

SECTOR IN-DEPTH

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High-Yield-Bond Covenants - Emerging Markets

Asian Bonds Provide Stronger Investor Protection than Latin American Bonds

- » **Emerging-market Asian high-yield bonds provide stronger investor protection in five of the six key risk areas.** The average covenant quality score for the 137 full-package emerging-market Asian bonds we scored from 2011-15 is stronger than that for the 47 full-package Latin American bonds scored in the same period, with better scores in five risk areas: restricted payments, risky investments, leverage, liens subordination and change of control. Structural subordination is the one area of relative weakness.
- » **Restricted payments (RP) protection is strong in Asia except for pre-dating.** Asian bonds have fewer RP carve-outs and stronger checks on affiliate transactions. But income baskets are pre-dated more frequently and for longer periods, increasing companies' flexibility to pay dividends.
- » **Asian bonds provide stronger protection against risky investments.** Asset sales covenants are stronger in Asia, but restricted investments covenants are weaker because Chinese property bonds have large carve-outs for investments in joint ventures.
- » **Leverage scores are stronger in Asian bonds.** Asian bonds give issuers less capacity to incur additional debt due to high fixed charge coverage ratio (FCCR) thresholds under the \$1 debt test. But more Latin American bonds require companies to satisfy two leverage ratio tests, rather than one, which is a protective feature for investors.
- » **Asian bonds allow for less potential liens subordination.** Permitted liens carve-outs are smaller in Asian bonds, averaging 0.58x adjusted EBITDA versus 1.38x in Latin America. Latin American bonds also contain higher general liens baskets than Asian bonds and more contain a carve-out for liens securing any debt under the debt covenant if a secured leverage ratio test is satisfied.
- » **Structural subordination is Asia's one weak area.** Due to regulatory constraints on capital outflows, onshore Chinese subsidiaries do not provide guarantees or other security for debt issued by offshore entities unless the proceeds are used offshore, which has not been the case for any of the bonds we scored. This increases the likelihood that offshore bondholders recover less than onshore subsidiaries' bondholders in a default.
- » **Change of control protection is much stronger in Asia.** Nearly all Asian bonds contain the five standard events that trigger the change-of-control put option versus 19% of Latin American bonds. But 85% of Asian bonds contain a double trigger, further requiring a negative rating action to trigger the put versus 53% of Latin American bonds.

Asian covenant quality is stronger than all other regions; Latin America is stronger than North America and EMEA

High-yield bonds issued in emerging Asian markets provide stronger investor protection than those issued in emerging Latin American markets, and both provide more protection than bonds issued in North America and Europe, the Middle East and Africa (EMEA), as illustrated in Exhibit 1. (This report focuses on full-package bonds issued in emerging Asian and Latin American markets.)¹

Asian bonds have an average covenant quality (CQ) score of 2.55 versus 3.00 for Latin America.² These average CQ scores are based on 137 Asian and 47 Latin American full-package bonds we scored from 2011 through 2015. A lower score denotes stronger covenant quality on our scale from 1.0 to 5.0. (Please see the Appendix for a summary of our Covenant Scoring Key and Criteria.)

Exhibit 1

Covenant Packages for Asian and Latin American Bonds Are Stronger than Those in North America and EMEA

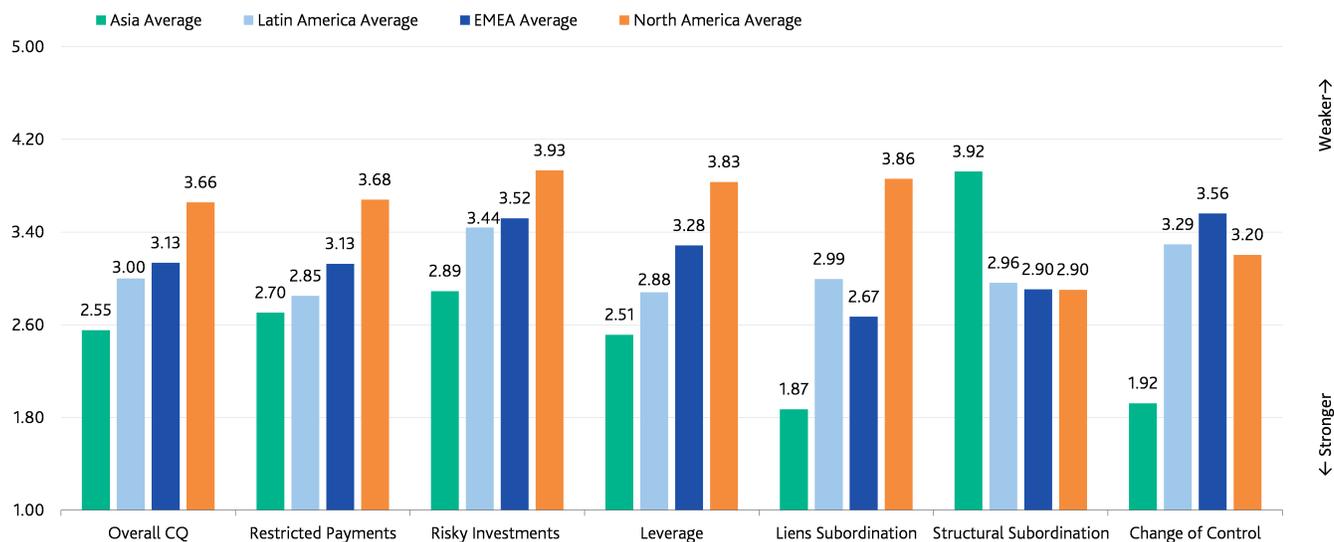


Excluding high-yield lite deals
Average scores from 1 January 2011 through 31 December 2015
Source: Moody's Investors Service

Asian bonds are stronger than the other regions' in five of the six risk areas we score: restricted payments (RP), risky investments, leverage, liens subordination and change of control. Structural subordination is the one area of relative weakness (see Exhibit 2). Both Asian and Latin American bonds fare better against North American and EMEA bonds in the RP, risky investments and leverage risk areas.

This publication does not announce a credit rating action. For any credit ratings referenced in this publication, please see the ratings tab on the issuer/entity page on www.moody.com for the most updated credit rating action information and rating history.

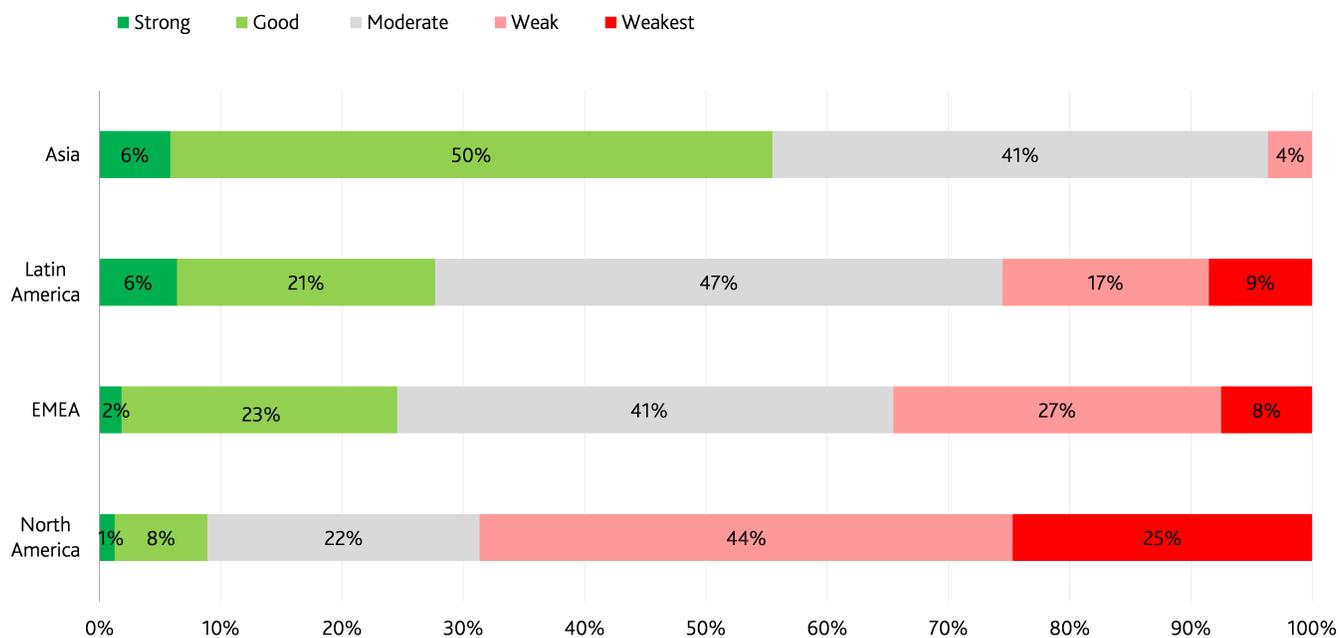
Exhibit 2
Asian Bonds Score Stronger Than Global Peers in Five of the Six Risk Areas



Excluding high-yield lite deals
 Average scores from 1 January 2011 through 31 December 2015
 Source: Moody's Investors Service

A higher percentage of Asian bonds fall in our strong and good categories (56%) than bonds from any other region (see Exhibit 3). No Asian bond has ever scored in our weakest category and only 4% fall in our weak category compared to 9% and 17%, respectively, for Latin American bonds. In North America and EMEA, investors' hunt for yield has resulted in a proliferation of weak covenant structures with a considerably higher percentage of deals falling in our weak and weakest categories.

Exhibit 3
Higher Percentage of Asian Bonds Fall in Our Strong and Good Categories



Excluding high-yield lite deals
 Bonds issued from 1 January 2011 through 31 December 2015
 Source: Moody's Investors Service

The three rated Asian bond issuers with the weakest CQ scores over our scoring period were [Pactera Technology International Ltd.](#) (B1 stable) (4.19), [Shimao Property Holdings Limited](#) (Ba2 stable) (3.47) and [Parkson Retail Group Limited](#) (B2 negative) (3.47). The three weakest Latin American issuers were [Digicel Group Limited](#) (B2 stable) (4.46), [VTR Finance B.V.](#) (B1 stable) (4.28) and [Minerva Luxembourg S.A.](#) (B1 positive) (4.09).

Pactera was a sponsor-driven deal, which is unusual in Asia, and is the reason for its weak score. Sponsors typically negotiate weak covenants, which allow them to extract value from the bond issuer and leverage it as much as possible. The Asian and Latin American markets have only five sponsor-driven deals collectively with an average CQ score of 3.28.

The three rated Asian bond issuers with the strongest CQ scores were [Modernland Realty Tbk](#) (P.T.) (B2 stable) (1.26), [GCX Limited](#) (B2 stable) (1.30) and [Pakuwon Jati, Tbk \(P.T.\)](#) (Ba3 stable) (1.49). The three strongest Latin American issuers were [Satelites Mexicanos, S.A. de C.V.](#) (ratings withdrawn) (1.42), [SMU S.A.](#) (Caa1 stable) (1.55) and [San Miguel Industrias PET S.A.](#) (Ba2 negative) (1.67).

Traditionally, lower-rated bonds provide stronger covenant protection than higher-rated bonds, since investors demand more protection when lending to riskier credits. This correlation holds true for North American bonds and for those with Ba and B ratings in Asia and EMEA (see Exhibit 4). However, the opposite is true for Latin American bonds, with the caveat that it is difficult to make generalizations given the relatively small number of bonds issued in that region.

Exhibit 4

Average CQ Scores by Rating Category *

	Ba		B		Caa/Ca	
	Overall CQ score (incl. HY-lite)	Overall CQ score (excl. HY-lite)	Overall CQ score (incl. HY-lite)	Overall CQ score (excl. HY-lite)	Overall CQ score (incl. HY-lite)	Overall CQ score (excl. HY-lite)
Asia	3.07	2.67	2.51	2.48	2.53	2.53
# of bonds (Asia)	63	52	82	81	4	4
Latin America	3.59	2.62	3.27	3.07	3.87	3.87
# of bonds (Latin America)	27	16	29	26	5	5
EMEA	4.04	3.16	3.16	3.08	3.41	3.35
# of bonds (EMEA)	194	101	296	284	57	55
North America	4.41	3.83	3.80	3.62	3.63	3.60
# of bonds (North America)	521	262	810	704	332	325

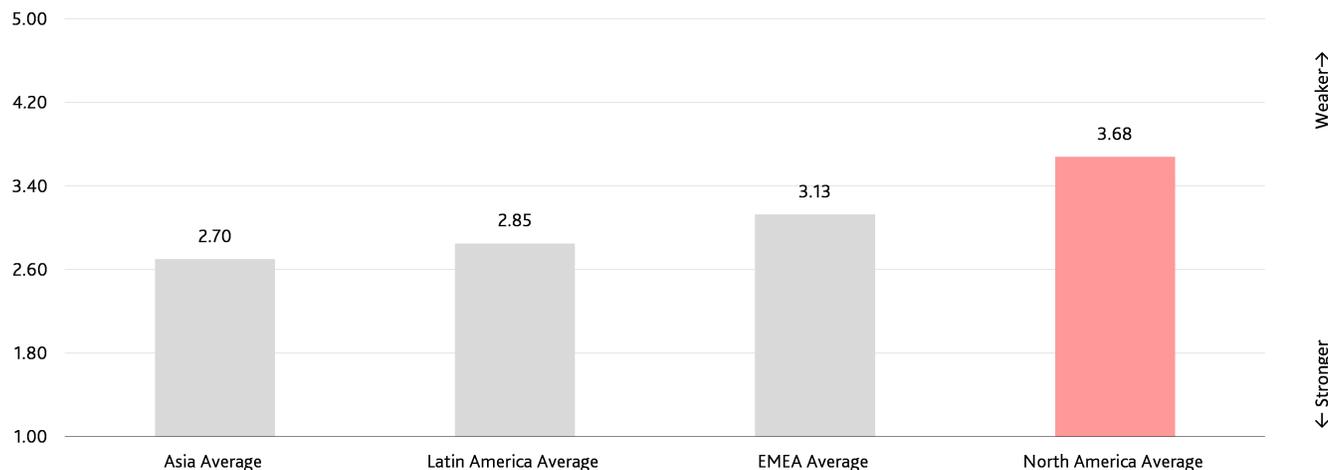
* The rating category refers to the bond rating at time of issuance.
Average scores from 1 January 2011 through 31 December 2015
Source: Moody's Investors Service

Adding to the weakness of Latin American bonds relative to Asian bonds is the significantly higher proportion of high-yield lite bonds issued.³ From 2011 to 2015, 14 of 61 (23%) high-yield bonds issued in Latin America were high-yield lite. In Asia, 12 of the 149 (8%) bonds issued were high-yield lite. High-yield lite bonds receive an automatic CQ score of 5.00 and are not included in the regional average scores discussed in this report.

Restricted payment protection is strong in Asia except for pre-dating of income baskets

RP scores for Asian and Latin American bonds provide upper-tier moderate investor protection and are far stronger than North American scores (see Exhibit 5). The RP covenant protects creditors from the risk of a company extracting so much value through cash dividends and other shareholder-friendly moves that it cannot adequately service its debt.

Exhibit 5

Restricted Payments Scores: Regional Comparison

Excluding high-yield lite deals

Average scores from 1 January 2011 through 31 December 2015

Source: Moody's Investors Service

Fewer RP carve-outs in Asian and Latin American bonds

A primary reason for the stronger RP scores in Asia and Latin America is that their bonds generally contain few quantifiable RP carve-outs. In Asia, aggregate carve-outs average 1% of a bond issuer's total assets and the Latin American average is 8%, compared with the averages of North American (9%) and EMEA (6%) bonds.

The bond issued in 2015 by Latin American company **Digicel** (\$925 million 6.750% Senior Notes due 2023) includes an unusually large RP carve-out (111% of total assets), which is the highest of bonds globally. Excluding this bond, which expressly permits a dividend to a non-guarantor parent to enable the parent to repay its outstanding notes, the Latin American average of quantifiable RP carve-outs falls to 6% of total assets.

Bonds for Latin American issuer **YPF Sociedad Anonima** (B3 stable) contain a carve-out for purchases of **YPF's** capital stock owned by non-affiliates, which is capped at 3% of **YPF's** total capital stock in any calendar year. As **YPF's** stock price increases, the amount of the carve-out also increases. For example, at the time of **YPF's** issuance of its \$1.5 billion 8.50% Senior Notes due 2025, its stock price was relatively high. This contributed in large part to the bond's RP score of 5.00 because this carve-out amounted to 17% of total assets.

The inclusion of a leverage ratio-based carve-out in Asian and Latin American bonds is rare, unlike in North American bonds

Very few Asian and Latin American bonds include a carve-out permitting the bond issuer to make RPs after satisfying a leverage ratio test. This carve-out permits cash outflows that a company might otherwise retain and use to grow its business, reducing capital retained to repay the bond at maturity.

If the leverage ratio test is satisfied, the structural protections of the RP income basket are eliminated, giving the issuer capacity to extract cash similar to a high-yield lite bond.⁴ Two Asian bonds and two Latin American bonds contain such a carve-out. The Asian bonds were issued by **Pactera** and **Tower Bersama Infrastructure Tbk (P.T.)** (Ba3 stable) (\$300m 4.625% Senior Unsecured Notes due 2018), and the Latin American bonds by **Consolidated Energy Finance, S.A.** (B1 stable) and **VTR Finance**.

By contrast, the inclusion of this carve-out in North American bonds increased to a record level in the second half of 2015, contemporaneously with a rise in the percentage of high-yield lite deals. This is not surprising since companies unable to negotiate high-yield-lite terms have been increasingly successful in negotiating a leverage ratio-based carve-out.⁵

Given the rarity of this carve-out in Asian and Latin American deals, it seems that investors are not willing to accept such flexible cash leakage terms in emerging markets. It remains to be seen if this trend will continue or whether Asian and Latin American bonds will follow the North American trend as their high-yield bond markets develop and issuers become more seasoned.

Asian bonds require strong objective checks on affiliate transactions while Latin American bonds provide more flexibility

Asian bonds impose an arm's-length transaction requirement along with strong objective checks on management's valuation of these transactions. These checks include majority approval by directors with no interest in the transaction for deals at a relatively low threshold value, and third-party opinions on the transaction's fairness from the company's standpoint for deals at a higher threshold. Bonds for **Parkson** and [Geely Automobile Holdings Limited](#)'s (Ba2 stable) did not contain a transactions-with-affiliates covenant, which is very rare for Asian full-package bonds.

Latin American bonds provide management with more flexibility to make "disguised" dividends in the form of related-party deals with shareholders or other affiliates outside the restricted group since only 66% of Latin American bonds require objective checks to be satisfied. For example, bonds for [OAS Finance Limited](#) (ratings withdrawn) (RP score of 4.00) and **VTR Finance** (RP score of 5.00) didn't require objective checks on their affiliate transactions.

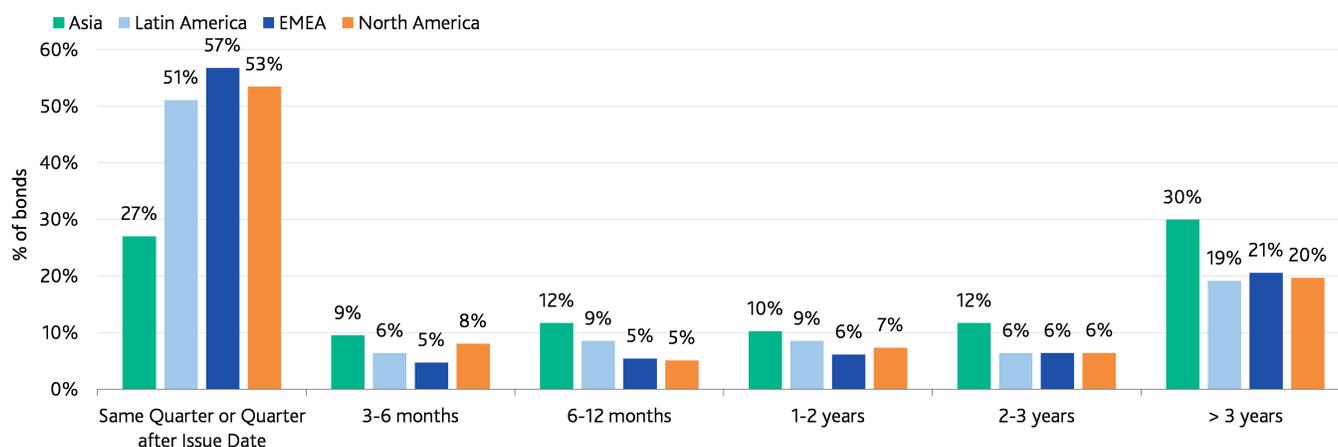
Pre-dating RP income basket start dates is more prevalent in Asia

The one notable weak feature of Asian RP covenants is that Asian issuers tend to pre-date their income baskets' start date to coincide with the RP income baskets from their previous bond issuances, which gives the issuers more flexibility to pay dividends.

Seventy-three percent of Asian bonds pre-dated their income basket start dates by more than six months before their bond issue dates. Thirty percent of the bonds had RP income basket start dates that were pre-dated by at least three years, including Chinese property developers [Country Garden Holdings Company Limited](#) (Ba1 stable), [Longfor Properties Co Ltd.](#) (Ba1 stable), [Powerlong Real Estate Holdings Limited](#) (B2 positive) and Indonesian property developer [Lippo Karawaci Tbk \(P.T.\)](#) (Ba3 stable). **Shimao** pre-dated its income basket start date by more than seven years. This aggressive structure is more prevalent in Asia than in all other regions (see Exhibit 6).

Exhibit 6

Longer Pre-Dating in Asian Bonds Than in Other Regions' Bonds Percentage of bonds with income baskets pre-dated by given time period



Excluding high-yield lite deals
Source: Moody's Investors Service

A pre-dated income basket start date can offer substantial up-front credit, which the company can tap immediately to pay large shareholder dividends, despite the incurrence of the new debt represented by the new bond. This practice can reduce the company's ability to make future debt payments to service the bond. This income capacity tends not to be disclosed in Asian deals, resulting in possible material omissions in the offering memoranda if the accumulated credit to the income basket is significant.⁶

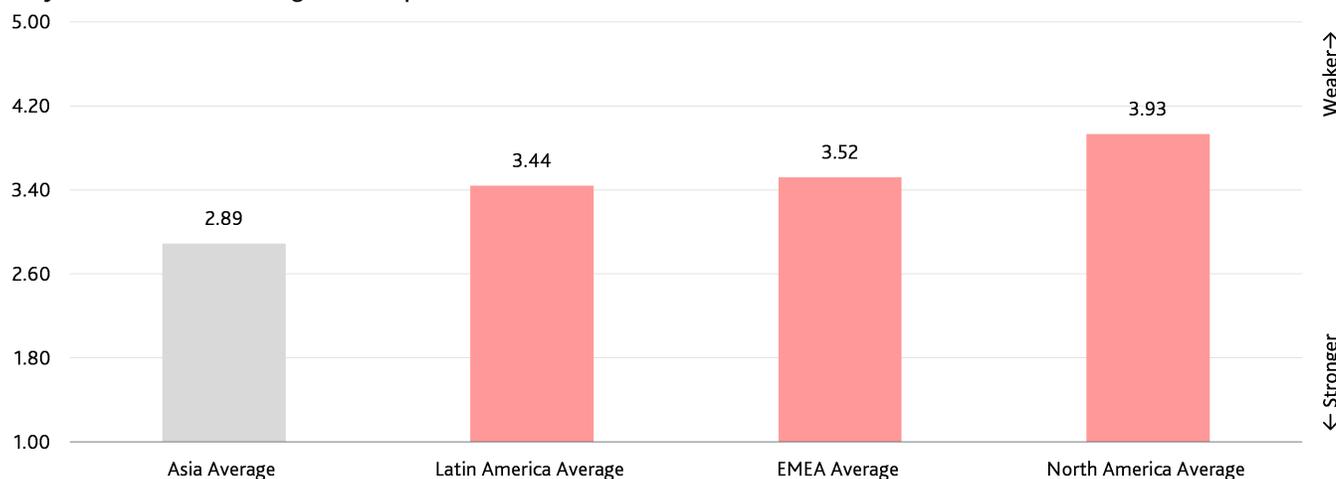
Examples of Latin American issuers that provided a more investor-friendly RP covenant are [Marfrig Global Foods S.A.](#) (B2 stable) and **YPF** because they did not pre-date their income basket in their repeat deals. [Navios South American Logistics Inc.](#) (B3 negative) pre-dated its income basket by more than three years but is the only deal in Latin America and Asia that disclosed the accumulated credit in its income basket, a positive for investors.

Asian bonds provide stronger protection against risky investments, but Chinese property bonds are increasing their carve-outs

Asian bonds score considerably stronger (average of 2.89) in the risky investments area than Latin American bonds (average of 3.44) and bonds in North America and EMEA (see Exhibit 7). This category evaluates the protections afforded by both the restricted investments and asset-sales covenants.

Exhibit 7

Risky Investments Scores: Regional Comparison



Excluding high-yield lite deals

Average scores from 1 January 2011 through 31 December 2015

Source: Moody's Investors Service

Asian bonds have large carve-outs for investments in joint ventures

Despite strong overall scores in this risk area, Asian bonds have weaker restricted investments covenants. These covenants are intended to guard creditors from the risk that a distressed issuer, in an effort to increase returns to shareholders, foregoes investments that maintain core assets in favor of more volatile and high-risk assets. This pursuit of high-risk returns can increase the risk of bond default and limit recoveries.

Expressed as a percentage of total assets, average quantifiable permitted investments carve-outs in Asian bonds are 11%, higher than the Latin American average of 6%. The average Latin American permitted investments carve-out has held steady since 2011. However, Asian average carve-outs increased to 16% of total assets in 2015 from 6% in 2011 (see Exhibit 8).

Exhibit 8

Asian Bonds Have the Highest Permitted Investments Carve-outs

Permitted investment carve-outs as a percentage of total assets

	Asia	Latin America	EMEA	North America
2011	6.0%	5.1%	4.6%	7.8%
2012	5.6%	7.6%	4.3%	7.4%
2013	8.4%	6.8%	5.6%	8.9%
2014	14.4%	5.0%	5.9%	9.2%
2015	16.4%	5.8%	8.1%	8.9%
2011-2015	10.6%	6.0%	5.7%	8.4%

Excluding high-yield lite deals

Source: Moody's Investors Service

The higher Asian carve-outs can be attributed primarily to Chinese property bonds (accounting for 61% of Asian bonds), which tend to have large carve-outs for investments in joint ventures. Due to the capital-intensive nature of real estate development and rising land costs, it is becoming more common for Chinese property developers to enter into joint-venture arrangements.⁷ A number of Chinese developers have conducted consent solicitations to amend their bonds to increase the amount of their permitted investments carve-outs for investments in joint ventures. For example, [Agile Property Holdings Limited](#) (Ba3 review for downgrade) increased its permitted investments carve-outs in its 2017 bonds to 30% of total assets from 20%.

Two Chinese property companies' deals, [Yanlord Land Group Limited](#) (Ba3 stable) and **Longfor**, don't contain any caps on the amount of these permitted investments, which is very unusual. This is particularly negative for bondholders since these companies can engage in potentially risky investments with no limits.

Other features in Asian bonds are stronger than those in Latin American bonds

Other features of the investments risk category are weaker in Latin American bonds. Asset sales covenants in Latin American bonds resemble North American covenants. Sixty-two percent of Latin American bonds allow companies more than one year to reinvest the proceeds of asset sales as opposed to only 5% of Asian bonds. The longer the retention period for proceeds of asset sales, the higher the risk that the company extends the period of time during which income-generating assets are not reinvested in the business, negatively affecting its debt-servicing capacity.

Asset sales covenants are further weakened in Latin American bonds because they include North American-style features, such as carve-outs to the "cash equivalent" consideration (typically termed "designated non-cash consideration").⁸ Less than 1% of Asian bonds contain this weak feature, but 23% of Latin American bonds include it. The Asian bonds that contain this feature are for **Pactera** and [MagnaChip Semiconductor Corporation](#) (Caa2 stable), both sponsor-driven deals.

Sale and leaseback covenants are significantly weaker in Latin American bonds since 13% of these bonds aren't required to comply with the asset sales covenant and 34% of them aren't required to comply with the \$1 debt test.⁹ For example, bonds for Latin American issuers [Agropecuaria Nossa Senhora do Carmo S.A.](#) (C stable) and **YPF** didn't require their sale and leaseback covenants to comply with the asset sales covenant.

By contrast, only a small number of Asian bonds - less than 2% - aren't required to comply with these two tests. Sale/leasebacks involve some of the same issues as asset sales in the use-of-sales proceeds for potentially risky investments. Thus, it is important to subject sale/leasebacks to the restrictions of the asset-sales covenant and require sale/leasebacks to conform to that covenant's use-of-proceeds criteria. Sale/leasebacks should also be restricted by the debt-incurrence and liens covenants.

Additionally, 34% of Latin American bonds don't contain a line-of-business covenant, compared to only 2% of Asian bonds (i.e., those issued by **Pactera**, **MagnaChip** and [Evergrande Real Estate Group Limited](#) (B2 negative)). Asian issuer **Evergrande** didn't include a line-of-business covenant in its 2019 and 2020 bonds and has conducted a consent solicitation to amend its 2018 bonds to, among other things, remove this covenant.

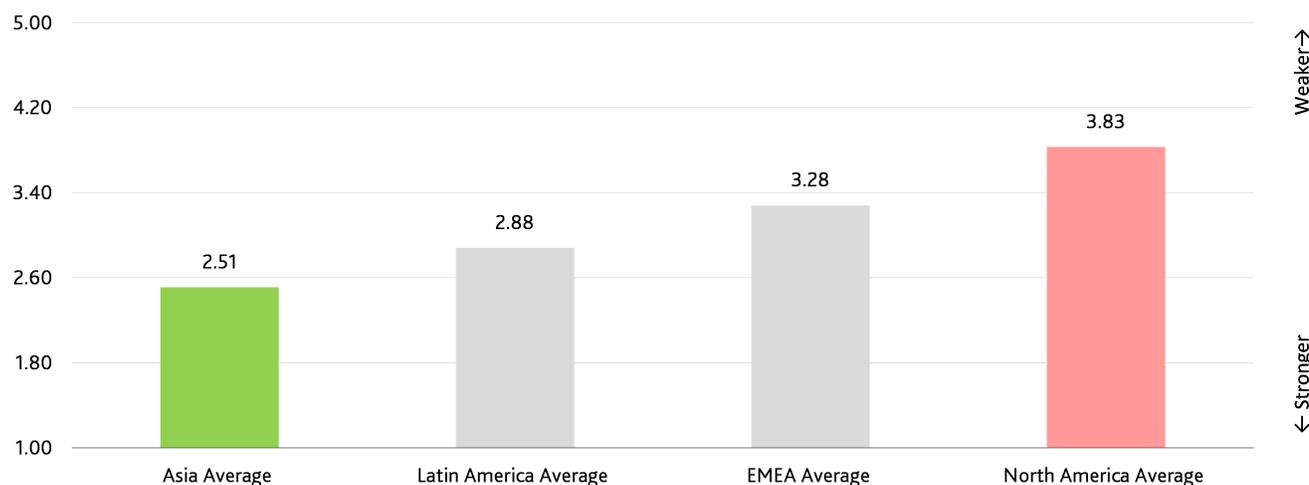
On 22 November 2015, **Evergrande** announced its plans to acquire a 50% equity interest in **Great Eastern Life Assurance (China) Co., Ltd.** (unrated), a Chinese-foreign joint venture life insurance company, for a total consideration of about RMB3.94 billion. Such an investment would not have been permitted under Evergrande's permitted investments carve-out prior to the removal of the line of business covenant but is now permitted. Without such a covenant, a company can change its management policy or strategic direction from its core business to riskier undertakings with higher earnings volatility or even to a new sector entirely different from what bondholders had evaluated on the bond's issue date when making their investment decision.

Leverage scores in Asian bonds are stronger than in Latin American bonds

Asian bonds score stronger (average of 2.51) than Latin American bonds (average of 2.88) and bonds in North America and EMEA in the leverage risk area (see Exhibit 9).

Exhibit 9

Leverage Scores: Regional Comparison



Excluding high-yield lite deals
Average scores from 1 January 2011 through 31 December 2015
Source: Moody's Investors Service

Asian bonds have higher FCCR test thresholds and less capacity to incur debt than Latin American bonds

Only 53% of Asian bonds provide issuers with capacity to incur debt at time of issuance under the \$1 debt test versus 79% of Latin American bonds. And the average cushion under the \$1 debt test in all Asian bonds (regardless of whether or not there is capacity) is also smaller (1.12x adjusted EBITDA) than in Latin American bonds (1.48x adjusted EBITDA) (see Exhibit 10). The more capacity a company has to incur debt under the \$1 debt test, the weaker the covenant since it allows the company to increase its leverage. This test, which limits a company's ability to incur additional debt under a debt-incurrence covenant, usually takes the form of a fixed-charge coverage ratio (EBITDA/interest expense) or a leverage ratio (debt/EBITDA.)

Bonds for Asian issuer [Nexteer Automotive Group Limited](#) (Ba1 stable) and Latin American issuers [OGX Austria GMBH](#) (ratings withdrawn) and [CITGO Holding, Inc.](#) (Caa1 stable) had cushion under the \$1 debt test of more than 6.0x adjusted EBITDA, which automatically resulted in a best-possible leverage score of 4.50 (weakest category) under our scoring criteria.

One of the reasons Asian bonds have less capacity to incur debt is that they have significantly higher fixed charge coverage ratio (FCCR) tests than elsewhere in the world, which makes it more difficult for Asian issuers to satisfy the test. The average FCCR test in an Asian bond is 2.85, significantly higher than FCCR tests in North America and EMEA, which are standardized at 2.00. Latin American bonds' FCCR tests generally follow the standardized 2.00 threshold.

Exhibit 10

Leverage Scores: Regional Comparison

	% of bonds that have capacity under \$1 debt test	Average cushion under \$1 debt test (regardless of whether there is capacity) (as a turn of EBITDA)	Average debt carve-out as % of total assets	Average debt incurrence capacity ((\$1 debt test cushion + carve-outs)/adj. EBITDA)
Asia	53%	1.12x	21%	4.14x
Latin America	79%	1.48x	20%	4.95x

Excluding high-yield lite deals
Averages from 1 January 2011 through 31 December 2015
Source: Moody's Investors Service

Debt carve-outs are slightly higher in Asian bonds, with an average of 21% of assets versus 20% for Latin American bonds. However, 45% of Latin American bonds contain credit facility carve-outs versus only 10% of Asian bonds. A credit facility carve-out weakens the leverage score because it is not dedicated to a specific purpose and is generally the largest carve-out. When incorporated as a liens

carve-out, it acts as the main source of liens subordination risk. For example, two Latin American issuers, [Sable International Finance Limited](#) (Ba2 negative) and [Playa Resorts Holding B.V.](#) (B3 stable), incorporated their credit facility carve-outs as liens carve-outs. Asian bonds permit the incurrence of credit facilities under their carve-outs, but only for specific purposes such as for working capital or capital expenditures.

The two Asian bonds with the highest debt carve-outs as a percentage of total assets are from **Evergrande** and [Glorious Property Holdings Limited](#) (Caa2 negative) (both at 32%). The two Latin American bonds with the highest debt carve-outs as a percentage of total assets are from **Digicel** (64%) and [Grupo Posadas, S.A.B. de C.V.](#) (B2 stable) (45%).

Over 70% of Latin American bonds contain leverage ratio tests and 22% require the satisfaction of two tests

A distinguishing feature of Latin American bonds' \$1 debt tests is the use of leverage ratio tests. More than 70% of Latin American bonds contain such a test. Bonds in the region use this test across various industries while in North America, for example, leverage ratio tests are commonly used only in the telecom and media sectors. Typically, leverage ratio tests are tailored to the at-issuance cash flow characteristics of the issuer so we view the leverage ratio test as favorable.

An advantage for investors in Latin American bonds is that almost a quarter of them require the satisfaction of both an FCCR test and a leverage ratio test in order to incur debt under the \$1 debt test, including bonds for **San Miguel Industrias** and [Central American Bottling Corp. \(The\)](#) (Ba2 stable) with strong debt scores of 1.40 and 1.60, respectively. This is more protective than just requiring one test to be satisfied, which is the case in 98% of Asian bonds.

Latin American bonds provide the issuers with more flexibility for mergers

The merger covenant, which provides event-risk protection against increasing leverage, in Asian bonds provides investors with more protection than Latin American bonds. Ninety percent of Asian bonds require the satisfaction of the \$1 debt test plus an additional test (such as a consolidated net worth test) in order to undertake a merger. That compares to less than 5% of Latin American bonds, which are more in line with the North American market where only 2% of bonds require satisfaction of two tests. Satisfying two tests is stronger than just satisfying either the \$1 debt test only or an alternative test.

Asian bonds don't contain aggressive EBITDA add-backs

Very few Asian bonds provide the company with the flexibility to calculate its EBITDA with aggressive add-backs: in the last two years only the sponsor-driven **Pactera** deal allowed for this. More Latin American bonds contain aggressive EBITDA add-backs than in Asia, but less than in North America where this is becoming more prevalent.

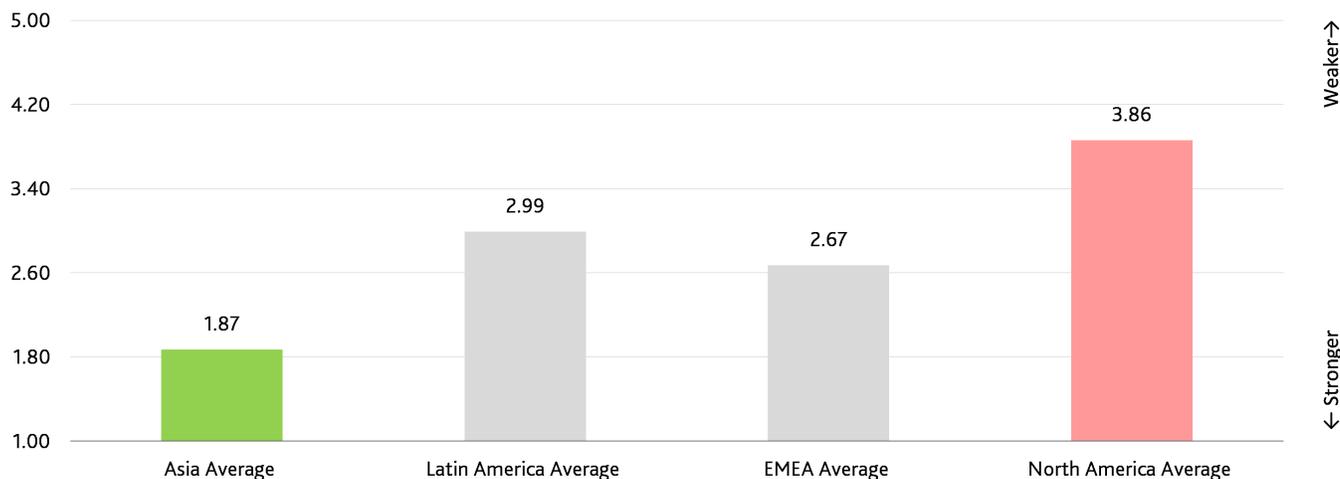
An example of a very aggressive add-back is uncapped cost savings, which is scored a 5.00. Aggressive, but capped, add-backs receive a 4.00. Such add-backs give management discretion to increase or adjust covenant cash flow such that they can incur additional debt or make restricted payments without due regard to debt-servicing cash flow. **Playa Resorts** and [SixSigma Networks Mexico, S.A. de C.V.](#) (B2 negative) are examples of Latin American issuers that contain uncapped cost savings in their EBITDA calculation.

Latin American bonds allow for more potential liens subordination

Protection against liens subordination risk in Asian bonds falls in our good category (average of 1.87), considerably stronger than Latin American bonds (average of 2.99) and bonds in North America and EMEA in this risk area (see Exhibit 11).

Exhibit 11

Liens Subordination Scores : Regional Comparison



Excluding high-yield lite deals
 Average scores from 1 January 2011 through 31 December 2015
 Source: Moody's Investors Service

Permitted lien carve-outs in Latin American bonds permit more lien subordination than the carve-outs in Asian bonds

Less than 10% of Asian and Latin American bonds are secured, thus making liens subordination a key concern for bondholders.

Potential liens subordination is the issuer's ability to incur subordinating liens in the future, post-issuance. Future incremental secured debt can reduce a bond's market value and reduce recoveries. Potential liens subordination for Latin American bonds average 1.38x adjusted EBITDA compared to an average of only 0.58x adjusted EBITDA in Asian bonds, owing to smaller permitted liens carve-outs in Asian bonds. For example, general liens carve-outs average only 1% in Asian bonds compared to 8% in Latin American bonds. Some Latin American bonds incorporated their credit facility carve-outs as liens carve-outs, including bonds for **Sable International** with a liens score of 3.50 and **Playa Resorts** with a liens score of 4.00.

Another factor that weakens the Latin American score is the use of a carve-out for liens securing any debt under the debt covenant if a secured leverage ratio test is satisfied. This carve-out is included in 19% of Latin American bonds, including bonds for [Columbus International Inc.](#) (Ba3 negative) and **Consolidated Energy**, but only 1% of Asian bonds (bonds for [Lodha Developers Private Limited](#) (Ba3 negative) and **Tower Bersama**).

Strong negative pledge provisions in both Asia and Latin America

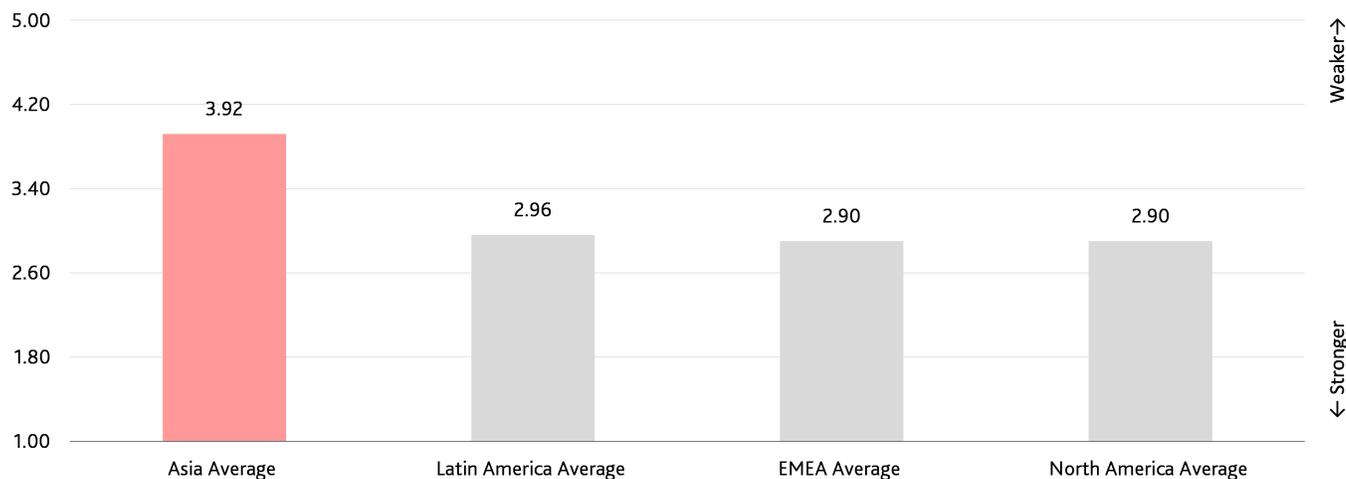
Both Asian and Latin American bonds generally have strong negative pledge provisions, which cover all assets of the company and its subsidiaries broadly (as opposed to covering only property, plant and equipment, for example), and the debt covered is broadly defined (i.e, all types of debt rather than just capital markets debt). The exceptions are bonds from **Parkson**, which covered only capital markets debt, and **CITGO** and **Digicel**, which restricted only the issuers that are holding companies. Such structures lead to an automatic liens score of 5.00 under our scoring criteria.

Asian bonds have the weakest structural subordination score globally due to the significant risk in Chinese bonds

Asian bonds have the weakest score globally for protection against structural subordination risk with an average score of 3.92 (see Exhibit 12).

Exhibit 12

Structural Subordination Scores: Regional Comparison



Excluding high-yield lite deals

Average scores from 1 January 2011 through 31 December 2015

Source: Moody's Investors Service

This weakness is due to Chinese regulatory constraints related to capital outflows. Onshore Chinese subsidiaries cannot provide guarantees or other security for the debt of offshore entities that issue bonds unless the bond proceeds are used offshore.¹⁰ The onshore subsidiaries are generally the main operating subsidiaries that own most of the assets and incur the majority of debt. As a result, the debt of the non-guarantor subsidiaries is effectively senior to the offshore entities' bonds, which increases the likelihood that offshore bondholders will recover less than the onshore subsidiaries' creditors in a default situation.

Excluding Chinese bonds, the average Asian structural subordination score is 2.13, stronger than all other regions.

Covenant protection against onshore Chinese bond issuance is weak

To mitigate structural subordination risk, Chinese bonds generally cap the amount of debt that onshore and offshore subsidiaries that don't guarantee the bonds (non-guarantor subsidiaries) can incur under their debt tests. This cap varies but is typically 15% of total group assets. However, there are exceptions for certain types of debt such as capital markets debt. Therefore, the onshore bonds issued by Chinese developers are generally not subject to this cap.¹¹

Structural subordination risk is further heightened in Chinese bonds since the debt carve-outs are not subject to the structural subordination cap. Between the structural subordination cap under the debt ratio test and the debt carve-outs available, offshore bondholders face increased structural subordination risk.

Latin American bonds provide stronger protection against structural subordination risk

In Latin American bonds, a substantial majority of group assets and/or cash flows are at the issuer level or with subsidiaries that guarantee the bonds, thereby minimizing structural subordination risk. A further protection against structural subordination risk is that close to 30% of Latin American bonds' \$1 debt tests preclude incurrence by non-guarantor subsidiaries.

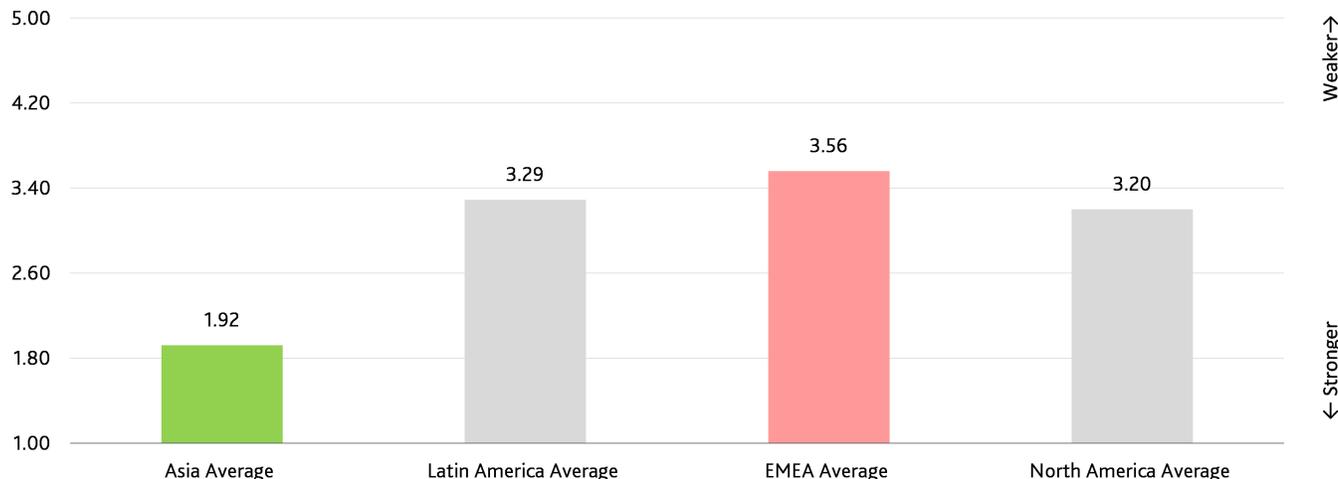
Bonds from [CBC AMMO LLC](#) (B1 stable) and [Ferreycorp S.A.A.](#) (Ba1 stable) don't allow non-guarantor debt incurrence under the \$1 debt test, which contributed to their strong structural subordination score of 1.10 and 1.50, respectively. However, bonds from [Union Andina de Cementos S.A.A.](#) (Ba2 stable) and [Minerva Luxembourg](#) received the weakest score of 5.00 because non-guarantors held debt of more than 0.75x adjusted EBITDA at time of issuance and can incur uncapped debt under \$1 debt test.

Change of control protection is much weaker in Latin American bonds

Asian bonds score significantly stronger in the change of control risk area than all other regions (see Exhibit 13).

Exhibit 13

Change of Control Scores: Regional Comparison



Excluding high-yield lite deals

Average scores from 1 January 2011 through 31 December 2015

Source: Moody's Investors Service

In nearly all Asian bonds, all five standard events trigger the investors' change of control put option, versus just 19% of Latin American bonds. These five events are: (1) a sale of all or substantially all of the company's assets, (2) merger of the company without requiring the surviving entity to have a controlling shareholder, (3) acquisition of a controlling interest in the company, (4) liquidation or dissolution, and (5) replacement of a majority of the board of directors. Bonds for [Reliance Communications Limited](#) (Ba3 negative) and [Comcel Trust](#) (Ba1 negative) contained only two of the five standard events, resulting in the base score of 3.80. However, 85% of Asian bonds contain a double trigger, with the put option triggered only if there is both a triggering event and satisfaction of a negative ratings condition, as opposed to Latin American bonds where only 53% contain a double trigger. A double trigger requirement makes it more difficult for the put option to come into effect.

Latin American issuer **YPF** has the weakest change of control score of 5.00 because its bonds include only one of the five standard change of control events. Furthermore, its bonds include a quasi-portability clause based on the foreign currency debt rating of the acquirer.¹² No other Latin American or Asian issuer includes such a clause in its deals.

Appendix

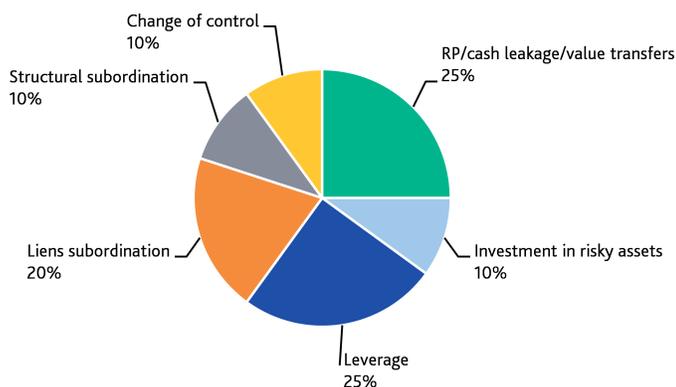
Covenant quality scoring criteria

The CQ score measures the level of protection a high-yield-bond covenant package, as a whole, provides to investors, using objective pre-defined criteria that will stay constant over time. Our scoring system thus enables us to track covenant trends over time. The higher the score, the weaker the covenant protection.

The CQ score is a weighted average of component scores that gauge the level of protection in six key risk areas: restricted payments, investments in risky assets, leverage, liens subordination, structural subordination and event risk (change of control).

Exhibit 14

Component Scores' Weighting in Overall CQ Score



Source: Moody's Investors Service

The schematic below summarizes the scoring, which is on a five-point scale, with CQ1 the most protective package and CQ5 the weakest.

CQ Scoring Key

← Stronger										Weaker →													
CQ1		CQ2			CQ3			CQ4			CQ5												
Strong		Good			Moderate			Weak			Weakest												
1.0		Upper 1.8 to 2.0			Lower 2.4 to 2.6			Upper 2.6 to 2.8			Lower 3.2 to 3.4			Upper 3.4 to 3.6			Lower 4.0 to 4.2			4.2		5.0	
1.8		2.6			3.4			4.2			5.0												

Source: Moody's Investors Service

For further information on CQ Scoring, please see our special comment High-Yield Bond Covenants: [Covenant Quality Scoring Criteria](#) and [Frequently Asked Questions: Moody's Bond Covenant Quality Scoring](#).

Moody's Related Research

Special Comments:

- » [Covenant Quality Trends 2015 - Second-Half Report: Investor Protection Continues to Erode, January 2016 \(1014841\)](#)
- » [High-Yield-Bond Covenants - Chinese Property Developers: Covenant Protection Against Onshore Bond Issuance Is Weak, November 2015 \(1009855\)](#)
- » [High-Yield-Bond Covenants – Asia: Chinese Property Developers' Covenant Quality Is Weakening, June 2015 \(181885\)](#)
- » [High-Yield-Bond Covenants – Asia: Asian Companies Are Pre-Dating Restricted Payments Baskets, Allowing More Flexibility to Pay Dividends, December 2014 \(1001713\)](#)
- » [Frequently Asked Questions: Moody's Bond Covenant Quality Scoring, April 2014 \(166453\)](#)
- » [High-Yield Bond Covenants: Covenant Quality Scoring Criteria \(Update\), October 2013 \(150958\)](#)

To access any of these reports, click on the entry above. Note that these references are current as of the date of publication of this report and that more recent reports may be available. All research may not be available to all clients.

Endnotes

- [1](#) All references to "Asia" or "Asian" are to the emerging-market countries of Bangladesh, China, India, Indonesia, South Korea and Mongolia. These countries are the principal places of business of companies that have issued bonds that we scored.
- [2](#) All CQ scores referred to in this report are for full-package high-yield bonds issued from 2011 to 2015, unless otherwise indicated. We consider a covenant package full-package if it has at a minimum restricted payment (RP) and debt incurrence covenants, which we consider to be the two most important covenants.
- [3](#) We consider a covenant package high-yield lite if it lacks either or both RP and debt incurrence covenants.
- [4](#) The RP income basket is the accumulated pool of profit (typically 50% of net income) plus negotiated additions that the issuer can use in making restricted payments.
- [5](#) Please see [Covenant Quality Trends 2015 - Second-Half Report: Investor Protection Continues to Erode](#), 28 January 2016.
- [6](#) Please see [High-Yield-Bond Covenants – Asia: Asian Companies Are Pre-Dating Restricted Payments Baskets, Allowing More Flexibility to Pay Dividends](#), 8 December 2014.
- [7](#) Please see [High-Yield-Bond Covenants - Asia: Chinese Property Developers' Covenant Quality Is Weakening](#), 8 June 2015.
- [8](#) A protective structure stipulates proceeds of asset sales should be 75% in cash or "cash equivalents".
- [9](#) This is also referred to as the debt incurrence ratio test. In order to satisfy the test, the issuer, on a pro forma basis, must be able to incur at least \$1 of additional debt under the debt incurrence ratio test. This test is used in several covenants as a means of limiting leverage if its incurrence would make debt servicing problematic.
- [10](#) Please see [Chinese Corporates: New Policy on Cross-Border Guarantees Supports Corporates' Overseas Investments](#), 21 May 2014.
- [11](#) Please see [High-Yield-Bond Covenants - Chinese Property Developers: Covenant Protection Against Onshore Bond Issuance Is Weak](#), 26 November 2015.
- [12](#) Portability enables an issuer to have the change of control offer requirement waived on certain conditions. The test may vary from deal to deal, but a common formulation includes achieving an agreed leverage ratio.

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