**ASIFMA** is an independent, regional trade association with over 80 member firms comprising a diverse range of leading financial institutions from both the buy and sell side including banks, asset managers, law firms and market infrastructure service providers. Together, we harness the shared interests of the financial industry to promote the development of liquid, deep and broad capital markets in Asia. ASIFMA advocates stable, innovative and competitive Asian capital markets that are necessary to support the region’s economic growth. We drive consensus, advocate solutions and effect change around key issues through the collective strength and clarity of one industry voice. Our many initiatives include consultations with regulators and exchanges, development of uniform industry standards, advocacy for enhanced markets through policy papers, and lowering the cost of doing business in the region. Through the GFMA alliance with SIFMA in the US and AFME in Europe, ASIFMA also provides insights on global best practices and standards to benefit the region.
## 1. Table of Contents

### 1. Table of Contents

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Table of Contents</td>
<td>i</td>
</tr>
<tr>
<td>2.1. G3 ex DM Asia: Total Issuance</td>
<td>3</td>
</tr>
<tr>
<td>2.2. G3 ex DM Asia: Total Outstanding</td>
<td>3</td>
</tr>
<tr>
<td>2.3. G3 ex DM Asia: HG Issuance</td>
<td>3</td>
</tr>
<tr>
<td>2.4. G3 ex DM Asia: HG Outstanding</td>
<td>3</td>
</tr>
<tr>
<td>2.5. G3 ex DM Asia: HY Issuance</td>
<td>3</td>
</tr>
<tr>
<td>2.6. G3 ex DM Asia: HY Outstanding</td>
<td>3</td>
</tr>
<tr>
<td>2.7. G3 ex DM Asia: Total Issuance by Country</td>
<td>4</td>
</tr>
<tr>
<td>2.8. G3 ex DM Asia: Total Outstanding by Country</td>
<td>4</td>
</tr>
<tr>
<td>2.9. G3 ex DM Asia: Total Issuance by Sector</td>
<td>4</td>
</tr>
<tr>
<td>2.10. G3 ex DM Asia: Total Outstanding by Sector</td>
<td>4</td>
</tr>
<tr>
<td>2.11. G3 ex DM Asia: HG Issuance by Rating</td>
<td>4</td>
</tr>
<tr>
<td>2.12. G3 ex DM Asia: HG Outstanding by Rating</td>
<td>4</td>
</tr>
<tr>
<td>2.13. G3 ex DM Asia: HY Issuance by Rating</td>
<td>5</td>
</tr>
<tr>
<td>2.14. G3 ex DM Asia: HY Outstanding by Rating</td>
<td>5</td>
</tr>
<tr>
<td>2.15. G3 ex DM Asia: Total Issuance by Tenor</td>
<td>5</td>
</tr>
<tr>
<td>2.16. G3 ex DM Asia: Outstanding by Remaining Tenor</td>
<td>5</td>
</tr>
<tr>
<td>2.17. Asia ex DM: Total Leveraged Loan Issuance</td>
<td>5</td>
</tr>
<tr>
<td>2.18. Asia ex DM: Total Leveraged Loan Issuance by Use of Proceeds</td>
<td>5</td>
</tr>
<tr>
<td>3. LCY Asia ex Developed Market Asia (Japan, Australia and New Zealand)</td>
<td>6</td>
</tr>
<tr>
<td>3.1. LCY ex DM Asia: Total Issuance</td>
<td>6</td>
</tr>
<tr>
<td>3.2. LCY ex DM Asia: Total Outstanding</td>
<td>6</td>
</tr>
<tr>
<td>3.3. LCY ex DM Asia: Issuance by Currency</td>
<td>6</td>
</tr>
<tr>
<td>3.4. LCY ex DM Asia: Issuance by Sector</td>
<td>6</td>
</tr>
<tr>
<td>3.5. LCY ex DM Asia: Outstanding by Country</td>
<td>6</td>
</tr>
<tr>
<td>4. All Asia</td>
<td>7</td>
</tr>
<tr>
<td>4.1. G3 All: Total Issuance</td>
<td>8</td>
</tr>
<tr>
<td>4.2. G3 All: Total Outstanding</td>
<td>8</td>
</tr>
<tr>
<td>4.3. G3 All: HG Issuance</td>
<td>8</td>
</tr>
<tr>
<td>4.4. G3 All: HG Outstanding</td>
<td>8</td>
</tr>
<tr>
<td>4.5. G3 All: HY Issuance</td>
<td>8</td>
</tr>
<tr>
<td>4.6. G3 All: HY Outstanding</td>
<td>8</td>
</tr>
<tr>
<td>4.7. LCY All: Total Issuance</td>
<td>9</td>
</tr>
<tr>
<td>5. China – Domestic</td>
<td>10</td>
</tr>
</tbody>
</table>
2. G3 Asia ex Developed Market Asia (Japan, Australia and New Zealand)

Market Overview and Highlights of Asia (ex-Japan, Australia and New Zealand) debt issuance in Third Quarter 2015

Total issuance in 3Q’15 came in at USD 26.4 billion (bn) as of September 30, down 58.2% quarter-over-quarter (qoq) from 2Q’15 (USD 63.3bn) and down 34.9% year-over-year (yoy), inclusive of high grade (HG), high yield (HY), and unrated deals. Year to date, issuance was USD 139.2 billion, comprised of USD 114.4bn HG issuance, USD 12.3bn HY issuance, and USD 13.4bn unrated issuance. General weakness in EM currencies including those of EM Asia, driven by a combination of USD strength and the renminbi devaluation, together with idiosyncratic factors (such as in the case of the MYR), have made Asian onshore issuance cheaper relative to offshore – driving this decline. In addition, a decline in risk appetite towards EM (and Asian) debt on the part of foreign investors and weakness in the commodity cycle, weighed on regional issuance. That said, Asian debt issuance volumes have fallen considerably less than elsewhere in EM (Brazil, for instance, has been especially hard hit).

Key highlights of the quarter were as follows:

1) HG issuance (of USD 21.4bn) easily outpaced HY issuance, which at USD 1.5bn fell to represent just 5.6% by dollar amount of total Asia ex-Japan, Australia and New Zealand debt issuance, down from 7.5% in the second quarter of 2015. HY issuance has been especially hard hit, as weakness in commodity prices has resulted in dramatically weaker credit profiles for companies in the Indonesian, India and China commodity space, while lingering concerns around the China property sector in the wake of the Kaisa default earlier this year had also undermined volumes.

2) Some of the other notable trends seen in the first half of the year continued, with China HG issuers, banks (especially those looking to shore up their capital base) and first time issuers in EUR (particularly from China) all tapping the markets during the quarter. Aggressive cuts in Chinese domestic interest rates should bring onshore CNY and offshore CNH rates into closer alignment.

3) In the LCY space, the favorable interest rate cycle in the region contributed to strong rallies in LCY bond markets, as falls in interest rates continued to underpin sentiment towards bonds. Higher yielding Asian currencies such as the INR continue to be in favour, as that country (like several others in Asia) is firmly in the midst of a rate-cutting cycle. The nascent internationalization of the INR, with the government announcing the opening of the “masala bond” market (offshore INR issuance by Indian corporates), could help underpin investor sentiment towards the Indian currency, going forward.

On a quarterly basis, Asian IG debt outperformed Asian HY paper, with HG paper reporting losses of 0.06% in 3Q’15, compared to a 3.33% loss in HY during the quarter.

State of the Asian leveraged loan market

Asian leveraged loan debt, excluding developed market Asia, reached USD 58.0bn in 3Q’15, a 9.9% decline qoq (USD 64.4bn) but a 1.5% increase yoy (USD 57.2bn). Leading sectors in 3Q’15 issuance were from transportation (USD 25.7bn), metal & steel (USD 8.4bn), and finance (USD 6.0bn). Sponsored loan deals rose by percentage, representing only 2.8% by dollar amount in the third quarter. Year to date, leveraged loan issuance was USD 182.4bn.
Key trends in Asia (ex-Japan, Australia and New Zealand) G3 & LCY bond issuance

For the third quarter 2015, total G3 issuance stood at USD 26.4bn, with HG transactions accounting for USD 21.4bn, HY issues accounting for USD 1.5bn, and unrated issues accounting for 3.5bn. China remains the largest issuing country in the third quarter, accounting for a total of USD 16.8bn, or 63.6%, of G3 issuance in 3Q’15, while USD 14.7bn and USD 770.3mn in HG and HY deals, respectively, were priced from China alone. South Korea continues to remain second in issuance volume with USD 3.5bn, followed by Indonesia with USD 1.7bn in issuance.

Finance remained the largest sector of G3 issuance in the third quarter (USD 10.2bn), followed by transportation (USD 3.1bn, and real estate (USD 2.5bn).

In terms of ratings, within the HG space, AA- transactions continued to account for the largest share of deals priced during the quarter, with USD 5.2bn in total issuance, followed by A transactions totaling USD 3.5bn and BBB- issuance with USD 3.1bn. Within HY issuance, the B category dominated with USD 900mn of issuance, followed by BB+-rated transactions (USD 300mn).

By tenor, Asia ex-Japan, Australia and NZ G3 deals with tenors of 5 years or less continued to account for the bulk of issuance in 3Q’15, with a total of USD 13.5bn in short tenor issues being priced during the quarter. Of these, USD 12.7bn in HG deals with the balance unrated.

Overall G3 debt outstanding in the region stood at USD 763.0bn, a growth of 1.2% qoq. High grade debt accounted for the bulk of total outstanding debt at USD 486.6bn (a 0.2% decline qoq), followed by HY debt at USD 159.8bn (a growth of 2.4% qoq) and NR debt at USD 116.6bn (a growth of 5.7% qoq). China (with USD 256.2bn), South Korea (with USD 122.4bn) and Hong Kong (with USD 106.9bn) remain the three countries with the largest shares of G3 debt outstanding. In terms of ratings, within the HG space, deals rated AA- (USD 100.6bn) accounted for the largest share of debt outstanding, while BB+ transactions (USD 69.8bn) dominated the deals outstanding in the HY space. By sector, financials with a total of USD 211.6bn accounted for a little over a quarter of outstanding G3 paper, followed by sovereigns (USD 175.6bn). Finally, deals with remaining tenors of 5 years or less (USD 424.3bn) accounted for the bulk of total Asia (ex-Japan, Australia and NZ) debt outstanding.

Finally, turning to the LCY debt markets, USD 184.7bn in total LCY-denominated debt was issued in Asia (ex-Japan, Australia & NZ) in 3Q’15, a decline of 4.2% qoq (USD 192.8bn) and 15.8% yoy (USD 40.6bn). Year to date, LCY issuance reached USD 492.9bn and is still on track to slightly exceed 2014 volumes. Total LCY debt outstanding at the end of 3Q’15 in Asia (ex-Japan, Australia and NZ) stood at USD 11.4tn, rising by 4.4% qoq, with HG and non-rated debt outstanding rising 35.0% and 0.3% qoq, respectively, while HY debt declined 2.3% qoq. China continues to account for the bulk of total outstanding LCY debt at USD 6.69tn, followed by India (USD 1.55tn) and South Korea (USD 1.40tn).
2.1. G3 ex DM Asia: Total Issuance

G3 ex DM Asia: Total Issuance
2007 - 2015:Q3

Source: Dealogic

2.2. G3 ex DM Asia: Total Outstanding

G3 ex DM Asia: Total Outstanding
2013:Q3 - 2015:Q3

Source: Bloomberg

2.3. G3 ex DM Asia: HG Issuance

G3 ex DM Asia: HG Issuance
2007 - 2015:Q3

Source: Dealogic

2.4. G3 ex DM Asia: HG Outstanding

G3 ex DM Asia: HG Outstanding
2013:Q3 - 2015:Q3

Source: Bloomberg

2.5. G3 ex DM Asia: HY Issuance

G3 ex DM Asia: HY Issuance
2007 - 2015:Q3

Source: Dealogic

2.6. G3 ex DM Asia: HY Outstanding

G3 ex DM Asia: HY Outstanding
2013:Q3 - 2015:Q3

Source: Bloomberg
2.7. G3 ex DM Asia: Total Issuance by Country

2.8. G3 ex DM Asia: Total Outstanding by Country

2.9. G3 ex DM Asia: Total Issuance by Sector

2.10. G3 ex DM Asia: Total Outstanding by Sector

2.11. G3 ex DM Asia: HG Issuance by Rating

2.12. G3 ex DM Asia: HG Outstanding by Rating
3. LCY Asia ex Developed Market Asia (Japan, Australia and New Zealand)

3.1. LCY ex DM Asia: Total Issuance

3.2. LCY ex DM Asia: Total Outstanding

3.3. LCY ex DM Asia: Issuance by Currency

3.4. LCY ex DM Asia: Issuance by Sector

3.5. LCY ex DM Asia: Outstanding by Country
4. All Asia

Total Issuance & Outstanding – G3 and LCY for Asia (including Japan, Australia and New Zealand)

Total G3 issuance in Asia (including Japan, Australia and New Zealand) stood at USD 92.2bn in the third quarter of 2015, a decline of 25.0% qoq and 26.2% yoy. Total HG G3 issuance in Asia (including Japan, Australia and New Zealand) was USD 54.0bn in 3Q’15, a decline of 34.9% qoq and 34.0% yoy. HY issuance was USD 5.9bn in 3Q’15, an increase of 20.1% qoq but a decline of 30.6% yoy. Unrated G3 issuance in Asia was USD 32.3bn in 3Q’15, a decline of 11.2% qoq and 6.7% yoy. Year to date, G3 issuance reached USD 346.3bn, on track to fall short of issuance volumes of 2014 (USD 487.3bn), comprised of USD 231.4bn HG issuance, USD 18.4bn HY issuance, and USD 98.4bn unrated issuance. Outstanding G3 debt, including developed market Asia, stood at USD 11.92tn at the end of third quarter 2015, a decline of 0.1% qoq, with declines in unrated debt (USD 2.3tn, 25.2% decline), but growth in HG debt (USD 9.4tn, a 8.8% growth) and HY debt (USD 211.4bn, 2.6% growth).

Finally, turning to LCY debt issuance, total HG issuance, including Japan, Australia, and New Zealand, stood at USD 285.1bn in the third quarter of 2015, while HY issuance and unrated issuance combined was USD 210.5bn, for a total of USD 495.7bn in issuance. Issuance for 3Q’15 was 1.5% above 2Q’15 (USD 488.6bn) but 15.4% below 3Q’14 (USD 586.3bn). Year to date, LCY issuance was USD 1.4tn, similarly on track to fall just shy of 2014 totals (USD 2.0tn).

In the current environment, USD strength together with across-the-board EM weakness (driven primarily by fears around a sharp Chinese economic slowdown) has combined to drive strong risk-aversion on the part of investors towards EM as an asset class, while developed markets have remained in the spotlight over the last several months.

However, in the short to medium term, we do feel that it is impossible for investors to ignore EM (and in particular, Asian) fixed income assets, particularly in the fixed income space. There are several factors which are supportive of Asian fixed income:

a) In the USD space, Asian investment grade and HY bonds still trade considerably wider than their European and US counterparts. So on a relative value basis, the attractiveness of Asian fixed income remains undiminished.

b) In large parts of the G3/hard currency world, where a sizeable universe of bonds yield not just 0% but are now trading at negative yields, investors will perforce be driven to seek high “absolute” yields in search of positive “total returns”. Fixed income instruments denominated in a number of Asian currencies offer yields that are comfortably positive – and not just in the higher risk/HY space (as alluded to earlier, INR fixed income assets are firmly in this category).

c) Finally, for investors interested in unhedged total returns, the reversal in EM currency weakness over the last few weeks (certainly in Asia), could serve as a catalyst to drive some inflows back to the region. The prospect of a positive currency return in addition to the carry, could prove too alluring for some classes of investors to resist – particularly those investors who are looking for “alpha” in a yield-constrained context and who remain convinced on the prospects for longer term Asian economic growth.
4.1. G3 All: Total Issuance

4.2. G3 All: Total Outstanding

4.3. G3 All: HG Issuance

4.4. G3 All: HG Outstanding

4.5. G3 All: HY Issuance

4.6. G3 All: HY Outstanding

Source: Dealogic

Source: Bloomberg
4.7. LCY All: Total Issuance

LCY All: Total Issuance in Asia
2007 - 2015 Q3

Source: Dealogic
5. China – Domestic

Total Issuance & Outstanding – Domestic CNY issuance

Total domestic CNY issuance stood at USD 143.2bn in the third quarter of 2015, similar to second quarter volume (USD 140.4bn) but still a decline of 9.5% yoy (USD 158.2bn); year to date, domestic issuance reached USD 354.8bn, still on track to be significantly below 2014 volumes (USD 498.7bn). By tenor, 60.2% of third quarter issuance (USD 86.2bn) would mature in five years or less, followed by the 7 – 10 year bucket (USD 28.4bn, or 19.8% of issuance). By sector, finance led issuance totals (USD 38.7bn), followed by real estate (USD 28.2bn).

Outstanding domestic CNY debt stood at USD 6.57tn at the end of third quarter 2015, with sovereigns leading totals (USD 3.75tn), followed by financials (USD 1.35tn) and industrials (USD 554.0bn).

Looking ahead, we expect domestic Chinese bond issuance to be strong going into 2015 Q4:

1) The most recent cut in rates will further boost the attractiveness of the onshore bond markets which are cheap relative to costs in a) the offshore debt market and b) the onshore loan market.
2) The property sector should continue to be a beneficiary of this more favorable rate environment – The PRC regulatory authorities’ relaxation of onshore borrowing, coupled with favorable funding costs, should see this sector continue to issue onshore – also, there is evidence that the property cycle may be turning for the better in China, with several cities reporting property price increases.
3) Banks continuing needs for capital (given both strong deposit/asset growth and an increase in NPLs) should see banking sector domestic issuance continue strong.
4) Increased onshore access has been given to certain classes of offshore investors such as Central Banks and international multilateral institutions (among others). Expectations of further liberalization should be supportive of onshore debt issuance.
5) There are hints of the potential opening of the panda bond market (onshore bond issuance by offshore corporates), following the successful launch of two panda bond issues by HK-based financial institutions. The further liberalization of rules allowing foreign corporates to raise funds in the domestic China bond market is also likely to give a further boost to the onshore CNY bond market.

5.1. Domestic CNY All: Total Issuance

[Graph showing domestic CNY issuance from 2008 to 2015 Q3]

5.2. Domestic CNY All: Total Outstanding

[Graph showing domestic CNY outstanding from 2014 Q1 to 2015 Q3]
5.3. Domestic CNY All: Issuance by Rating

5.4. Domestic CNY All: Outstanding by Rating

5.5. Domestic CNY All: Issuance by Tenor

5.6. Domestic CNY All: Outstanding by Remaining Tenor

5.7. Domestic CNY All: Issuance by Sector

5.8. Domestic CNY All: Outstanding by Sector
6. China – CNH

Key trends in offshore renminbi (CNH) and the dim sum bond markets

The pace of issuance continued to slow down on both a qoq and a yoy basis in the third quarter. For the third quarter of 2015, an equivalent of USD 3.8 bn in CNH bonds were issued, a decline of 56.7% qoq and 57.6% yoy. Year to date, issuance has reached USD 20.6bn, not even half of 2014 totals (USD 42.1bn). In terms of tenor, nearly all of third quarter 2015 issuance (USD 3.7 bn) was accounted for by transactions with tenors of 5-year years or less. HG deals rated AA totaling USD 1.1bn had the highest share among rated deals (28.4%). In 3Q’15, finance sector transactions totaling USD 3.1bn accounted for the largest volume of deals by sector (80.7%), followed by real estate, totaling USD 376.7mn (representing 9.8% of issuance).

The total of dim sum bonds outstanding stands at USD 97.43bn, an increase of 2.8% qoq. A combination of factors has served to undermine dim sum bond issuance in Hong Kong this quarter, with the one-off devaluation of the renminbi in August serving as yet another catalyst for the drop in CNH bond issuance. With investors realizing that the Chinese currency is likely to be subject to more frequent two-way moves, they moved quickly to sell off offshore renminbi assets, which had the effect of sharply increasing the yield on dim sum bonds. Furthermore, the uncertain macroeconomic environment in China took its toll on both stocks and bonds. Finally, with offshore CNH liquidity drying up (the RMB deposit base in HK has been stagnant), the quickest way for investors to raise cash was through the sale of dim sum assets.

That said, contrarian investors are likely to be rewarded longer term, especially if the Chinese currency stabilizes. Moreover, as the RMB internationalizes, the focus of Chinese offshore bond issuance is likely to shift elsewhere, such as Taiwan, where the Formosa bond market has shown strong growth and London, where the PBOC concluded its first ever RMB-denominated transaction. In the fullness of time, however, as access to onshore CNY assets is progressively granted to more classes of investors, the gradual convergence between the onshore CNY and the offshore CNH/dim sum bond markets is set to continue. The possible inclusion of the CNY in the SDR basket, potentially as early as 2016, could help accelerate this process.

6.1. CNH All: Total CNH Issuance

The total of dim sum bonds outstanding stands at USD 97.43bn, an increase of 2.8% qoq. A combination of factors has served to undermine dim sum bond issuance in Hong Kong this quarter, with the one-off devaluation of the renminbi in August serving as yet another catalyst for the drop in CNH bond issuance. With investors realizing that the Chinese currency is likely to be subject to more frequent two-way moves, they moved quickly to sell off offshore renminbi assets, which had the effect of sharply increasing the yield on dim sum bonds. Furthermore, the uncertain macroeconomic environment in China took its toll on both stocks and bonds. Finally, with offshore CNH liquidity drying up (the RMB deposit base in HK has been stagnant), the quickest way for investors to raise cash was through the sale of dim sum assets.

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6.2. CNH All: Total Outstanding
6.3. CNH All: Issuance by Rating

6.4. CNH All: Outstanding by Rating

6.5. CNH All: Issuance by Tenor

6.6. CNH All: Outstanding by Remaining Tenor

6.7. CNH All: Issuance by Sector

6.8. CNH All: Outstanding by Sector
7. Spreads, Credit & Total Return

Relative Value and returns (Asia ex-Japan, Australia & New Zealand G3)

In a trend consistent with previous quarters, Asian bonds continue to trade wider than their US and European counterparts. At the end of 3Q’15, Asian HG bonds on a composite basis were quoted at an average spread of 201 basis points (bps), while US and European HG bond issues were quoted at average spreads of 178 bps and 145 bps respectively. Likewise, in the HY space, Asian HY corporates were quoted at a composite spread of 775 bps, but US and European HY bonds were tighter at 662 bps and 555 bps respectively.

In terms of total return in the third quarter, Australia and global corporate credit led returns, followed by US and Japanese corporate credit, while stocks and commodities generally underperformed. Asian HG lost 0.06% in the third quarter, while HY indices lost all gains in the second quarter, losing 3.33%. Going into the quarter, we did hold the view that the defensive HG sector would outperform HY (See Asia Credit Report, Second Quarter 2015) and that has most definitely occurred – The reasons for this outperformance were a combination of a) continuing expectations of a US rate increase by the end of 2015, which would have the effect of supporting the more defensive HG names at the expense of the riskier HY issues and b) idiosyncratic factors pertaining to HY issues in the Chinese property and Asian commodities sectors, which at the time were beset by serious weakness.

What is significant though, is that the Chinese property sector has shown some signs of revival, which has had a positive impact on Chinese HY issues which have rallied as the fourth quarter has got under way – while the outlook for commodities continues to be mixed to weak. Under these circumstances, we do believe that select HY issues with strong credit profiles could finally begin to perform – investors looking for alpha generally should benefit by switching into HY selectively, while still maintaining a reasonable level of defensiveness, given that the prospects of an imminent US rate hike still remain on the table. Overall though, longer term, Asian credit should outperform over the full economic cycle (regardless of short term headwinds) – growth prospects for the region remain strong and as can be seen above, Asian credits across the board trade wider than their US and European counterpart – so on a Relative Value (RV) basis as well, Asian credits should find favor among the wider investing community.

7.1. Global HG Corporate Spreads

7.2. Global HY Corporate Spreads
7.3. China Interbank AAA - BBB Corps Fixed Rate Curve

China Interbank AAA - BBB Corps Fixed Rate Curve
September 30, 2015

7.4. CNH HG Yield Curve

CNH HG Yield Curve

7.5. CNH HY Yield Curve

CNH HY Yield Curve

7.6. CNH NR Yield Curve

CNH NR Yield Curve

7.7. Global Returns, Quarter-End

Total Return (Global)
2015: Q3

7.8. Global Returns, 2015 Year to Date

Total Return (Global)
2015 YTD
7.9. Asia Upgrades / Downgrades ex DM Asia

7.10. Asia Upgrades / Downgrades, DM Asia

7.11. Asian Upgrades & Downgrades, Standard & Poor’s, Third Quarter 2015

<table>
<thead>
<tr>
<th>Upgrades</th>
<th>Country</th>
<th>Date</th>
<th>Rating</th>
</tr>
</thead>
<tbody>
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<td>Japan</td>
<td>7/15/2015</td>
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<tr>
<td>Boart Longyear Ltd.</td>
<td>Australia</td>
<td>7/15/2015</td>
<td>CCC+</td>
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<td>Toyota Tsusho Corp.</td>
<td>Japan</td>
<td>7/30/2015</td>
<td>A+</td>
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<td>Republic of Korea</td>
<td>Korea, Republic of</td>
<td>9/15/2015</td>
<td>AA</td>
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<td>Korea National Oil Corp. (Republic of Korea)</td>
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<td>9/30/2015</td>
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<td>CITIC Group Corp</td>
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</table>

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<thead>
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<td>Viva Industrial REIT</td>
<td>Singapore</td>
<td>7/24/2015</td>
<td>BB</td>
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<td>PT Japfa Comfeed Indonesia Tbk</td>
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<td>Greenland Holding Group Company Ltd.</td>
<td>China</td>
<td>8/19/2015</td>
<td>BBB-</td>
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<td>Woodworths Ltd.</td>
<td>Australia</td>
<td>8/27/2015</td>
<td>BBB+</td>
</tr>
<tr>
<td>EMECO Holdings Ltd.</td>
<td>Australia</td>
<td>8/28/2015</td>
<td>B-</td>
</tr>
<tr>
<td>Tronox Ltd.</td>
<td>Australia</td>
<td>9/1/2015</td>
<td>BB</td>
</tr>
<tr>
<td>Toshiba Corp.</td>
<td>Japan</td>
<td>9/9/2015</td>
<td>BBB-</td>
</tr>
<tr>
<td>Anatec Global Technologies Pte Ltd.</td>
<td>Singapore</td>
<td>9/15/2015</td>
<td>CCC+</td>
</tr>
<tr>
<td>Japan</td>
<td>Japan</td>
<td>9/16/2015</td>
<td>A+</td>
</tr>
<tr>
<td>Shariah Central Bank</td>
<td>Japan</td>
<td>9/17/2015</td>
<td>A</td>
</tr>
<tr>
<td>Nomitchakin Bank</td>
<td>Japan</td>
<td>9/17/2015</td>
<td>A</td>
</tr>
<tr>
<td>Sumitomo Mitsui Trust Bank Ltd. (Sumitomo Mitsui Trust Holdings)</td>
<td>Japan</td>
<td>9/17/2015</td>
<td>A</td>
</tr>
<tr>
<td>Sumitomo Mitsui Financial Group Inc.</td>
<td>Japan</td>
<td>9/17/2015</td>
<td>A-</td>
</tr>
<tr>
<td>Development Bank of Japan Inc.</td>
<td>Japan</td>
<td>9/17/2015</td>
<td>A</td>
</tr>
<tr>
<td>Mizuho Financial Group Inc.</td>
<td>Japan</td>
<td>9/17/2015</td>
<td>A-</td>
</tr>
<tr>
<td>Japan Housing Finance Agency</td>
<td>Japan</td>
<td>9/17/2015</td>
<td>A+</td>
</tr>
<tr>
<td>Tokio Marine &amp; Nichido Fire Insurance Co. Ltd. (Tokio Marine Holdings Inc.)</td>
<td>Japan</td>
<td>9/17/2015</td>
<td>A+</td>
</tr>
<tr>
<td>MassMutual Life Insurance Co.(Massachusetts Mutual Life Insurance Co.)</td>
<td>Japan</td>
<td>9/17/2015</td>
<td>A+</td>
</tr>
<tr>
<td>Narita International Airport Corp.</td>
<td>Japan</td>
<td>9/17/2015</td>
<td>A+</td>
</tr>
<tr>
<td>Okinawa Electric Power Co. Inc.</td>
<td>Japan</td>
<td>9/17/2015</td>
<td>A+</td>
</tr>
<tr>
<td>Electric Power Development Co. Ltd</td>
<td>Japan</td>
<td>9/17/2015</td>
<td>A-</td>
</tr>
<tr>
<td>Seven Bank Ltd. (Seven &amp; I Holdings Co. Ltd.)</td>
<td>Japan</td>
<td>9/18/2015</td>
<td>A+</td>
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7.12. Asian Defaults, Standard & Poor’s, Third Quarter 2015

<table>
<thead>
<tr>
<th>Defaults</th>
<th>Country</th>
<th>Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>PT Berau Coal Energy Tbk</td>
<td>Indonesia</td>
<td>Metals and mining</td>
</tr>
</tbody>
</table>
8. Summary of the Methodologies Adopted for this Report

2. G3 Asia ex Developed Market Asia (Japan, Australia, and New Zealand)

Issuance

Bond transactions are sourced primarily from Dealogic, with supplemental information sourced from Bloomberg. Unless otherwise noted, all issuance are long-term debt. High grade transactions are defined as transactions with a Dealogic “effective” rating of equal or greater than BBB-, and may include unrated transactions based on issuer and desk notes. High yield transactions are defined as transactions with a Dealogic “effective” rating of equal or less than BB+, and may also include unrated transactions based on issuer and desk notes. Unrated deals are those deals with no effective rating from Dealogic.

“All Asia” issuance are defined as being a corporate bond issue having a Dealogic “deal nationality” as within Asia, regardless of market, including domestic. Sovereign, sub-sovereign, medium-term notes, and agencies are also included from issuance, while supranational and ABS/MBS issuers are excluded from issuance. Loans are excluded from issuance as well.

“DM”, or Developed Market Asia, include those deals with a Dealogic deal nationality from Australia, Japan, and New Zealand. “Ex DM Asia” will refer to all deals excluding those deals with a Dealogic deal nationality from Australia, Japan, and New Zealand.

G3 deals are defined a subset of deals in “All Asia” that are rank eligible, according to Dealogic’s rank eligibility guidelines, with a tranche currency in US dollar (USD), European euro (EUR), or Japanese yen (JPY). There may exist deals within “All Asia” issuance that are denominated in a G3 currency but are not rank eligible and therefore not included in G3 tables but may be included in all other non-G3 exclusive tables.

“LCY”, or local currency, are defined as a subset of deals in “All Asia” flagged by Dealogic local currency flag. G3 and LCY deals are not mutually exclusive and may overlap (e.g., in the case of Japanese JPY deals).

All issuance are denoted in USD equivalents based on exchange rates as of the issue date of the bond.

Outstanding

 Outstanding figures are sourced from Bloomberg and contain all bonds from its corporate securities database, including private placements. Structured notes and debt secured by assets are excluded. All other criteria hew closely to the criteria for issuance.

All outstandings are denoted in USD equivalent based on exchange rates as of quarter-end.

Outstanding G3 deals are defined a subset of deals in “All Asia” that are rated with at least one rating by one of the four rating agencies: Fitch Ratings, Moody’s, Standard & Poor’s, or DBRS; and denominated in US dollar (USD), European euro (EUR), or Japanese yen (JPY). Deals that are not rated by one of the four rating agencies (those deals with a Bloomberg composite rating of “NA”) are excluded. The “NA” exclusion is due to overlap between rank ineligible deals and those deals with no rating; a close analysis of the data reveals that the figures for data excluding “rank ineligible” deals and the figures for data excluding data rated N.A. in Bloomberg are similar.
2.1, 2.3, 2.5, 2.7, 2.9, 2.11, 2.13, 2.15, 2.17, 2.18.

Data are sourced from Dealogic.

Issuance by country is determined by Dealogic’s deal nationality.

Issuance by tenor is determined by years of maturity at issuance.

Issuance by sector is defined by Dealogic’s General Industry Group (“GIG”) groupings and are not analogous to Bloomberg’s Sector grouping.

2.2, 2.4, 2.6, 2.8, 2.10, 2.12.

Data are sourced from Bloomberg.

 Outstanding by rating are by current composite rating assigned by Bloomberg. Composite ratings by Bloomberg are the average of ratings assigned by Moody’s, Standard & Poor’s, Fitch Ratings, and DBRS; a minimum of two ratings must be given to a bond before a composite rating is generated. “NR” denotes a bond with a single rating assigned by the four rating agencies, whereas “NA” denotes a bond with no rating from any of the four.

Outstanding by tenor are based on current tenor as quarter-end. “Other” includes those bonds with no listed maturity date and perpetu als.

3. LCY Asia ex Developed Market Asia (Japan, Australia and New Zealand)

3.1 - 3.4.

Issuance data are sourced from Dealogic according to the criteria outlined in Section 1. Outstanding data are sourced from Bloomberg according to the criteria outlined in Section 1.

4. All Asia

4.1 – 4.9.

Issuance data are sourced from Dealogic according to the criteria outlined in Section 1. Outstanding data are sourced from Bloomberg according to the criteria outlined in Section 1.

5. Domestic CNY

Issuance

Bond transactions for CNY are sourced from Dealogic and are defined as all issued debt denominated in renminbi (CNY) and in the domestic debt markets. CNY-denominated deals issued in the euro, foreign, or international markets are excluded. There are no restrictions on deal type and will include supranationals, medium-term notes, money market notes, securitisations, and commercial paper debt. Due to the lower restrictions in CNY issuance, CNY-denominated deals outside of Section 5 and 6 are a subset of the deals contained in Section 5 and 6.

Outstanding

Bond transactions for CNY are sourced from Bloomberg and are defined as debt denominated in CNY and issued in the domestic or domestic MTN markets. CNY-denominated deals issued in the euro, foreign, or international debt markets are excluded. Deals include corporate high grade bonds, high yield bonds, medium-term notes, money market and commercial paper debt. The combination of CNH and CNY debt exclude a small minority of dual-currency deals that are non-domestic, non-dim sum debt.

All outstandings are denoted in USD equivalent based on exchange rates as of quarter-end.
5.1. – 5.8.
Issuance data are sourced from Dealogic in accordance to the criteria specified in Section 5. Outstanding data are sourced from Bloomberg in accordance to the criteria specified in Section 5.

6. CNH

Issuance

Bond transactions for CNH are sourced from Dealogic and are defined as all debt denominated in renminbi (CNY) issued and in the euro, foreign, or international debt markets. CNY-denominated deals issued in the domestic market are excluded. There are no restrictions on deal type and will include supranationals, medium-term notes, money market notes, securitisations, and commercial paper debt. Due to the lower restrictions in CNH issuance, CNH-denominated deals outside of Section 5 and 6 are a subset of the deals contained in Section 5 and 6.

All issuance are denoted in USD equivalents based on exchange rates as of the issue date of the bond.

Outstanding

Bond transactions for CNH are sourced from Bloomberg and are defined as debt denominated in CNY and issued in the euro, foreign, or international debt markets. CNY-denominated deals issued in the domestic market are excluded. Deals include corporate high grade bonds, high yield bonds, medium-term notes, money market, securitisations, and commercial paper debt. The combination of CNH and CNY debt exclude a small minority of dual-currency deals that are non-domestic, non-dim sum debt.

All outstandings are denoted in USD equivalent based on exchange rates as of quarter-end.

6.1. – 6.8.

Issuance data are sourced from Dealogic in accordance to the criteria specified in Section 4. Outstanding data are sourced from Bloomberg in accordance to the criteria specified in Section 6.

7. Spreads, Credit Quality & Total Return

7.1. – 7.2. Global Corporate Spreads

High grade and high yield US and European corporate spreads are sourced from Bank of America-Merrill Lynch (BAML) indices. Spreads are over government debt.

US high grade spreads are sourced from BAML’s US Corporate Index (COA0) and tracks the performance of US dollar denominated investment grade corporate debt publicly issued in the US domestic market. Qualifying securities must have an investment grade rating (based on an average of Moody’s, S&P and Fitch), at last 18 months to final maturity at the time of issuance, at least one year remaining term to final maturity as of the rebalancing date, a fixed coupon schedule and a minimum amount outstanding of USD 250 million. Original issue zero coupon bonds, 144a securities (with and without registration rights), and pay-in-kind securities (including toggle notes) are included in the index. Fixed-to-floating rate securities are included provided they are callable within the fixed rate period and are at least one year from the last call prior to the date the bond transitions from a fixed to a floating rate security. Contingent capital securities, including those with automatic principal write-down provisions, are included in the index provided they do not have an automatic common equity conversion, unless the conversion is activated by a regulatory authority in which case they are included. Other hybrid capital securities, such as those that potentially convert into preference shares, those with both cumulative and non-cumulative coupon deferral provisions, and those with alternative coupon satisfaction mechanisms, are also included in the index. Securities issued or marketed primarily to retail investors, equity-linked securities, securities in legal default, hybrid securitized
corporates, Eurodollar bonds (USD securities not issued in the US domestic market), taxable and tax-exempt US municipal securities and DRD eligible securities are excluded from the index.

European high grade spreads are sourced from BAML's Euro Corporate Index (ER00) and tracks the performance of EUR denominated investment grade corporate debt publicly issued in the Eurobond or Euro member domestic markets. Qualifying securities must have an investment grade rating (based on an average of Moody's, S&P and Fitch), at last 18 months to final maturity at the time of issuance, at least one year remaining term to final maturity as of the rebalancing date, a fixed coupon schedule and a minimum amount outstanding of EUR 250 million. Original issue zero coupon bonds and pay-in-kind securities, including toggle notes, are included in the index. Callable perpetual securities qualify provided they are at least one year from the first call date. Fixed-to-floating securities also qualify provided they are callable within the fixed rate period and are at least one year from the last call prior to the date the bond transitions from a fixed to a floating rate security. Contingent capital securities are included in the index provided they do not have an automatic common equity conversion feature; these securities with triggers activated by a regulatory authority, including conversions into equity, qualify for inclusion. Also qualifying for inclusion are contingent capital securities with principal write-down triggers. Hybrid capital securities qualify for the index, including those potentially converting into preference shares, those with both cumulative and non-cumulative coupon deferral provisions, and those with alternative coupon satisfaction mechanisms. Euro legacy currency, equity-linked and securities in legal default are excluded from the Index. Securities issued or marketed primarily to retail investments do not qualify for inclusion in the index.

US high yield spreads are sourced from BAML's US High Yield Index (H0A0) and tracks the performance of US dollar denominated below investment grade corporate debt publicly issued in the US domestic market. Qualifying securities must have a below investment grade rating (based on an average of Moody's, S&P and Fitch), at last 18 months to final maturity at the time of issuance, at least one year remaining term to final maturity as of the rebalancing date, a fixed coupon schedule and a minimum amount outstanding of $100 million. In addition, qualifying securities must have risk exposure to countries that are members of the FX-G10, Western Europe or territories of the US and Western Europe. The FX-G10 includes all Euro members, the US, Japan, the UK, Canada, Australia, New Zealand, Switzerland, Norway and Sweden. Original issue zero coupon bonds, 144a securities (with and without registration rights), and pay-in-kind securities (including toggle notes) are included in the index. Callable perpetual securities are included provided they are at least one year from the first call date. Fixed-to-floating rate securities are included provided they are callable within the fixed rate period and are at least one year from the last call prior to the date the bond transitions from a fixed to a floating rate security. Contingent capital securities, including those with automatic principal write-down provisions, are included in the index provided they do not have an automatic common equity conversion, unless the conversion is activated by a regulatory authority in which case they are included. Other hybrid capital securities, such as those that potentially convert into preference shares, those with both cumulative and non-cumulative coupon deferral provisions, and those with alternative coupon satisfaction mechanisms, are also included in the index. Securities issued or marketed primarily to retail investors, equity-linked securities, securities in legal default, hybrid securitized corporates, Eurodollar bonds (USD securities not issued in the US domestic market), taxable and tax-exempt US municipal securities and DRD eligible securities are excluded from the index.

European high yield spreads are sourced from BAML's Euro High Yield Index (HE00) and tracks the performance of EUR denominated below investment grade corporate debt publicly issued in the euro domestic or eurobond markets. Qualifying securities must have a below investment grade rating (based on an average of Moody's, S&P and Fitch), at least 18 months to final maturity at the time of issuance. In addition, qualifying securities must have at least one year remaining term to final maturity, a fixed coupon schedule and a minimum amount outstanding of EUR 100 million. Original issue zero coupon bonds, “Global”
securities (debt issued simultaneously in the Eurobond and euro domestic markets), 144a securities and pay-in-kind securities, including toggle notes, qualify for inclusion in the index. Callable perpetual securities qualify provided they are at least one year from the first call date. Fixed-to-floating securities also qualify provided they are callable within the fixed rate period and are at least one year from the last call prior to the date the bond transitions from a fixed to a floating rate security. Contingent capital securities are included in the index provided they do not have an automatic common equity conversion feature; these securities with triggers activated by a regulatory authority, including conversions into equity, qualify for inclusion. Also qualifying for inclusion are contingent capital securities with principal write-down triggers. Hybrid capital securities qualify for the index, including those potentially converting into preference shares, those with both cumulative and non-cumulative coupon deferral provisions, and those with alternative coupon satisfaction mechanisms. Euro legacy currency, equity-linked and securities in legal default are excluded from the Index. Securities issued or marketed primarily to retail investments do not qualify for inclusion in the Index.

Asian high grade and investment grade spreads are sourced from J.P. Morgan’s Asia Credit Index (JACI) and tracks the performance of USD-denominated Asian debt in the Asian ex-Japan region. Qualifying countries are those Asian region excluding Japan, including: China, Hong Kong, Indonesia, India, South Korea, Sri Lanka, Mongolia, Macao, Malaysia, the Philippines, Pakistan, Singapore, Thailand, Taiwan and Vietnam. Minimum deal sizes are $150 million and at least 12 months to final maturity at time of issuance. Fixed and floating rate instruments, and debt issued by sovereign, quasi-sovereign and corporate entities qualify for inclusion. Convertible bonds do not qualify for inclusion in the index.

7.3. China Interbank AAA Yield Curve
The curve is comprised of yuan-denominated fixed-rate corporate bonds that are traded on the China Interbank exchange. The bonds are rated AAA by local rating agencies. The values for the points on the curve are contributed by China Government Securities Depository Trust & Clearing Co Ltd (CDC).

7.4. – 7.6. China CNH Yield Curves
The securities underlying this curve are a subset of CNH data and sourced from Bloomberg; please see section 6 for more details regarding criteria. Ratings are determined by Bloomberg composite rating. Curves are fitted using Nelson-Siegel regression on mid-yield to maturity of underlying bonds.

7.7. – 7.8. Total Return (Quarter-End and YTD)
Total return data are sourced from various global bond and equity, including, but not limited to: the Bank of America-Merrill Lynch, Standard & Poor’s, J.P. Morgan, and MSCI.

7.9. – 7.11. Asian Issuer Rating Actions
European issuer upgrades and downgrades are sourced from S&P and are a combination of both emerging market, Japan, Australia, and New Zealand rating actions. Multiple upgrades or downgrades of a single issuer are counted separately. Rating actions are inclusive of both corporate (both credit, policy, or merger-related) as well as sovereign ratings.

Due to publication timing, these data set may run on a quarter lag.

7.12. Asian Issuer Defaults
European issuer upgrades and downgrades are sourced from S&P and are a combination of both emerging market, Japan, Australia, and New Zealand defaults reported. Defaults are inclusive of both corporate (both credit, policy, or merger-related) as well as sovereign defaults.
9. Disclaimer

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