
19-Mar-19	ANTM01BCN1	14-Dec-21	9.05	2.72	idA-	98.95	2.00	2.00	9.49	2.39
22-Mar-19	TPIA02CN1	19-Dec-21	10.00	2.73	idAA-	102.20	7.00	576.55	9.08	2.38
22-Mar-19	BNTT01BCN1	21-Dec-21	10.50	2.74	idA	100.10	3.00	205.00	10.46	2.36
20-Mar-19	TUFI04ACN1	08-Jan-22	9.40	2.79	idAA+	100.10	2.00	50.00	9.36	2.39
20-Mar-19	ADMF04BCN4	23-Jan-22	9.00	2.83	idAAA	101.35	1.00	10.00	8.46	2.45
19-Mar-19	PPLN03ACN3	19-Feb-22	8.50	2.90	idAAA	101.00	4.00	6.80	8.11	2.55
20-Mar-19	PPRO01ACN2	22-Feb-22	11.15	2.91	BBB+(idn)	100.00	1.00	8.00	11.15	2.44
19-Mar-19	BFIN04BCN2	22-Feb-22	10.50	2.91	AA-(idn)	100.45	5.00	20.00	10.32	2.47
21-Mar-19	BEXI03CCN4	23-Feb-22	8.90	2.91	idAAA	100.38	1.00	0.25	8.75	2.53
21-Mar-19	ISAT03BCN1	05-Mar-22	9.25	2.94	idAAA	101.95	1.00	10.00	8.50	2.56
21-Mar-19	SPSBTN01	07-Mar-22	8.60	2.95	idAAA	100.25	2.00	0.00	8.50	2.58
22-Mar-19	FIFA03BCN5	12-Mar-22	8.80	2.96	AAA(idn)	101.50	5.00	76.35	8.23	2.59
22-Mar-19	AGII01ACN3	19-Mar-22	11.00	2.98	A-(idn)	100.00	2.00	3.20	11.00	2.52
21-Mar-19	SMSMII01BCN2	21-Mar-22	-	2.99	idAAA	100.00	3.00	16.00	-	-
22-Mar-19	SMFP04BCN8	22-Mar-22	8.45	2.99	idAAA	100.00	3.00	127.70	8.45	2.63
19-Mar-19	ISAT02CCN1	31-May-22	8.55	3.18	idAAA	100.15	3.00	4.00	8.49	2.76
22-Mar-19	ISAT01DCN2	04-Jun-22	10.25	3.19	idAAA	105.30	2.00	10.00	8.34	2.71
22-Mar-19	SMGR01CN1	20-Jun-22	8.60	3.24	idAA+	101.05	3.00	30.00	8.23	2.81
22-Mar-19	ADHI02CN1	22-Jun-22	9.25	3.24	idA-	99.00	4.00	173.00	9.61	2.77
18-Mar-19	ISAT08B	27-Jun-22	8.88	3.26	idAAA	100.50	1.00	0.98	8.70	2.76
19-Mar-19	BBKP02SBCN1	30-Jun-22	12.00	3.26	idA-	102.02	2.00	8.00	11.25	2.62
20-Mar-19	BMTRO1ACN1	07-Jul-22	11.50	3.28	idA+	100.00	1.00	1.00	11.50	2.65
20-Mar-19	SIBMTR01ACN1	07-Jul-22	11.50	3.28	idA+(sy)	94.50	7.00	35.50	13.59	2.62
22-Mar-19	PPLN09B	10-Jul-22	12.25	3.29	idAAA	105.89	2.00	2.00	10.13	2.65
21-Mar-19	SIPPLN02ACN1	11-Jul-22	7.70	3.29	idAAA(sy)	98.50	1.00	0.20	8.22	2.84
22-Mar-19	BBNI01CN1	11-Jul-22	8.00	3.29	idAAA	99.95	1.00	1.30	8.02	2.83
22-Mar-19	BBTN03BCN1	13-Jul-22	8.50	3.30	idAA+	100.53	1.00	0.40	8.31	2.82
20-Mar-19	BBRI02BCN3	24-Aug-22	8.00	3.41	idAAA	99.00	2.00	6.00	8.34	2.95
22-Mar-19	PPGD03CCN1	03-Oct-22	7.70	3.52	idAAA	96.60	1.00	0.10	8.83	3.00
22-Mar-19	WSKT03BCN1	06-Oct-22	8.50	3.53	A(idn)	93.73	2.00	8.00	10.65	2.94
22-Mar-19	PIHC01BCN2	09-Nov-22	7.90	3.62	AAA(idn)	98.44	5.00	200.00	8.40	3.09
20-Mar-19	ISAT01CCN3	08-Dec-22	10.60	3.70	idAAA	106.10	1.00	0.20	8.66	3.06
19-Mar-19	BJTG01SB	18-Dec-22	12.25	3.73	idA	106.45	2.00	18.00	10.16	3.01
20-Mar-19	BBRI02ACN4	21-Feb-23	6.65	3.91	idAAA	95.39	3.00	104.00	8.03	3.38
22-Mar-19	WSKT03BCN2	23-Feb-23	8.25	3.91	A-(idn)	96.30	9.00	182.00	9.39	3.28
19-Mar-19	BNII02CN2	15-Mar-23	7.15	3.97	idAAA	95.15	4.00	80.00	8.60	3.41
21-Mar-19	ADMF04DCN2	21-Mar-23	7.50	3.99	idAAA	97.25	1.00	0.50	8.32	3.41
22-Mar-19	MEDC03BCN1	29-Mar-23	9.15	4.01	idA+	100.00	4.00	4.10	9.15	3.26
19-Mar-19	BNII02SBCN2	10-Jun-23	9.63	4.21	idAA	101.23	3.00	10.00	9.27	3.44
20-Mar-19	SWMEDP01B	04-Jul-23	10.25	4.28	idA(sy)	98.10	2.00	24.00	10.81	3.35
20-Mar-19	MGIA01	27-Jul-23	-	4.34	idAA+	100.04	2.00	81.20	-	-
21-Mar-19	ADMF04ECN3	16-Aug-23	9.25	4.39	idAAA	99.75	1.00	70.10	9.32	3.55
19-Mar-19	SMBRIS01SB	16-Nov-23	-	4.64	AA+(idn)	97.20	2.00	6.00	-	-
22-Mar-19	BEXI03DCN3	22-Nov-23	8.50	4.66	idAAA	99.05	3.00	30.00	8.75	3.79
21-Mar-19	KEHA01SB	21-Dec-23	9.95	4.74	AAA(idn)	100.00	4.00	46.00	9.95	3.75
18-Mar-19	BSSB02BCN1	28-Dec-23	10.65	4.76	idA+	103.40	4.00	20.00	9.75	3.65
19-Mar-19	ASDF04CCN2	13-Feb-24	9.20	4.88	AAA(idn)	99.93	2.00	6.00	9.22	3.87
19-Mar-19	PPLN03BCN3	19-Feb-24	9.10	4.90	idAAA	103.70	2.00	4.20	8.18	3.93
21-Mar-19	BBKP02SBCN2	28-Feb-24	11.00	4.93	idA-	99.95	9.00	86.00	11.01	3.75
20-Mar-19	ISAT03CCN1	05-Mar-24	9.75	4.94	idAAA	101.00	12.00	9.74	9.49	3.89

Sources: IDX, Danareksa Estimates

## APPENDICES

**Appendix 5. Corporate Bonds Trading 18 -22 Mar 2019 (cont'd)**

Last Trade Data	Bonds	Maturity	Coupon	Tenor	Rating	Last Done Price	Freq	Vol (IDR bn)	Yield	Modified Duration
22-Mar-19	PNBN02SBCN2	17-Mar-24	10.25	4.98	idA+	100.60	3.00	73.75	10.09	3.87
19-Mar-19	SSMM01B	31-Mar-24	9.60	5.02	idBB	50.00	1.00	9.83	28.66	3.17
22-Mar-19	ISAT02DCN1	31-May-24	8.90	5.18	idAAA	101.10	2.00	16.00	8.63	4.11
21-Mar-19	PIHC01BCN1	12-Jul-24	8.60	5.30	AAA(idn)	99.80	6.00	30.00	8.65	4.16
20-Mar-19	BBRI02CCN3	24-Aug-24	8.25	5.41	idAAA	97.80	4.00	2.57	8.76	4.30
20-Mar-19	BBRI02BCN4	21-Feb-25	6.90	5.91	idAAA	88.00	2.00	7.60	9.58	4.69
19-Mar-19	BVIC01SBCN2	05-Jun-25	11.00	6.19	idBBB	95.50	4.00	20.00	12.04	4.38
20-Mar-19	PIKI01B	04-Jul-25	9.15	6.28	idAA	101.19	2.00	36.00	8.90	4.67
21-Mar-19	BEXI04DCN3	08-Nov-25	9.75	6.62	idAAA	105.10	1.00	6.40	8.73	4.85
18-Mar-19	ISAT01ECN4	02-Sep-26	9.15	7.44	idAAA	99.75	3.00	3.00	9.20	5.34
21-Mar-19	BBRI02ECN1	01-Dec-26	8.90	7.68	idAAA	101.45	7.00	70.00	8.64	5.52
20-Mar-19	BEXI03ECN4	23-Feb-27	9.40	7.91	idAAA	103.54	3.00	36.00	8.77	5.56
21-Mar-19	BBRI02DCN2	11-Apr-27	8.80	8.04	idAAA	100.00	4.00	46.00	8.80	5.63
19-Mar-19	SIPPLN02CCN2	03-Nov-32	8.70	13.61	idAAA(sy)	94.70	2.00	20.00	9.39	7.68
22-Mar-19	TLKM01DCN1	23-Jun-45	11.00	26.24	idAAA	113.50	2.00	20.00	9.59	9.17

Sources: IDX, Danareksa Estimates

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