Introduction

Ratings of individual debt instruments may be adjusted up or down from the Consolidated Corporate Rating to take into account the individual security's priority of payment. Priority of payment for an individual debt instrument is determined by its issuer's place in the corporate structure, its seniority with respect to other debt, and the collateral securing it (if any).

Priority of payment can be determined for the debt instruments of a corporation at any CCR rating level, from AAA to C, but is less relevant for rating individual securities of a highly rated corporation. If the capacity for repayment of an issuer's debt is large relative to its total debt, so that even the most junior claims are well-protected, the ranking with respect to payment is less important to rating individual securities. Where debt capacity is merely adequate or even insufficient to provide for all claims, priority of payment is important for ratings because the most junior debts are less likely to be fully repaid.

The adjustments to the issuer's rating will typically be limited to one or two "notches" because all Morningstar credit ratings are fundamentally relative rankings of the likelihood of default. The ranking of a bond or loan with respect to payment in default should not make the rating diverge significantly from the likelihood of default. Recovery is a secondary consideration compared with default risk as even a debt instrument with excellent recovery characteristics will be delayed in payment, may not get post-petition interest, or have administrative costs connected with the bankruptcy or restructuring.

The starting point for any adjustment is the consolidated corporate rating or CCR, which would be the rating of the ultimate parent's senior unsecured debt assuming that is the only class of debt; that all debt is issued by the ultimate parent level and guaranteed by all subsidiaries; and all of the domestic and foreign assets of the corporation were available to service that debt.

Part I of this document explains parent and subsidiary relationships and how they may affect issuer ratings at the parent and subsidiary level. Part II explains the directional impact of corporate structure (structural subordination), seniority (contractual subordination), and security (collateral) on issue-level ratings (Issue Credit Ratings or ICRs). These directional impacts are the same at all rating levels but the
magnitude of their influence on ratings varies with the issue-specific facts (for example, amount and quality of collateral) as well as the issuer's corporate credit rating. Part II also describes how Morningstar adjusts the issuer rating to arrive at an issue rating, taking into account both the direction and the significance of structure, seniority, and security.

Part I. Parent Subsidiary Relationships and Structural Subordination

Corporations large enough to have publicly traded debt normally operate through one or more subsidiaries. These may be owned directly (parent owns the equity of the subsidiary) or indirectly through an intermediate holding company whose only asset is the equity of the operating subsidiary. Debt is often issued by both a parent and one or more operating companies; sometimes by an intermediate holding company or finance company subsidiary.

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Parent and Subsidiaries: Separate but Equal

In most cases, the issuer credit rating of a subsidiary will be the same as its parent and both will be the same as the consolidated corporate rating, even though they are separate legal entities. There are a number of reasons for this linkage.

- Guarantees and Other Forms of Support. In some cases the parent will provide explicit guarantees of a subsidiary's debt (downstream guarantees) or a subsidiary will guarantee the debt of its parent (upstream guarantees). Where such guarantees are "blanket" guarantees the linkage is unambiguous. If
only some of the debt is guaranteed, the linkage will depend on the extent of the debt guaranteed. There are many forms of support other than guarantees; for example, a parent may provide creditors of its captive finance subsidiary an enforceable pledge to maintain a minimum level of equity or maximum level of leverage at the subsidiary (commonly known as keep-well agreements).

- Cross Defaults: The inclusion of cross defaults in the bond indentures and bank loan agreements of the parent is another common mechanism that supports linking the ICRs. In this case, the default of a material amount of debt at a subsidiary would then automatically default the debt at the parent, thus linking the parent and subsidiary ICRs. MCR will examine relevant debt and corporate legal documents to determine the degree of linkage between the parent and subsidiary issuer ratings. But even in the absence of cross defaults or guarantees, the parent typically has powerful incentives for supporting its subsidiaries: commercial reputation and operational integration.

- Commercial Reputation. Allowing the default of a material subsidiary risk calling into question the parent's willingness as well as its capacity to adhere to its contractual obligations. This could cause liquidity problems for the parent, including a potential downgrading of the long and short term credit ratings, and damage customer and supplier relationships.

- Integration. Allowing a subsidiary to default could also threaten the parent's business to the extent that the subsidiary was an essential, integrated part of the operations of the consolidated enterprise. While some types of business can continue to operate in bankruptcy most would face serious difficulty with suppliers and customers. In any case, the parent's control over the company would be likely be impaired.

**Parent and Subsidiaries: Separate and Unequal**

There are some circumstances in which the issuer credit ratings of the parent and its subsidiaries will be different. These cases require the parent and subsidiary issuer credits rating to be evaluated on a standalone basis as well as examining the degree of credit support among the parent and its subsidiaries.

Examples of circumstances requiring different issuer ratings at the parent and subsidiary include the following:

- Subsidiary issuer rating higher. The subsidiaries may operate in regulated industries, such as electric utilities and banking, where regulators require higher credit quality for the operating subsidiary than is optimal for the parent.

- Subsidiary debt agreements may require higher credit quality (such as restrictive leverage covenants) than the parent's or limit the parent's ability to access subsidiary cash (tight restricted payments covenants and limits on upstream guarantees).

- Subsidiary issuer rating lower. The subsidiary could be exposed to some risk or liability, which the parent wants to limit to the subsidiary and there are no legal or reputational obstacles to limiting support of the subsidiary. In the absence of guarantees or other support agreements, a parent has no more claim than any other shareholder for a subsidiary corporation's debts.

- Foreign subsidiaries may be exposed to country risks that impair credit quality. Furthermore, the assets of foreign entities are also generally less available to serve as collateral to secure domestic debt issues.

Distinctions between parent and subsidiary issuer ratings are heavily dependent on the facts of each particular case. Accordingly, there are no simple rules for determining the difference, if any, between
the issuer ratings of a parent and a subsidiary. However, we are able to apply general principles that govern the priority of payment between debt issued at a subsidiary and debt issued at the parent as explained below.

Part II: Structure, Seniority, Security

**Structural Subordination**

Debt issued at the parent is said to be structurally subordinated to debt at the subsidiary level because the parent has only an equity claim on the subsidiary's assets cash flow. Even the most junior creditor of the subsidiary must be paid in full before the parent can recover the residual, equity value for the benefit of shareholders and creditors of the parent company. Whether this means the parent company debt has materially increased credit risk depends on the size of that residual equity value relative to the parent's debt and to the parent's other sources of debt repayment (parent company assets, including other subsidiaries). If asset coverage at the subsidiary is adequate to repay all claims, if the subsidiary debt is a fraction of the parent debt, or if the parent has sufficient assets other than the subsidiary, then there will be little or no impact on the parent's credit risk. Conversely, if the subsidiary's debt is large relative to its assets and as a percentage of total parent company debt this will likely drive higher parent credit risk. In that case, for example, senior unsecured debt at the parent could be rated lower than subordinated debt at the subsidiary.

Upstream guarantees are usually effective in reducing or eliminating structural subordination for the parent company. However, guarantees must be analyzed carefully before making a rating decision to determine which class of debt at the parent has been made pari passu with which classes of subsidiary debt. For example, guarantees may be secured or unsecured, senior or subordinate, or some combination. Parent level debt with an unsecured guarantee from the subsidiary would still be junior in payment to secured debt of the subsidiary.

**Seniority and Contractual Subordination**

Differing priorities in payment can also result from contractual arrangements between creditors and borrowers. Every debt instrument is governed by a contractual agreement between borrower and lenders. Because these agreements are contracts between private parties, they are dependent on the legal system governing the instruments' documentation to uphold the terms of the contract. As a result, credit documents will include specification of the governing law, which will apply to the agreement and the court jurisdictions in which disputes will be heard.

Senior debt is debt the borrower and senior lender have contracted to be paid before other specified debt. Senior debt indentures will often contain covenants which restrict the issuance of additional senior debt to protect their relative priority of payment and also covenants which restrict total debt to reduce risk of default. Such covenants are common in the credit agreements of speculative and low investment grade issuers but less common for highly rated investment grade issuers. Where it is relevant, MCR will take into account the level of covenant protection in rating individual issues.

Subordinated debt agreements allow the borrower to pay specified classes of other debt before the subordinated debt. Documentation for subordinated debt includes an inter-creditor agreement between
the subordinated lenders and the specified senior lenders that typically give the senior lenders superior rights such as standstill agreements and reallocation of proceeds in the event of bankruptcy.

**Security**

Security is a contractual arrangement that grants a creditor the legal right to seize the assets of a debtor to satisfy an unpaid debt. Corporations typically enter bankruptcy voluntarily to prevent the seizure. In return, the bankruptcy court acts to preserve the value of the collateral for all claimants and gives the secured lender priority over other debt claimants, up to the value of the lender’s collateral. This is an essential qualification: If the value of the collateral is deemed to be less than the secured lender’s debt, then the shortfall becomes an unsecured claim which becomes pari passu with all other unsecured claims of the same seniority.

Security operates independently of seniority, although most but not all secured debt is senior debt. For example, while second-lien mortgage debt is subordinated with respect to the first-lien mortgage debt, it is still considered senior debt in the context of the broader capital structure.

The security for loans and other credit instruments is always specified in their documentation, which must be carefully scrutinized to understand which assets are included in the collateral. Collateral can consist of specified assets, or of all the assets of corporation or a selected set of its subsidiaries. Collateral can also include assets acquired after the closing of the credit documentation and assets such as intellectual property, which can be difficult to value.

Security may also consist of the equity stock of a subsidiary, but this security is a claim only to the equity value of the subsidiary. Therefore, debt secured by the stock of a subsidiary is still structurally subordinate to creditors of that subsidiary. Nonetheless, security in subsidiary equity can be valuable to the extent there is any residual left after satisfying the subsidiary’s creditors. In the case of a loan to the parent, security in the stock of subsidiaries puts the lender ahead of unsecured lenders to the parent if there is any residual value to the subsidiary’s stock. This would be particularly relevant in a case where one subsidiary is a much greater contributor to the overall value of the enterprise; having any direct claim to this subsidiary thus would elevate a claim compared with either unsecured debt or perhaps claims on less valuable operating subsidiaries. Lenders to a parent may also take security in the stock of the parent’s foreign subsidiaries in cases where taxation or the foreign legal system precludes taking security in the foreign subsidiaries’ assets.

Part II: Adjusting for Structure, Seniority, Security

The rating of an individual security may be adjusted up or down from the issuer rating when there are material differences in potential recovery due to structure, seniority or security. Recoveries in bankruptcy are heavily influenced by each case’s unique facts and, therefore, vary widely among classes of debt and among specific issues within a debt class. The distribution of recoveries is so broad that statistical approaches are less useful than careful analysis of the legal and economic facts of each case.

Because issue ratings are fact-intensive with respect to economic value and documentation, the table below is to be used as a guideline rather than to be interpreted as a rigid set of rules. For example,
senior secured would not automatically be notched up nor would unsecured automatically be notched down. Issues can be adjusted up or down from the issuer rating depending on security or seniority, and issuer ratings can differ among parent and subsidiaries due to structural subordination, differences in stand-alone credit worthiness, or regulatory ring-fencing. The rating committee will also take into account the amount of debt senior and junior to the issue being rated and the value (size and quality) of the collateral for any secured debt.

### Exhibit 1

<table>
<thead>
<tr>
<th>Issuer Rating</th>
<th>Senior Secured</th>
<th>Senior Unsecured</th>
<th>Unsecured</th>
<th>Subordinated</th>
</tr>
</thead>
<tbody>
<tr>
<td>AAA</td>
<td>No notching</td>
<td>No notching</td>
<td>No notching</td>
<td>No notching</td>
</tr>
<tr>
<td>AA</td>
<td>No notching</td>
<td>No notching</td>
<td>0 to -1</td>
<td>0 to -2</td>
</tr>
<tr>
<td>A</td>
<td>0 to +1</td>
<td>No notching</td>
<td>0 to -1</td>
<td>0 to -2</td>
</tr>
<tr>
<td>BBB</td>
<td>0 to +2</td>
<td>No notching</td>
<td>0 to -1</td>
<td>0 to -2</td>
</tr>
<tr>
<td>BB</td>
<td>0 to +2</td>
<td>No notching</td>
<td>0 to -2</td>
<td>0 to -2</td>
</tr>
<tr>
<td>B</td>
<td>0 to +3</td>
<td>No notching</td>
<td>0 to -2</td>
<td>0 to -3</td>
</tr>
<tr>
<td>CCC-C</td>
<td>0 to +3</td>
<td>No notching</td>
<td>0 to -2</td>
<td>0 to -3</td>
</tr>
</tbody>
</table>

The general principles illustrated are as follows:

- The starting point for all ratings is the consolidated corporate rating. This is conceptually the rating of the ultimate parent’s senior unsecured debt assuming that is the only class of debt, that all debt is issued by the ultimate parent level and guaranteed by all subsidiaries; and all of the domestic and foreign assets of the corporation were available to service that debt.

- The next step is to assign an issuer rating to each issuer (legal obligor) of rated debt within the corporate structure: parent, subsidiary, or intermediate holding company. In most cases, the Issuer ratings of the parent, subsidiaries, and intermediate holding companies will be the same and equal to the consolidated corporate rating. However, the individual issuer (obligor) ratings may be adjusted from the consolidated corporate rating if necessary due to different credit risk at each member of the corporate family and barriers to consolidating cash flow and assets among parents and subsidiaries.

- At the level of each issuer, the senior unsecured issue rating is set at the level of its issuer’s rating. It is the rating all issues would be assigned if the issuer had no other class of debt so that all debt was pari passu with respect priority of payment, recovery, and rights. All other types of debt instruments may be notched up or down from the senior unsecured rating to take into account the individual characteristics of the instrument (security, seniority, or guarantees for example). But this notching will be applied only if the recovery of an individual debt instrument is judged likely to be materially different from the recovery of the issuer’s senior unsecured debt.

The table indicates the maximum adjustment allowed at each issuer rating level. Issue ratings will not be adjusted from the Issuer (senior unsecured) rating unless the rating committee determines that the particular issue would have a materially higher or lower recovery than the senior unsecured issues.

Notching is not relevant at very high issuer credit ratings as even the most junior debt of such issuers usually has a wide margin of safety. Accordingly, issues of AA and AAA rated issuers will not be notched...
from the issuer rating. Notching becomes more relevant further down the ratings scale as fundamental creditworthiness deteriorates and the range of potential recovery outcomes widens.

Only secured debt can be rated above the issuer rating. The lower the borrower's corporate credit rating, the more lenders rely on collateral protection rather than the borrower's fundamental creditworthiness, and, therefore, the higher likelihood for the secured issue rating to have materially stronger credit coverage than the unsecured debt. Maximum notching widens for secured debt increases from +1 for A rated issuers to +3 for B rated issuers.

Limited notching may be appropriate for issues of A-category issuers in some circumstances. Nonfinancial corporations with ratings of A and above rarely issue secured debt other than specialized debt such as leases, project financings, or real property mortgages; and even less frequently issue subordinated debt. Limited notching may be appropriate in these cases. However, financial corporations such as banks frequently issue subordinated debt for which notching is appropriate.

Notching is broadest for issuer ratings of B category and lower because recovery can range from par plus post-petition interest for well-secured debt to low-single-digit recoveries for junior subordinated debt. But even with the maximum allowed notching of +3, from B+ to BB+, the debt of an issuer rated B will be maintained below the investment-grade threshold.

Covenant protections other than those that preserve relative ranking (such as prohibitions on securing assets or limitations on senior debt) do not determine individual rating levels directly. But covenants, financial and nonfinancial, are important indicators of management's and lenders' confidence in credit quality and are important elements of MCR's credit and rating analysis. Covenants also constrain management's options with respect to capital structure decisions because significant changes in policies would more likely require existing creditors' consent. However, covenants are most important for lower-rated credits for which lenders feel the need to establish limits. Higher-rated credits may dispense with financial covenants altogether.   

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Morningstar Credit Research provides independent, fundamental credit research differentiated by a consistent focus on sustainable competitive advantages.

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