

Malaysia Govt-Guaranteed Bonds

Tight Credit Spreads Hitting the Floor

Outstanding government-guaranteed debts totaled MYR318b/17.2% of GDP at end-Jun 2023, of which MYR250.4b/13.5% of GDP through GG bonds. GG is a quasi-fiscal tool mainly to finance strategic projects or programmes that have economic and social benefits for national development, allowing GG recipients access to funding at favourable borrowing costs. Malaysia's budget allocation for gross development expenditure (GDE) ranged between 3.3% and 4.1% of GDP (Average: 3.7%) in 2013-2022. Augmented GDE that include GG funding with directly attributable projects is larger.

Off-Balance Sheet Funding: During the fiscal consolidation period in 2009-2017, the deficit-to-GDP ratio was successfully trimmed from -6.7% to -2.9%, stabilizing government debt at c.50% of GDP. But GG usage ballooned with a total of 17 new issuers and annual gross issuances rose by >170% to peak at MYR37.6b in 2017, while the contingent liability ratio which didn't have a statutory limit also rose from 11.8% to 17.3% owing to increased use of off-balance sheet funding for public infrastructure developments and other programmes while trying to keep a lid on government debts.

Fiscal Prudence: A more holistic approach was taken from 2018 on public debt monitoring that include GG and PPP. Gross GG issuance almost halved to MYR18b in 2022 from peak. Net issuance flipped to negative -MYR1.8b in 2022 for the first time since 2006 and stayed negative -MYR0.6b in 9M23. Currently there are only five regular issuers: Danainfra (MRT, PBH, LRT3), Prasarana (public transport system), MRL (ECRL), LPPSA (civil servant home financing) and PTPTN (higher education student loans). In fact, the net supply of Danainfara and Prasarana also turned slightly negative in 9M23. Some GG recipients e.g. Bank Pembangunan, Johor Corp, Khazanah, PASB and SME Bank have shifted to issuing rated bonds directly or indirectly. A limit will be imposed on GG at 25% of GDP under the Public Finance and Fiscal Responsibility Bill passed by the parliament earlier this week.

GG Spreads: Supported by favourable supply profile, GG credit spreads have tightened markedly from as wide as >60bp in 2016-2017, to 20-30bp on average in 2019-2022, and c.10bp recently for some names which we think are hitting the floor. Differentiations do exist among GG issuers with some >20bp still. We think the collapse in GG spreads has also indirectly pulled down the rated credit curves amid stable credit conditions. GG bonds are largely placed out privately this year rather than book building amid strong reinvestment demand. Going forward, supply technical should remain as the main driver on spread performance unless a global recession sets in which will then impose a larger risk premium on MYR credit pricing.

Secondary Liquidity: GG trading volumes have declined in recent years. In the first 9 months, GG volumes fell below that of AAA but comparable with AA segment. Measured by turnover ratio, GGs are less actively traded compared with rated sectors, perhaps due to the larger presence of buyand-hold investors especially in ultra-long tenors, and lower AMC participation due to a lack of yield appeal. Among GGs, the frequently traded names include Danainfra, Prasarana, LPPSA and PTPTN which are also the major issuers, but their turnover ratios are only moderate at 10-20%, a lot lower vs. government bonds, while Khazanah and GovCo saw good secondary volumes with higher turnover ratio of >20% in 2023 YTD.

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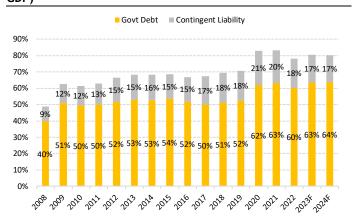
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Government-Guaranteed Debts: A Quasi-Fiscal Tool

Strategic Projects and Programmes. Government guarantees (GG) is a quasi-fiscal tool primarily to help finance strategic projects and programmes that are deemed to have economic and social benefits for national development. This allows the entities granted with GGs to raise funds at favourable borrowing costs. Total outstanding government-guaranteed debts or contingent liabilities amounted to MYR318b/17.2% of GDP at end-Jun 2023, of which MYR250.4b/13.5% of GDP via GG bonds, while the rest MYR67.2b loan guarantees went to entities such as Urusharta Jamaah, Malaysia Rail Link (MRL), National Higher Education Fund (PTPTN), Suria Strategic Energy Resources and etcetera based on the last MOF economic report. The 10 major recipients of loan guarantees accounted for >80% of the total.

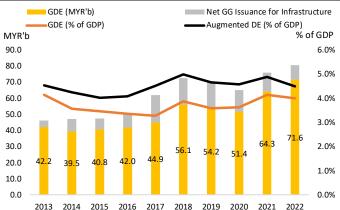
Augmented GDE. Malaysia's budget allocation for gross development expenditure (GDE) ranged between 3.3% and 4.1% of GDP (Average: 3.7%) in 2013-2022. But off-balance sheet debts also contributed to the GDE. If we conservatively include only the net GG issuance of Danainfra (funding vehicle for KVMRTs, Pan Borneo Highway Sarawak and LRT3) and MRL (the owner of East Coast Rail Link) i.e. the two large GG issuers with directly attributable projects as proxy for additional DE, it would add close to 0.8% of GDP per year on average to augmented GDE, by our estimate (Figure 2). We haven't added Prasarana and PASB to the computations as the use of proceeds are less project specific including capex, opex, asset restructuring and refinancing, although some proceeds from Prasarana were for LRT3 project.

Figure 1: Malaysia Govt Debt and Contingent Liability (% of GDP)



Source: CEIC, Maybank IBG Research

Figure 2: Augmented GDE: Included Select Net GG Issuance



Source: CEIC, MOF Economic Reports, BPAM, Maybank IBG Research *Net GG increase for infra include Danainfra and MRL

**Augmented DE = GDE + Net GG issuance for infra above

***Only as gauge for additional development expenditure. The timing of the use of GG proceeds may vary.

***MRL GG totalled about MYR30.8b in 2022 including both loans and bonds. Due to data limitation, we assume the amount is evenly spread across 2017-2022. Actual disbursements likely differ.

Statutory Limit. Unlike government debts which are governed by statutory limits i.e. 1) outstanding MGS, GII and MITB not exceeding 65% of GDP, 2) offshore borrowings not exceeding MYR35b and 3) MTB not exceeding MYR10b, previously no statutory limits were imposed on the amount of GGs, although the issuance of GGs is regulated by the Loans Guarantee (Bodies Corporate) Act 1965 where each GG recipient needs to be gazetted as corporate body and GG is only provided to government-related entities, statutory bodies and state agencies. The entities granted with GG are liable for the obligations while the government acts as the guarantor. Going forward, GG debts will be capped at 25% of GDP under the Public Finance and Fiscal Responsibility Bill 2023 passed by the parliament on 11 Oct 2023, while the government debt ratio will also be capped at 60% of GDP in 3-5 years.

Figure 3: Government Debt and Contingent Liability - Statutory Limit

Type of Debt	Statutory Limit/Guidano	ce	Outstanding	Act
MGS, GII and MITB	Not exceeding 65% of GDP	Not exceeding 60% of GDP in the medium		Loan (Local) Act 1959 Government Funding Act 1983
Offshore Borrowing	Not exceeding MYR35b		MYR30.4b as of Jun 2023	External Loans Act 1963
МТВ	Not exceeding MYR10b	esponsibility Bill 2023	MYR3.5b as of Sep 2023	Treasury Bills (Local) Act 1946
GG/Contingent Liability	Each guaranteed recipier as a body corporate. (Not exceeding 25% of G Finance and Fiscal Respo	DP under the Public	MYR318b as of Jun 2023/17.2% of GDP (of which GG bonds MYR250.4b as of Sep 2023)	Loan Guarantee (Bodies Corporate) Act 1965 Financial Procedure Act 1957

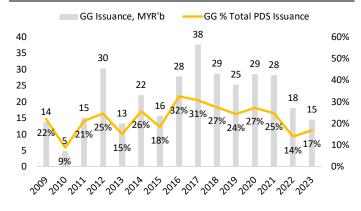
Sources: MOF, Maybank IBG Research's Compilations

GG Bond Supply Profile

Gross GG Issuance: The bumper year occurred in 2009-2017 where yearly supply grew by 174% from MYR13.8b in 2009 to MYR37.6b in 2017, a 13.4% CAGR. A total of 17 new GG names debuted that time (Figure 4), including Danainfra (2012), PASB (2011), PTPTN (2012) and LPPSA (2016). By convention, GGs are given to undertake strategic projects with long gestation period by financially sustainable entities, but in certain circumstances GGs are also provided to entities that require financial assistance. GGs were used for the restructuring of water industry in Peninsular by PASB (2011) and the consolidation of several toll roads under PLUS (2012). Several government related companies and state agencies also leveraged on GG with debut issuances: Penerbangan Malaysia (2009), 1MDB (2009), Pelabuhan Tanjung Pelepas (2010), Senair Airport Terminal Services (2011), Johor Corp (2012), Turus Pesawat (2012) and PR1MA (2017). An explicit government guarantee provides credit enhancement and access to cheaper cost of funds.

Off-Balance Sheet Funding. The government implemented fiscal consolidation in 2010-2017. Budget deficit ratio was successfully reduced from -6.7% in 2009 to -2.9% in 2017 (Figure 5). But to finance major infrastructure projects and other programmes, the use off-balance sheet funding surged, contributing to the peak GG issuance in 2017. GG share of total PDS supply exceeded 30% that year.

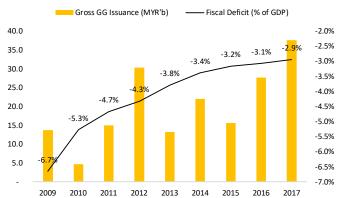
Figure 4: Gross GG Issuance and Share of Total PDS Issuance: 2009- 9M2023



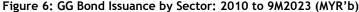
Source: BPAM, Maybank IBG Research

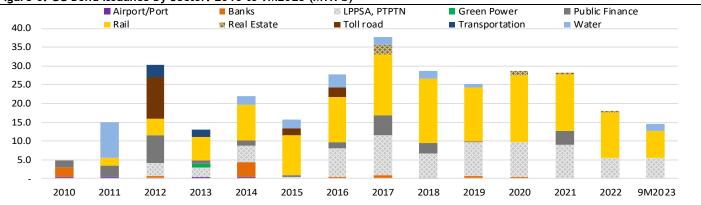
*2023 = As of 30 Sep

Figure 5: Fiscal Consolidation 2010-2017: Coincided With Increased Use of Off-Balance Sheet Debts to Fund Major Infrastructure Projects and Other Programmes



Source: CEIC, MOF Economic Reports, BPAM, Maybank IBG Research



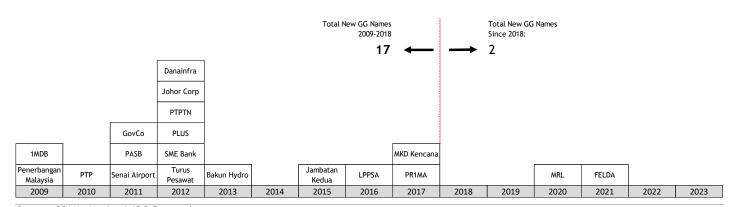


Source: BPAM, Maybank IBG Research

*As PBH is funded by Danainfra, it has been classified under rail sub-sector.

More Prudent Approach. A more holistic approach on government debt monitoring has been taken since 2018, because even though the total debt ratio was capped at c.50% in 2017 (2009: 50.8%), heavier GG usage resulted in a much higher contingent liability ratio at 18.4% in 2018 (2009: 11.8%), raising question on long-term fiscal sustainability. To improve transparency, more details are shared on GG and the Public Private Partnership (PPP) liabilities in the Economic Reports of Budget. Since 2018, there has been only two new GG bond names (Figure 7).

Figure 7: New GG Names 2009-2023 (New on Debut Year)



Source: BPAM, Maybank IBG Research

*Counted as new on first year of issuance by issuer name, which is not necessarily the year the issuer first obtained GG because some GG recipients might have obtained GG loans earlier then only tap/refinance through the bond market later

Net GG Supply: Turned Negative in 2022, First Time Since 2006... Net GG supply peaked at MYR35.3b in 2017, shrinking to MYR22.9b the following year and turning negative from 2022 at -MYR1.8b for the first time since 2006, partly due to net redemptions from Johor Corp (-MYR1.8b), Khazanah (-MYR2.5b) and GovCo (-MYR1.1b) amid increased scrutiny on the use of GG.

...And Stayed Slightly Negative in 9M23. Net GG supply remained negative at -MYR0.6b in 9M23. Currently there are only five regular issuers: Danainfra, MRL, Prasarana, LPPSA and PTPTN. In fact, Danainfra, the largest GG bond issuer, saw negative net issuance at -MYR0.5b YTD (Peak: MYR11.9b in 2017) as funding needs dwindled following the completion of KVMRT2 and PBH Sarawak (Phase 1) is near completion by Nov 2023 while LRT3 probably still requires funding with target completion by 30 Nov 2024. Budget indicated allocations to MRT and LRT projects although it is unclear whether the amount was meant for constructions or repayment of borrowing costs. PTPTN has also turned net redemptions in recent years (2021: -MYR1b, 2022: -MYR2b: 9M23: -MYR0.4b), probably benefited from diversified funding sources as its deposit base grows. Overall, total outstanding GG bonds fell slightly to MYR250.4b at end-Sep 2023 vs. MYR251b at end-2022 and MYR252.8b at end-2021.

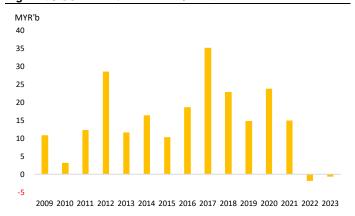
Figure 8: Net Issuance of GG Bonds by Issuer: 2009- 9M2023 (MYR'b)

Issuer Name (Short Name in Bracket)	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
1Malaysia Development Berhad (1MDB)	5.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bakun Hydro Power Generation Sdn Berhad															
(Bakun)	-	-	-	-	1.0	-	-	-	-	-	-	-	-	-	-
Bank Pembangunan Malaysia Berhad (BPM)	-	2.5	-	-	-1.0	3.0	-2.0	0.5	-	-	-	-	-0.7	-	-0.3
DanaInfra Nasional Berhad (Danainfra)	-	-	-	2.4	4.1	7.6	6.6	9.0	11.9	11.2	11.1	8.5	6.4	3.9	-0.5
Federal Land Development Authority	_	_		_	_	_	_	_	_	_	_	_	2.7	_	_
(Felda)						_					_	_	2.7		
GovCo Holdings Berhad (GovCo)	-	-	3.0	-	-	-	-	1.6	4.2	-1.5	-0.1	-	-1.5	-1.1	-0.3
Jambatan Kedua Sdn Berhad (JK2)	-	-	-	-	-	-	2.0	2.6	-	-	-	-	-	-	-0.3
Johor Corporation (Johor Corp)	-	-	-	3.0	-	-	-	-	-0.4	-	-0.8	-	-	-1.8	-
K.L. International Airport Berhad (KLIA)	-0.5	-0.5	-0.5	-0.5	-0.5	-0.5	-2.2	-2.2	-	-	-	-	-	-	-
Khazanah Nasional Berhad (Khazanah)	2.7	0.2	-	4.5	1.0	1.3	-	-2.0	-1.0	-2.0	-2.5	-1.2	-2.3	-2.5	-2.0
Lembaga Pembiayaan Perumahan Sektor Awam (LPPSA)	-	-	-	-	-	-	-	4.0	6.8	7.0	4.7	7.7	7.4	2.7	3.0
Malaysia Debt Ventures Berhad (MDV)	-	0.5	-	-	-	-	0.1	0.1	-0.3	0.0	0.3	-0.2	-	-0.4	-0.1
Malaysia Rail Link Sdn Berhad (MRL)	-	-	-	-	-	-	-	-	-	-	-	2.8	3.0	1.0	3.2
MKD Kencana Sdn Berhad (MKD Kencana)	-	-	-	-	-	-	-	-	1.0	2.5	-	-	1.0	-	-1.3
Pelabuhan Tanjung Pelepas Sdn Berhad (PTP)	-	0.5	0.3	-	0.4	0.3	-	-	-	0.2	-	-1.5	-	-	-
Penerbangan Malaysia Berhad (PMB)	1.8	-	-	-0.3	-	-1.5	-	-	-	-	-	-	-	-	-
Pengurusan Air SPV Berhad (PASB)	-	-	9.5	-	0.4	0.6	1.8	0.5	0.4	0.2	-1.1	-2.5	-1.7	-1.3	-0.7
Perbadanan Tabung Pendidikan Tinggi Nasional (PTPTN)	-	-	-	3.5	2.5	4.5	0.5	3.5	4.0	0.5	2.6	2.5	-1.0	-2.0	-0.4
PR1MA Corporation Malaysia (PR1MA)	-	-	-	-	-	-	-	-	2.5	-	-	1.0	0.5	-0.3	-
Prasarana Malaysia Berhad (Prasarana)	2.0	-	-0.2	1.0	2.0	2.0	3.6	1.1	6.0	4.8	0.9	6.7	1.3	1.4	-0.3
Projek Lebuhraya Usahasama Berhad (PLUS)	-	-	-	11.0	-	-	-	-	-	-	-	-	-	-	-
Senai Airport Terminal Services Sdn Berhad (Senai Airport)	-	-	0.3	0.1	-	-	-	-	-	-	-	-	-	-0.3	-
Silterra Capital Berhad (Silterra)	-	-	-	-	-	-1.8	-	-	-	-	-	-	-	-	-
Small Medium Enterprise Development Bank Malaysia (SME Bank)	-	-	-	0.5	-	1.0	-	-	0.3	-	-0.0	0.1	-	-0.8	-
Turus Pesawat Sdn Berhad (Turus Pesawat)	-	-	-	3.4	1.9	-	-	-	-	-	-	-	-	-0.5	-0.6
TOTAL	10.9	3.2	12.3	28.6	11.8	16.5	10.4	18.7	35.3	22.9	15.0	23.9	15.1	-1.8	-0.6

Source: BPAM, Maybank IBG Research

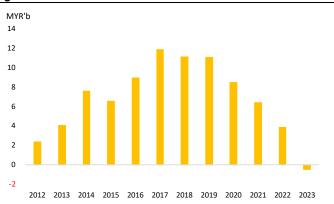
*Compilations based on the first issuance in MYR bond market. Not necessarily the year issuer first obtained GG because some GG recipients might have obtained GG loans earlier then only tap/refinance through the bond market later

Figure 9: GG Bond Net Issuance: 2009-2023 YTD



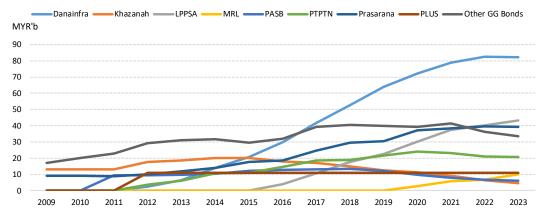
Source: BPAM, Maybank IBG Research

Figure 10: Danainfra Bond Net Issuance: 2012-2023 YTD



Source: BPAM, Maybank IBG Research

Figure 11: Outstanding GG Bonds by Issuer: 2009-Sep 2023



Source: BPAM, Maybank IBG Research

*Compilations based on the first issuance in MYR bond market. Not necessarily the year issuer first obtained GG because some GG recipients might have obtained GG loans earlier then only tap/refinance through the bond market later

GG Bond Supply Outlook

Going forward, the gross and net supply of GG bonds will depend on the progress of the existing projects, the availability of new projects, any change to the funding profile of regular issuers and whether the use of government guarantees will remain prudent to ensure fiscal sustainability.

- Projects: Ongoing infrastructure projects include ECRL (MYR75b), PBH Sabah (MYR15.7b) and potential new projects of MRT3, Penang LRT and Johor Bahru BRT. Tenders remain ongoing for MRT3 with tender validity being extended to end-2023. Budget 2024 mentioned Penang LRT at an estimated cost MYR10b but will be funded through PPP instead.
- Prudence: Repayments of GGs contributed to lower net supply. <u>Senai Airport Terminal</u> Services SB redeemed MYR330m GG notes early in Dec 2022. <u>Turus Pesawat</u> repaid MYR500m in 2022 and another MYR625m in 2023. Additionally, more GG recipients issue rated bonds instead without government guarantee. <u>Johor Corp</u> refinanced its last outstanding GG of MYR1.8b in 2022 with a new AAA programme. SME Bank established a MYR3b IMTN programme in 2021 equivalent to its GG size and has since shifted to issuing only rated bonds. Khazanah and PLUS, previously among the major recipients of GG, possess sound financials and likely don't require government guarantees for refinancing.

Figure 12: Some GG Issuers Shifted Issuance to Rated Bonds

Issuer	GG Bon	ds Outstanding (MYR'b)	R	Rated Bonds Outstanding (MYR'b)					
	End-2018	End-Sep 2023	Change	Rating	End-2018	End-Sep 2023	Change			
Bakun Hydro Power Generation Sdn Berhad	1.0	1.0	0.0	AAA	5.5	3.7	-1.9			
Bank Pembangunan Malaysia Berhad	3.9	2.7	-1.2	AAA	0.0	5.2	5.2			
Johor Corporation	2.6	0.0	-2.6	AAA	0.0	3.1	3.1			
Pelabuhan Tanjung Pelepas Sdn Berhad	1.7	0.2	-1.5	AA2	0.0	2.1	2.1			
Pengurusan Air SPV Berhad	13.3	6.1	-7.2	AAA	0.0	13.9	13.9			
Small Medium Enterprise Development Bank Malaysia	1.8	1.1	-0.7	AAA	0.0	2.0	2.0			

Source: BPAM, Maybank IBG Research

^{**}Full name of issuer on Figure 8

GG Bond: Maturity Profile Manageable

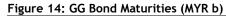
The maturities are well staggered over the long term (Figure 14). Refinancing risk is manageable. For 4Q23, GG maturities amounted to MYR2.4b from Danainfra, LPPSA and Prasarana. Next year, maturities total about MYR18b, of which almost MYR5b is not expected to be refinanced via GG: Bank Pembangunan (MYR0.5b), GovCo (MYR1b), Khazanah (MYR2.5b), SME Bank (MYR0.4b) and Turus Pesawat (MYR0.5b); Danainfra (MYR3.2b) and Prasarana (MYR2.1b) maturities likely require refinancing unless allocated with sufficient funds from the Budget, while LPPSA (MYR1.5b), PTPTN (MYR3.3b), PASB (MYR1b) and PR1MA will depend on their funding profiles and whether budget allocation is available for PR1MA, in our view.

Figure 13: List of GG Maturities in 4Q23 and 2024

Month	Issuer	Amount (MYR'm)	Date
	DanaInfra Nasional Berhad	400	20/10/2023
October 2023 November 2023 December 2023 February 2024 March 2024 April 2024 May 2024 June 2024 July 2024 August 2024 September 2024 October 2024	DanaInfra Nasional Berhad	500	31/10/2023
	Lembaga Pembiayaan Perumahan Sektor Awam	550	31/10/2023
November 2023	Lembaga Pembiayaan Perumahan Sektor Awam	450	6/11/2023
December 2023	Prasarana Malaysia Berhad	500	4/12/2023
February 2024	GovCo Holdings Berhad	625	22/2/2024
	DanaInfra Nasional Berhad	370	21/3/2024
	Khazanah Nasional Berhad	1,500	20/3/2024
March 2024	Perbadanan Tabung Pendidikan Tinggi Nasional	780	14/3/2024
	Perbadanan Tabung Pendidikan Tinggi Nasional	1,800	28/3/2024
	Prasarana Malaysia Berhad	500	12/3/2024
	Small Medium Enterprise Development Bank Malaysia	400	22/3/2024
	DanaInfra Nasional Berhad	500	19/4/2024
April 2024	Lembaga Pembiayaan Perumahan Sektor Awam	300	11/4/2024
	Lembaga Pembiayaan Perumahan Sektor Awam	500	17/4/2024
May 2024	DanaInfra Nasional Berhad	700	24/5/2024
June 2024	Pengurusan Air SPV Berhad	1,000	6/6/2024
July 2024	DanaInfra Nasional Berhad	500	19/7/2024
July 2024	DanaInfra Nasional Berhad	400	24/7/2024
August 2024	Khazanah Nasional Berhad	1,000	27/8/2024
	Bank Pembangunan Malaysia Berhad	500	12/9/2024
	GovCo Holdings Berhad	400	27/9/2024
September 2024	Lembaga Pembiayaan Perumahan Sektor Awam	700	6/9/2024
	Prasarana Malaysia Berhad	800	13/9/2024
	Prasarana Malaysia Berhad	500	27/9/2024
October 2024	PR1MA Corporation Malaysia	1,750	18/10/2024
	DanaInfra Nasional Berhad	700	15/11/2024
November 2024	Prasarana Malaysia Berhad	300	13/11/2024
	Turus Pesawat Sdn Berhad	500	19/11/2024
December 2024	Perbadanan Tabung Pendidikan Tinggi Nasional	700	20/12/2024

Sources: BPAM, Maybank IBG Research

*As of 30 Sep



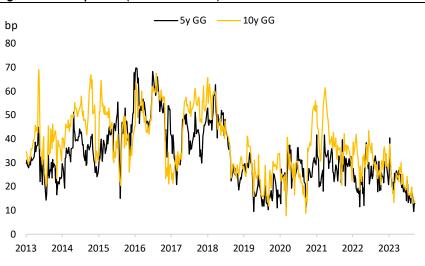


Source: BPAM, Maybank IBG Research

GG Credit Spreads: Hitting the Floor

GG spreads have compressed by 10-15bp YTD to low-teen levels. Pre-pandemic, the spreads averaged 28bp in 2019. Pension funds, banks and life insurance companies are usually the main anchor due to their inherent demand for high quality assets and more favourable regulatory credit risk charge for GG than rated corporate bonds, although we believe some are deterred by the tight spreads. AMC participation is likely low without the yield appeal. In PDS, GG bonds remain the main source of long duration supply as corporates tend to issue short to medium tenors ($\leq 10y$) and project financing bond supply has fallen in recent years. Overall, supply technical has been supportive for GG, but we think c.10bp should set the floor for GG spread, otherwise it would trade on par with GIIs which are direct obligations of the government on credit risk and typically more liquid with primary dealers as market makers.

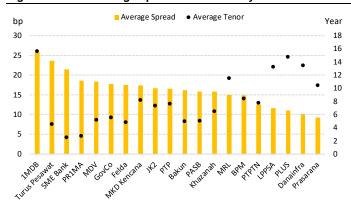
Figure 15: GG Spreads (2015-2023 YTD)



Source: BPAM, Maybank IBG Research

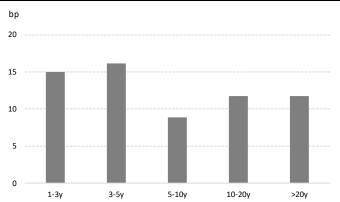
By issuer, Danainfra and Prasarana spreads are the tightest at around 10bp on average out of the 20 GG names, while 1MDB spread screens wide at slightly above 25bp based on BPAM marked levels (Figure 16). Differentiations do exist among GG, although all carry an explicit government guarantee. But it is important to point out that the average spread differences in Figure 16 could be partly skewed by the duration profile of individual GG issuer, as shorter-tenor spreads tend to be wider (Figure 17).

Figure 16: GG: Average Spread and Tenor by Issuer



Source: BPAM, Maybank IBG Research *Full name of issuer on Figure 8

Figure 17: GG: Average Spread by Tenor Sector

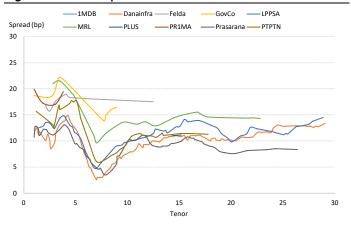


Source: BPAM, Maybank IBG Research

On primary issuances this year, six regular issuers successfully priced GG bonds with a clear tightening trend from >20bp in January to slightly >10bp recently (Figure 19). A large majority was sold through private placements rather than book-buildings amid healthy demand and reduced supply. For the book-building issuances this year, the book cover ratio is understood averaging close to 2x.

Foreign demand, however, is typically low in PDS with the overall foreign holdings at MYR13b/1.6% of total outstanding which we believe concentrate largely in GG names many of which are constituents in the iBoxx Asia Local Bond Index.

Figure 18: Credit Spread: Select GG Issuer Curves



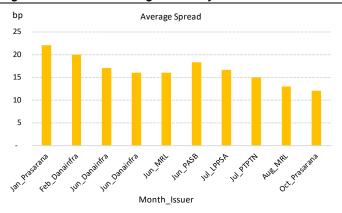
Source: BPAM, Maybank IBG Research *Full name of issuer on Figure 8

Figure 20: PASB Credit Spread: GG vs. AAA



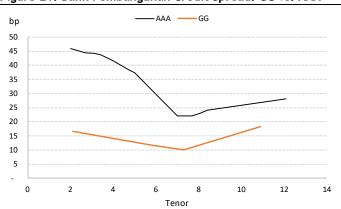
Source: BPAM, Maybank IBG Research

Figure 19: GG Bond Pricing in Primary Issuance 2023 YTD



Source: Maybank IBG Research (Month refers to issue month) *Full name of issuer on Figure 8

Figure 21: Bank Pembangunan Credit Spread: GG vs. AAA



Source: BPAM, Maybank IBG Research

Secondary Liquidity: Varies by GG Name

By rating sector, the trading volume of GG totaled MYR26.1b in 9M23, lower than MYR46.5b for AAA but similar to MYR26.2b for AA segment based on our compilations. Measured by turnover ratio (volume divided by average outstanding) which we annualized using 9M23 data, GG was less active at 14% vs. 29% for AAA and 19% for AA compared to 26% in 2020, based on our computations.

Figure 22: PDS Secondary Volume by Rating: 9M23

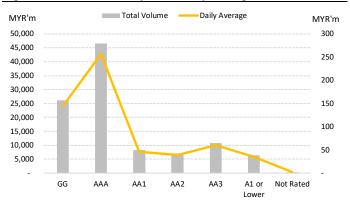
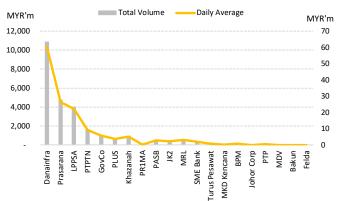


Figure 23: GG Secondary Volume by Issuer: 9M23

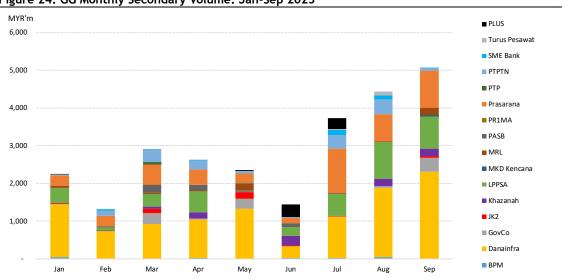


Source: BPAM, Maybank IBG Research *Full name of issuer on Figure 8

Source: BPAM, Maybank IBG Research

Liquidity by GG Issuer. Danainfra is the most actively traded based on total volumes, followed by Prasarana, LPPSA, PTPTN, GovCo and PLUS. The turnover ratio of these frequently traded names mostly ranged between 8-18%, while GovCo is slightly higher. Some names are not traded. It is unclear whether the decline in GG trading volume was partly due to increased issuance of bonds through private placements, which may be tightly held by a smaller group of investors especially if the bonds are intended to be held to maturity.

Figure 24: GG Monthly Secondary Volume: Jan-Sep 2023



Source: BPAM, Maybank IBG Research *Full name of issuer on Figure 8

Figure 25: GG Secondary Trading Volume and Turnover Ratio: 2021-2023

Januar Nama	Total	Volume (MYR	'm)	To	urnover Ratio		Average Vo	lume Per Day	(MYR'm)
Issuer Name	2021	2022	2023	2021	2022	2023	2021	2022	2023
Danainfra	10,295	9,225	10,926	14%	11%	18%	41.7	38.0	60.4
Prasarana	5,923	7,015	4,774	16%	18%	16%	24.0	28.9	26.4
LPPSA	2,951	1,972	4,015	9%	5%	13%	11.9	8.1	22.2
PTPTN	5,017	1,145	1,644	21%	5%	10%	20.3	4.7	9.1
GovCo	1,185	1,472	1,015	18%	29%	30%	4.8	6.1	5.6
PLUS	395	1 <i>,</i> 575	652	4%	14%	8%	1.6	6.5	3.6
Khazanah	585	670	935	6%	9%	23%	2.4	2.8	5.2
PR1MA	1,650	510	5	44%	13%	0%	6.7	2.1	0.0
PASB	994	467	516	11%	6%	11%	4.0	1.9	2.9
JK2	610	189	402	13%	4%	12%	2.5	0.8	2.2
MRL	192	207	544	4%	3%	9%	0.8	0.9	3.0
SME Bank	401	142	321	22%	10%	39%	1.6	0.6	1.8
Turus Pesawat	252	317	130	5%	6%	4%	1.0	1.3	0.7
MKD Kencana	380	75	30	10%	2%	1%	1.5	0.3	0.2
BPM	21	207	155	1%	6%	7%	0.1	0.9	0.9
PTP	40	10	60	17%	4%	33%	0.2	0.0	0.3
MDV	100	-	-	10%	0%	0%	0.4	0.0	0.0
Bakun	55	10	-	6%	1%	0%	0.2	0.0	0.0
Felda	55	-	-	4%	0%	0%	0.2	0.0	0.0

Source: BPAM, Maybank IBG Research *Full name of issuer on Figure 8 **2023 turnover ratio is annualised using 9M23 data

Appendix

Figure 26: List of GG Issuer: Outstanding Bonds

Sector	GG Issuer	Amount (MYR'b)
Airport/Port	Pelabuhan Tanjung Pelepas Sdn Berhad	0.2
Development Financial	Bank Pembangunan Malaysia Berhad	2.7
Institution (DFI)	Small Medium Enterprise Development Bank Malaysia Berhad	1.1
LPPSA, PTPTN	Lembaga Pembiayaan Perumahan Sektor Awam	43.3
LFF3A, FIFTIN	Perbadanan Tabung Pendidikan Tinggi Nasional	20.7
Green Power	Bakun Hydro Power Generation Sdn Berhad	1.0
	1Malaysia Development Berhad	5.0
	Federal Land Development Authority	2.7
Public Finance	GovCo Holdings Berhad	4.3
Public Finance	Khazanah Nasional Berhad	4.5
	Malaysia Debt Ventures Berhad	0.5
	MKD Kencana Sdn Berhad	3.2
	DanaInfra Nasional Berhad	82.2
Rail	Malaysia Rail Link Sdn Berhad	8.9
	Prasarana Malaysia Berhad	39.4
Real Estate	PR1MA Corporation Malaysia	3.8
Toll road	Jambatan Kedua Sdn Berhad	4.3
iott road	Projek Lebuhraya Usahasama Berhad	11.0
Transportation	Turus Pesawat Sdn Berhad	4.2
Water	Pengurusan Air SPV Berhad	6.1
Sources: BPAM, Maybani	k IBG Research	

*As of end-Sep 2023

Figure 27: List of GG Issuer: Profile and Debt Programme

Issuer	Sector	Profile	Facility Code	Programme	Use of proceeds	Outstanding Amount (MYR m)	Facility Limit (MYR m)	Maturity Date
1Malaysia Development Berhad (1MDB)	Public Finance	1MDB is an insolvent strategic development company entirely owned by the Minister of Finance (Incorporated). It originally began as Terengganu Investment Authority (TIA) in February 2009 as a sovereign wealth fund supporting economic development in Terengganu, but was renamed 1MDB on 25 Sep 2009 as it was expanded into a federal entity. 1MDB's primary objective was to promote long-term economic development for Malaysia by establishing global partnerships and encouraging foreign direct investment.	200900028	1MDB RM5.0B IMTN	1MDB's investments, working capital and contributions to a foundation established for Terengganu's economic and welfare benefit.	5,000	5,000	27/05/2039



Bakun Hydro Power Generation Sdn Berhad (Bakun Hydro)	Infrastructure & Utilities	Bakun Hydro, established on 24 Jan 1994, owns and operates the 2,400MW Bakun hydroelectric plant. It holds a license from the Sarawak state government to construct and operate the plant, supplying electricity to Syarikat SESCO Bhd. Both companies share the same ultimate parent, Sarawak Energy Bhd which is the state's sole integrated electricity company. The plant is situated on the Balui River in the Upper Rajang River basin, 37km upstream from Belaga town.	201300061	BAKUN HYDRO RM1.0 BILLION SUKUK IJARAH	Finance the construction and development of the Bakun hydroelectric dam and related ancillary in Sarawak.	1,000	1,000	18/08/2034
Bank Pembangunan Malaysia Berhad (BPMB)	Financial	BPMB is a development financial institution owned by the government via the Minister of Finance (Incorporated). Its primary mandate is to offer medium to long-term financing to capital-intensive industries, including infrastructure, maritime, technology and oil and gas. Established on 28 Nov 1973, it commenced operations on 8 Jun 1974.	• 200600028_1 • 200600027_1 • 200000054	BPMB RM7.0B CONVENTIONAL MTN (Guaranteed) BPMB RM7.0B ISLAMIC MTN (Guaranteed) BPIMB \$2.5B INFRA. NOTES PROG.	For BPMB and its subsidiaries' working capital.	• 250 • 2,300 • 150	• 7,000 • 6,000 • 2,500	• 25/04/2036 • 25/04/2036 • 30/10/2025
DanaInfra Nasional Berhad (Danainfra)	Infrastructure & Utilities	Danainfra, wholly-owned by the Minister of Finance (Incorporated), was created on 3 Mar 2011 for the purpose of financing major infrastructure projects undertaken by the Malaysian government for public benefit. It was the Economic Council's decision on 14 Jun 2010 to form Danainfra in recognition of the need for an Infrastructure Financing Entity (IFE) to advise and secure funding for the MRT systems under My Rapid Transit project.	• 202100055 • 201700072 • 201200042	DANAINFRA NASIONAL RM7.6 BILLION GG ICP/IMTN PROGRAMME DANAINFRA RM15.8 BILLION GUARANTEED ICP/IMTN PROGRAMME DANAINFRA RM71.0 BILLION GUARANTEED ICP/IMTN PROGRAMME	 Fund expenditures related to the LRT3 project. Fund expenditures in relation to the Pan Borneo Highway project. Fund the development and operating costs of the Klang Valley MRT project. 	• 5,100 • 13,780 • 63,280	• 7,600 • 15,800 • 71,000	• 22/10/2071 • 25/10/2067 • 20/07/2062
Federal Land Development Authority (FELDA)	Public Finance	FELDA was founded on 1 Jul 1956 under the Land Development Ordinance of 1956. It is tasked to oversee land development and the resettlement of the rural poor into newly established regions (colonies, settlements or schemes) as well as assisting them in cultivating cash crops.	202100012	FELDA RM9.9 BILLION IMTN GG SUKUK MURABAHAH	Refinance existing and future borrowings, and fund working capital, capex and related sukuk costs.	2,720	9,900	24/03/2051
GovCo Holdings Berhad (GovCo)	Public Finance	GovCo is a subsidiary of the Minister of Finance (Incorporated) created with the specific objective of issuing MYR3b of Islamic Medium Term Notes (IMTN). The proceeds are utilized for GovCo's Shariah-compliant general purposes and covering the associated costs related to the IMTN programme.	201100005	GOVCO RM8.8B IMTN PROGRAMME	Fund GovCo's general purposes and related IMTN programme costs.	4,325	8,800	22/02/2036
Jambatan Kedua Sdn Berhad (JKSB)	Infrastructure & Utilities	JKSB was established on 9 Jul 2008 and is wholly- owned by the Minister of Finance (Incorporated). JKSB is the concessionaire of the Second Penang Bridge responsible for the construction, operation, management, and maintenance of the bridge, now known as Jambatan Sultan Abdul Halim Muadzam Shah. The bridge was officially opened on 1 Mar 2014, connecting Batu Kawan in Seberang Perai on the mainland to Batu Maung on Penang island.	201500024	JKSB 30 YRS RM4.6B IMTN	Finance all costs related to the operation and maintenance of the Second Penang Bridge, future capex, and refinance borrowings.	4,300	4,600	26/05/2045



Khazanah Nasional Berhad (Khazanah)	Public Finance	Khazanah is the strategic investment fund of the Malaysian government. Established on 3 Sep 1993, it is wholly-owned by the Minister of Finance (Incorporated). Khazanah serves a crucial role in promoting the nation's economic growth and making strategic investments on behalf of the government to support nation-building. It fosters the growth of selected strategic domestic industries and has investments spanning various sectors, including power, telecommunications, banking, automotive, property development, infrastructure, airport management, venture capital, and investment holding, both in Malaysia and abroad.	200600106	KHAZANAH BOND	Khazanah's general investment, refinancing and working capital needs.	4,500	20,000	30/12/2050
Lembaga Pembiayaan Perumahan Sektor Awam (LPPSA)	CAGA, LPPSA, PTPTN	LPPSA is a statutory body established on 1 Jan 2016 under the purview of Ministry of Finance. LPPSA takes over the responsibilities of the Housing Loan Division and acts as the exclusive provider of home financing for civil servants on behalf of the government.	201600043	LPPSA RM50.0B GUARANTEED ICP/IMTN PROGRAMME	Provide home financing for civil servants and capex funding.	43,250	50,000	21/09/2066
Malaysia Debt Ventures Berhad (MDV)	Public Finance	Established on 23 Apr 2002 and wholly-owned by the Minister of Finance (Incorporated), MDV is a financial supporter and development enabler for emerging technology sectors in Malaysia, including ICT, biotechnology and green technology. MDV's primary purpose is to address the funding gap faced by growing ICT companies that struggle to secure financing through the traditional channels. MDV's initial MYR1.6b funding was contributed by the Japan government through the Japan Bank for International Cooperation via the Ministry of Finance. In 2007, MDV received approval for a second fund of MYR2.5b from the Ministry of Finance.	201800045	MDV 20YRS RM1.0B IMTN	Shariah-compliant financing to companies in mandated sectors.	500	1,000	14/09/2038
Malaysia Rail Link Sdn Berhad (MRL)	Infrastructure & Utilities	MRL, under the Ministry of Finance, was established to oversee the East Coast Rail Link (ECRL) project which spans 640km linking the East Coast states of Kelantan, Terengganu and Pahang to Negeri Sembilan, Selangor and Putrajaya. At a speed of 160km/h, the ECRL will significantly reduce travel time between the East and West Coasts of Peninsular Malaysia.	• 202200033 • 202000019	MRL RM1.70 BILLION ICP/IMTN PROGRAMME MRL RM9.75 BILLION IMTN SUKUK MURABAHAH	Finance part of the ECRL construction costs and refinance borrowings.	• 1,700 • 8,250	• 1,700 • 9,750	• 07/07/2072 • 04/07/2070
MKD Kencana Sdn Berhad	Public Finance	MKD Kencana Sdn Berhad (MKD Kencana) was established to secure funding for project-related expenses and working capital needs associated with the development of Special Border Economic Zone in Kedah.		MKD KENCANA RM1.0 BILLION GG SUKUK PROGRAMME MKD KENCANA SB RM1.5 BILLION SUKUK PROGRAMME	Fund issuer's strategic investments and working capital, including proposed developments in Sedenak, Johor.	• 1,000 • 450	• 1,000 • 1,500	• 12/04/2041 • 27/04/2038
			201700062	MKD KENCANA SB RM3.4 BILLION SUKUK PROGRAMME	Finance costs related to the development of Special Border Economic Zone in Kedah.	1,750	3,400	02/10/2037



Pelabuhan Tanjung Pelepas Sdn Berhad (PTP)	Infrastructure & Utilities	PTP is primarily involved in constructing, operating, maintaining and managing Tanjung Pelepas Port, along with providing related port facilities and services. Major shareholders include MMC Corporation Bhd and APM Terminals B.V. The Minister of Finance (Incorporated) holds 100% of redeemable preference shares and 1 special share in PTP. Tanjung Pelepas Port, which commenced operations on 10 Oct 1999, is situated at the eastern mouth of the Pulai River in Johor.	201800056	PTP SUKUK MURABAHAH PROGRAMME	For Shariah-compliant capex.	240	600	01/11/2038
Pengurusan Air SPV Berhad (PASB)	Infrastructure & Utilities	PASB, founded on 3 Aug 2009 and wholly-owned by Pengurusan Aset Air Berhad (PAAB), is a specialized company created mainly to finance PAAB's acquisition of water assets in Peninsular Malaysia and Labuan as well as to fund the subsequent development of water operators' infrastructure in those states. PAAB was established on 5 May 2006 and is wholly-owned by the Minister of Finance (Incorporated) to restructure the water industry in Peninsular Malaysia and Labuan in accordance with the Water Services Industry Act 2006, enforced in Jan 2008. PAAB's role is to develop water infrastructure and secure necessary funding, allowing operators to concentrate on providing improved water quality and distribution services to end-users at more affordable rates.	201100003	PASB RM20.0B GOVT GUARANTEED IMTN PROGRAMME	Fund PAAB's acquisition of water assets.	6,070	20,000	08/02/2041
Perbadanan Tabung Pendidikan Tinggi Nasional (PTPTN)	CAGA, LPPSA, PTPTN	PTPTN is an agency under Malaysia's Ministry of Higher Education and was established on 1 July 1997 through the Perbadanan Tabung Pendidikan Tinggi Nasional Act 1997. Its primary role is to offer educational funding through study loans to students pursuing higher education in Malaysia.	• 202000043 • 201900010 • 201600036 • 201400014 • 201300023	PTPTN RM12.3 BILLION SUKUK PROGRAMME PTPTN- RM3.0 BILLION 30-YEARS IMTN SUKUK MURABAHAH PTPTN RM8.0B IMTN SUKUK MURABAHAH PROGRAMME ("GG SUKUK") PTPTN - RM5.0 BILLION 25-YEARS IMTN SUKUK MURABAHAH PTPTN RM2.5B Islamic Medium Term Notes ("Sukuk") Programme	Provide educational Shariah-compliant financing in accordance with the PTPTN Act, and to refinance borrowings.	• 5,300 • 3,000 • 7,000 • 3,800 • 1,630	• 12,300 • 3,000 • 8,000 • 5,000 • 2,500	• 27/10/2050 • 1/3/2049 • 27/7/2046 • 28/3/2039 • 28/2/2033
PR1MA Corporation Malaysia (PR1MA)	Real Estate	PR1MA was established by Perbadanan PR1MA Malaysia to secure financing for developing 89 PR1MA projects across the country, with the objective of constructing 500,000 homes for the middle-income population. PR1MA is an affordable housing initiative established under the PR1MA Act of 2012.	201700069	PR1MA RM5.0 BILLION SUKUK MURABAHAH	Fund costs related to identified housing projects and to refinance borrowings.	3,750	5,000	20/10/2037
Prasarana Malaysia Berhad (Prasarana)	Infrastructure & Utilities	Founded in 1998 and operational since 2002, Prasarana is government-owned and the owner- operator of the Malaysia's rail services. It oversees and manages the assets and operations	202100046202000007201700095201700055	PRASARANA RM17.0 BIL SUKUK MURABAHAH PROGRAMME PRASARANA RM3.5B SUKUK	Finance capex, operating expenses, working capital and other purposes of Prasarana subject to	5,7003,5005,70010,000	17,0003,5006,00010,000	25/08/205125/02/205027/12/204713/09/2047



		of several transportation services, including LRT networks, KL Monorail, MRT lines and stage bus services in Kuala Lumpur, Selangor, Penang and Pahang.	 201500056 201500005 201400011 201300063 201200067 200900050 	MURABAHAH PROGRAMME (2020) PRASARANA RM6.0B SUKUK MURABAHAH PROGRAMME (2017) PRASARANA RM10.0B SUKUK MURABAHAH PROGRAMME (2017) PRASARANA RM5.0B SUKUK MURABAHAH PROGRAMME (2015) PRASARANA RM2.0B SUKUK MURABAHAH PROGRAMME (2015) PRASARANA RM2.0B SUKUK MURABAHAH PROGRAMME (2015) PRASARANA RM2.0B SUKUK MURABAHAH PROGRAMME (2014) PRASARANA RM2.0B SUKUK IJARAH PROGRAMME (2013) PRASARANA RM2.0B SUKUK MURABAHAH PROGRAMME (2014) PRASARANA RM2.0B SUKUK MURABAHAH PROGRAMME PRASARANA RM2.0B SUKUK MURABAHAH PROGRAMME	government approval as well as for the refinancing of borrowings.	• 3,955 • 2,000 • 2,000 • 1,500 • 1,000 • 4,000	• 5,000 • 2,000 • 2,000 • 2,000 • 2,000 • 4,000	• 11/12/2045 • 24/03/2045 • 10/03/2034 • 29/08/2033 • 06/09/2027 • 28/09/2029
Projek Lebuhraya Usahasama Berhad (PLUS)	Infrastructure & Utilities	PLUS, jointly owned by UEM Group Bhd and EPF via PLUS Malaysia Bhd, was established on 27 Jul 2011 to consolidate various highway concessions. PLUS became the largest toll concessionaire domestically and one of the largest in Southeast Asia. Highways currently in its portfolio include North-South Expressway, New Klang Valley Expressway, Federal Highway Route 2, Seremban-Port Dickson Highway, North South Expressway Central Link, Second Link, Butterworth-Kulim Expressway, and Penang Bridge.	201200004	PLUS BERHAD RM11.0 BILLION GUARANTEED SUKUK PROGRAMME	Finance part of the purchase of highway concessionaires and rollover the GG sukuk.	11,000	11,000	31/12/2058
Small Medium Enterprise Development Bank Malaysia Berhad	Financial	Small Medium Enterprise Development Bank Malaysia Berhad (SME Bank) was established on 3 Oct 2005. It is a development financial institution in Malaysia supporting the continuous development and expansion of SMEs by providing a wide range of financial products and services tailored to their needs.	201200056	SME BANK RM3.0 BILLION SUKUK	For working capital requirements.	1,100	3,000	13/08/2032
Turus Pesawat Sdn Berhad (Turus Pesawat)	Transportation & Storage	Turus Pesawat is a specialized company created to issue the sukuk and provide financing to Malaysia Airlines Berhad (MAS) for the acquisition or refinancing of aircraft purchases. MAS is Malaysia's national airline and also engaged in aircraft maintenance, repair, overhaul, and aircraft handling.	201200079	TPSB RM5.311B SUKUK PROGRAMME	For MAS' acquisition or refinancing of aircraft purchases.	4,185	5,311	19/11/2032

Source: Company, BPAM, Maybank IBG Research

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