

## RATING METHODOLOGY

# Captive Finance Subsidiaries of Nonfinancial Corporations

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This rating methodology replaces "Captive Finance Subsidiaries of Nonfinancial Corporations", last revised on December 23, 2015. We have updated some outdated references and removed certain issuer-specific information.

## Summary

This rating methodology explains our approach to assessing the interrelationship between industrial companies and their credit-supported captive finance subsidiaries.<sup>1</sup> Captive finance subsidiaries support the sale of their parent company's products and services by making financing available to the parent's dealer network and its retail customers. To accomplish this, it is critical for the finance company to maintain consistent access to capital markets. Accordingly, we expect that the industrial parent will be strongly motivated by its own self-interest to provide financial support for its captive. In most cases, captive finance subsidiaries receive lift that equalizes their ratings with that of their parent company. In virtually all cases, this rating equalization primarily reflects our view of the very high level of strategic importance of the captive for the parent's core operating business, although our assessment also considers formalized support mechanisms. These can be evidenced by a guarantee, a support agreement, or by parent actions to benefit the captive. This methodology explains our approach to assessing the impact of such support on the ratings of the captive. This document also provides insights on the qualitative assessment we make about the possible negative impact on the credit strength of a supporting industrial parent company.

Our assessment of the fundamental credit strength of the industrial parent company, absent the captive finance subsidiary, follows the relevant industry sector rating methodology for the industrial parent. Our assessment of the stand-alone credit strength of captive finance companies follows broad principles that are outlined in our finance companies rating methodology<sup>2</sup>, although it is noted that our approach to rating captives differs in significant ways from other finance companies (see details in Appendix C). In conjunction with the other relevant methodologies, this methodology explains how a captive finance subsidiary's credit quality can benefit from implicit and/or contractual support provided by a more credit-worthy parent and how an industrial parent's rating can be pulled down by the potential need to provide financial support for its captive finance subsidiary.

<sup>1</sup> This update may not be effective in certain jurisdictions until certain requirements are met.

<sup>2</sup> For details, see our methodology for rating finance companies under the Moody's Related Publications section. Some captive finance companies are regulated as banks and take retail deposits. Our assessment of the stand-alone credit strength of these bank captives may follow the principles outlined in our rating methodology for banks, which can also be found under the Moody's Related Publications section.

This methodology does not include an exhaustive treatment of all factors that are reflected in our ratings but should enable the reader to understand how we rate captive finance companies and how assumptions about support of captive finance subsidiaries can impact the ratings of their industrial parent company. This document formalizes our existing approach with some refinements.

Our analysis begins with an assessment of the difference between the stand-alone credit quality of the industrial company and the captive finance subsidiary. The credit quality of the industrial company is assessed using the relevant industry rating methodology, such as our methodology for rating the automobile manufacturer industry.<sup>3</sup> We use broad principles from our finance companies methodology as part of our assessment of the stand-alone credit quality of the captive finance subsidiary.<sup>4</sup>

After forming a view on the approximate stand-alone credit quality of the captive finance subsidiary, we make a subjective assessment of the credit lift for the subsidiary as a result of support provided by the parent. This focuses on the strategic importance of the subsidiary, particularly the degree to which its activities are integral to the parent company's core business. We also consider any guarantees or support agreements, or other actions taken by the parent to indicate an intention to provide support.

We also make a qualitative decision as to whether the credit drag from supporting the captive might lower the industrial parent's rating. This is a purely qualitative decision. In some cases, we may find it useful to make quantitative estimates for a potential equity shortfall or a potential liquidity shortfall at the captive. In other cases, particularly where we view the general magnitude of likely support as not being large relative to the parent's resources, we may see no need to make such quantitative estimates.

This document explains the considerations that are most important in assessing the interrelationship between the ratings of industrial parents and their captive finance subsidiaries. Importantly, the assessments outlined in this document represent a summary that is not intended to include every rating consideration. The Appendices include an illustrative example of how the general level of support and the subsidiary company credit drag on the parent might be approximated using a worksheet that is presented in this document. However, this is an illustrative example and our assessment is often made on a qualitative basis without using the worksheet. This rating methodology is not intended to be an exhaustive discussion of all factors that our analysts consider in rating industrial companies and their captive finance subsidiaries. Potential capital and liquidity needs represent some but not all of the important considerations for assessing the risk that the captive poses to its parent.

Highlights of this report include:

- » An overview of the rated universe
- » A description of the main considerations for our qualitative assessments that determine the rating relationship between industrial companies and their finance captives
- » An illustrative example of pull-down assessment for a parent industrial company ("ParentCo") (Appendix A)
- » An illustrative example of a support assessment worksheet for a captive finance subsidiary ("CaptiveSub") (Appendix B)

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's.com](http://www.moody's.com) for the most updated credit rating action information and rating history.

<sup>3</sup> A link to an index of our sector methodologies can be found under the Moody's Related Publications section.

<sup>4</sup> For details, see our methodology for rating finance companies under the Moody's Related Publications section.

## About the Rated Universe

### Description of the Portfolio of Industrial Companies with Material Captive Finance Subsidiaries.

Companies covered by this methodology include captive finance subsidiaries. A number of industrial companies have captive finance subsidiaries not covered by this methodology. In many cases, the magnitude of the captive finance operations may not be material enough to warrant detailed disclosure and there are no separate financial reports on the captive. In other cases, business activities that would typically be conducted by a captive finance company are directly conducted by the industrial company. In such cases, we may estimate the impact of the captive on the parent company's financial profile when comparing the industrial company to similarly rated peers.

The principal organizational and funding structures typically used by the industrial companies and their captive finance subsidiaries covered by this methodology are:

- » **Discrete Parent and Captive Funding Structure:** In this structure, the industrial company and the captive subsidiary are separate legal entities that have independent funding operations and market access. This is the most common structure seen, and because the parent often provides credit support for the captive in the form of a support agreement or a guarantee, this structure is the primary focus of this methodology. In most cases, the captive is wholly owned by the industrial parent.
- » **Central Conduit Funding Structure That Funds Both the Captive and the Parent:** In this structure, the industrial company and captive subsidiary may be separate legal entities, but funding of the entire businesses is arranged through a central funding structure. The parent or various funding conduit subsidiaries (that are guaranteed by the parent) issue debt in the capital markets and advance funds through inter-company loans to the captive and the industrial operating companies. This is a common structure typically seen with European industrial companies. For these companies, the approach described in this methodology provides insights for how we assess credit risk of the parent and the captive independently and consider the degree of rating drag that the captive has on the overall rating.

### Some of the General Characteristics of Industrial Companies with Material Captive Finance Subsidiaries

- » Industrial companies that have material captive finance subsidiaries are typically manufacturers of large ticket durable goods for which there is an established secondary market. Examples include automobiles, trucks, airplanes, or construction/farm equipment. The characteristics of these products give rise to the need to offer term financing for retail purchasers of the products and underlie the need for a finance subsidiary.
- » In many cases, the industrial company markets its products to end users through a dedicated dealer network, and the need to provide floor plan financing for dealers creates another reason for establishing a captive finance subsidiary.
- » Alternate financing options from banks and independent finance companies are often available for dealers and retail purchasers of the industrial company's products. However, the captive finance subsidiary is often better equipped to offer subvented financing programs (for instance where an auto captive offers reduced interest rate loans which are subsidized by the industrial parent), manage residual value risks, and address other technical issues related to financing the product. Industrial companies often elect to participate in the captive finance business to enhance their sales penetration and better manage customer relationships.

- » When business risks are effectively managed, captive finance subsidiaries can provide important earnings contributions and be a fairly reliable source of dividends to the parent. However, if underwriting standards and funding structures are not carefully managed, captive finance companies can pose a significant financial burden for industrial companies.
- » Captive finance companies seek to match the duration of their assets and liabilities. Nevertheless, many captives rely heavily on short-term funding that can pose significant risk in times of debt market turbulence.

Regardless of the number of finance subsidiaries used, or the structure of the support provided to each subsidiary, we assess the drag on the parent's rating by looking at the combined financial services activities of the group. This is often facilitated by the availability of consolidating financial statements that break out balance sheet, income statement and cash flow information for their aggregate financial service activities from that of the industrial activities. Thus, in assessing the pull-down of the parent rating, we consider the financial drag which the entire financial services activities could pose on the industrial parent. In assessing the uplift of the captive, we look at the specific support structure that is in place for each finance subsidiary. It is possible that different finance subsidiaries of a single parent could have different ratings depending on the strength of the support structure attending to each subsidiary and the strategic importance of that subsidiary to the parent. We would not expect this to be a frequent occurrence because a "second-tier" captive would typically not be cost effective to operate.

## About This Rating Methodology

This document includes four sections, which are summarized as follows:

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### 1. Overview of Our Approach

This rating methodology explains the main considerations for the following subjective assessments:

- » Assessing the difference between the stand-alone credit quality of the parent (using the relevant industry rating methodology) and the captive
- » Assessing the potential for any drag on the parent rating due to potential support of the captive
- » Assessing lift to the captive's credit quality provided by parental support

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### 2. Explanation of Our Approach and Analytical Tools that May be Used

In this section of the report, we summarize the main considerations. We describe analytical tools that can be used to help inform our assessments of credit uplift for the captive and credit drag for the parent company.

When assessing the stand-alone credit quality of the parent of a captive finance company, we populate the methodology scorecard from the relevant industry sector methodology using stand-alone financial information for the industrial operations of the company.

In assessing the stand-alone credit quality of the captive, we follow broad principles outlined in our finance companies methodology<sup>5</sup>, although it is noted that our approach to rating captives differs in significant ways from other finance companies (see details in Appendix C).

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<sup>5</sup> For details, see our methodology for rating finance companies under the Moody's Related Publications section.

When assessing the drag of a captive on the credit quality of a parent company, we may find it useful to estimate the degree to which a liquidity or capital call by the captive changes the scorecard-indicated outcome for the parent company under the relevant industrial methodology. For reasons that are explained in each industrial methodology, the assigned rating of the parent may not match the scorecard-indicated outcome, which is only a starting point for our analysis. The reasons for this difference include factors such as: analytic considerations that are addressed outside the scorecard; analytical weightings in the industry scorecard that are estimates of the appropriate weight on average but not for every company; and, scorecard-indicated outcomes that use historic information that may differ from actual ratings which reflect our forward-looking expectations. Therefore, in assessing the potential pull-down of the parent's rating, we focus on the difference in scorecard-indicated outcomes. We compare the scorecard-indicated outcome of the parent with the scorecard-indicated outcome that results from the capital call adjustment and the liquidity call adjustment.

When assessing possible credit lift of a captive's credit quality, the most important determinant is usually a subjective assessment of the nature and strength of the parent's economic self-interest to support the captive, which determines the degree of lift afforded to the rating of the captive. We may use the worksheet contained in this report (Exhibit 3) as a way to provide organization for this assessment. We also consider any support agreements or support arrangements. An assessment that the parent's support is strong is likely to result in the captive's rating being equal to the rating of the parent. When we view support as being less certain, the assigned rating of the captive could be notched below the assigned rating of the parent or lifted above its stand-alone credit strength to a level below the parent.

The information used in assessing the stand-alone credit quality of industrial companies and captive finance subsidiaries is primarily derived from information contained in the company's financial statements, other information about the industry sector and similar companies, and observations or estimates made by analysts.<sup>6</sup>

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### 3. Illustrative Example

In this section (Appendices A and B), we provide tables with a summary example about the relationship between a parent industrial company ("ParentCo"), a global automobile manufacturer in this scenario, and a captive finance company subsidiary ("CaptiveSub").

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### 4. Assumptions, Limitations and Rating Considerations That Are Not Included in the Scorecard

This section discusses limitations in the use of pull-down analysis for the parent, factors that might be considered in assessing the benefits of support agreements, and limitations and key assumptions that pertain to the rating methodology.

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<sup>6</sup> For details, see our cross-sector methodology for financial statement adjustments in the analysis of non-financial corporations under the Moody's Related Publications section.

## Overview of Our Approach

Analysis of the interrelationship between the ratings of industrial companies and their captive finance subsidiaries typically involves three principal assessments:

### » **Assessing stand-alone credit quality of the parent and captive**

To assess the interrelationship between the credit quality of a captive finance company and its industrial parent company, it is important to have a general understanding of the credit strengths and weaknesses of each entity on a stand-alone basis. Understanding the risks and weaknesses of the captive finance subsidiary is necessary to estimate the magnitude of any potential call which the captive finance subsidiary might make on the parent for financial assistance. Similarly, it is only by understanding the credit profile of the industrial parent, that a determination can be made of its ability to provide the financial assistance that the captive might require.

### » **Assessing the lift of the captive finance subsidiary's credit quality provided by parental support**

The financial support which the captive finance subsidiary receives from the parent company reduces its financial risk and enhances its credit quality. This support is often exhibited in the form of a guarantee or a support agreement issued by the parent in favor of the captive. But it is critical to look beyond the contractual arrangement to understand the business and economic motivations which a parent might have to support the captive. We utilize Moody's existing practices regarding the assessment of guarantees as well as an assessment of support agreement characteristics as part of our decisions in evaluating the strength of parental support for a captive and the degree of lift which can be imputed above the captive's stand-alone credit quality.

### » **Assessing the drag on the parent rating posed by the potential need to support the captive**

The potential need to provide financial support to a captive finance subsidiary that is experiencing a capital or liquidity shortfall can sometimes have an adverse effect on the credit quality of the parent company. The important role that the captive plays in the sales finance process for the parent motivates the parent company to provide support for its captive. In some cases, we make quantitative estimates to help inform the rating decision. Such quantitative estimates assume that the parent would be called upon to fill a capital shortfall or a liquidity shortfall at the finance operation. Where we view these as being large relative to the resources of the parent, we may make pro forma adjustments to the parent company's scorecard (from the relevant industry rating methodology) that reflect its provision of the necessary capital or liquidity to the finance unit. We would then compare the scorecard-indicated outcomes that are adjusted for capital or liquidity support to the parent's scorecard-indicated outcome without these adjustments.

## Explanation of Our Approach

### **I: Assessing the difference between the stand-alone credit quality of the parent and the captive finance subsidiary**

#### **Why It Matters**

Industrial company financial analysis is very different from finance company analysis, and simply analyzing a parent and its captive on a consolidated basis can give very misleading impressions of credit strength. For instance, the combined balance sheet of an industrial company and its captive finance subsidiary might seem highly leveraged in comparison to a peer industrial company that does not have a captive finance subsidiary. But upon splitting the businesses apart, it might become apparent that the greater level of debt

associated with the finance business is appropriate given the nature of its assets, and that the industrial business is only moderately leveraged. It is therefore important to make an assessment of the difference in the stand-alone credit quality between the parent company and the captive; that is to assess the credit quality of the finance company on its own excluding any parental support, and then to separately assess the credit quality of the industrial operations after deconsolidating the finance subsidiary.

### How We Assess It

- » Appendix A compares the scorecard-indicated outcome for a sample parent industrial company ("ParentCo"), a global automobile manufacturer, on a stand-alone basis with the scorecard-indicated outcome when adjustments are made for a potential liquidity call and a potential capital call. We show three different scorecard-indicated outcomes for "ParentCo" using the scorecard from our methodology for rating automobile manufacturers<sup>7</sup>: 1) an outcome using financial values for "ParentCo" that deconsolidate its captive finance subsidiary ("CaptiveSub"), 2) an outcome after making pro forma adjustments for a potential capital call, and 3) an outcome after making pro forma adjustments for potential liquidity calls by the captive.
- » Our assessment of the stand-alone credit strength of captive finance companies follows the broad principles outlined in our finance companies methodology<sup>8</sup>, although it is noted that our approach to rating captives differs in significant ways from other finance companies (see details in Appendix C). Because of the many interconnections that exist between a captive and its parent, it is unlikely that a captive would ever truly be a "stand-alone" entity, and the analyst's estimate of the stand-alone credit quality of a captive does not represent an actual rating for that entity. It is simply a theoretical construct that is helpful as an informational input for our qualitative rating assessment of the captive including support.

As a general statement, in estimating the stand-alone credit quality of captive finance companies, we have typically found that many of their characteristics are consistent with a speculative grade or low investment grade credit quality.

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## II: Assessing the drag on the parent rating posed by the potential need to support the captive

### Why It Matters

- » For industrial companies that produce high ticket capital equipment such as automobiles, construction equipment and airplanes, the ownership of a captive finance subsidiary is often a critical component of the sales and distribution process. Captive finance subsidiaries assist manufacturers by providing floor plan financing for dealers and provide support for sales to end users through retail sales financing and lease financing. Ownership of a captive finance subsidiary can be particularly helpful for an industrial company during economic downturns as the captive can be used to provide subvented financing for customers which in turn helps to support sales volumes. Consequently, for companies that have chosen to operate captive finance subsidiaries, there is usually a significant incentive to provide ongoing support for the captive.
- » Yet the operation of a captive finance subsidiary brings important risks in that the captive subsidiary requires significant access to capital to fund its portfolio. The inability of a captive finance subsidiary to maintain a competitive cost of capital can render it unable to effectively compete with other lenders. Moreover, because of the risks of cyclical changes in credit losses or residual value risks on used

<sup>7</sup> For details, see our methodology for rating the automobile manufacturer industry under the Moody's Related Publications section.

<sup>8</sup> For details, see our methodology for rating finance companies under the Moody's Related Publications section.



equipment coming off leases, captive finance subsidiaries can also pose an element of earnings volatility for parent companies.

- » Failing to provide support for a captive that is viewed by the capital markets as a key component of the parent's operations can have important reputational risks for the parent and could adversely affect its ability to access the capital markets.

#### How We Assess it

The potential drag on the parent company's rating can be assessed qualitatively, particularly when the likely support is not viewed as being large relative to the parent's resources. We may also estimate support on a quantitative basis. This involves producing support-adjusted scorecard-indicated outcomes for the parent using two methods:

- » Capital Call Assessment:

In the capital call assessment, we estimate the amount of equity shortfall in the captive's capital structure in relation to a target leverage range. In measuring the target leverage range, we use the ratio of Tangible Common Equity (TCE) to Tangible Managed Assets (TMA), a common measure of leverage used for finance companies. The target leverage range will vary depending on the nature of the company, but as a means of guidance we provide the following suggested TCE/TMA ranges for finance companies at given rating levels derived from our finance companies methodology.<sup>9</sup>

Rating Level	Suggested Target TCE/TMA
Aa/A	≥16%
Baa	12% - 16%
Ba	8% - 12%
B	4% - 8%
Caa	<4%

In using this chart, we look at the rating range of the parent company under the assumption that in most cases, a captive finance subsidiary is seeking to enhance its credit quality to the level of the parent company that is providing financial support. For instance, if a hypothetical industrial company "ParentCo" has an actual rating of A2, we might target a TCE/TMA for the captive "CaptiveSub" of 16%. Importantly, because each case must be assessed on its own unique circumstances, analysts consider issuer-specific characteristics in selecting the target TCE/TMA for the captive. If in our example, "CaptiveSub" were judged to have above average risks because the asset type that it finances has a limited aftermarket or has a history of volatility of used equipment values, the analyst might target a TCE/TMA of 20% with the view that the higher risk warrants a higher level of capital reserve.

Using the target TCE/TMA, the amount of equity shortfall in the captive's capital structure is calculated. Extending our example, the equity shortfall of "CaptiveSub" can be estimated as follows (\$millions).

<sup>9</sup> For details, see our methodology for rating finance companies under the Moody's Related Publications section.



Tangible Common Equity of "CaptiveSub"	\$1,600
Tangible Managed Assets of "CaptiveSub"	\$13,000
Actual TCE/TMA	12.3%
Target TCE/TMA	16%
Tangible Common Equity Needed	\$2,100
Equity shortfall of "CaptiveSub"	\$500

It is then assumed that this shortfall is filled via an equity contribution from the parent and that the parent funds its equity contribution via the issuance of new debt. The parent company's industry rating methodology scorecard is then recalculated using the higher level of debt and imputed interest on the additional debt. In our example, if the incremental \$500 million of debt were inconsequential to "ParentCo", its scorecard-indicated outcome might be unaffected. Alternatively, if the incremental debt were more material to the company's overall credit profile, the support-adjusted scorecard-indicated outcome for "ParentCo" might be pulled down by one or more notches.

The following exhibit demonstrates how a sample industrial rating methodology scorecard for "ParentCo" might be affected, assuming that "ParentCo" is a company rated in accordance with our methodology for automobile manufacturers.<sup>10</sup> If the equity shortfall at "CaptiveSub" is funded by "ParentCo" using new borrowings, "ParentCo's" scorecard-indicated outcome would be pulled down from A2 to A3 as shown below.

## EXHIBIT 1

**Sample Parent Company Rating Methodology Scorecard with Pro forma Adjustments for Potential Capital Call from Finance Subsidiary**

Broad Factor	Specific Factor	Weight	Sub-factor	Actual Results as of 12/31/14	12/31/14 Pro forma for Capital Call	Scorecard- Indicated Outcome
				Scorecard- Indicated Outcome	Sub-factor	Scorecard- Indicated Outcome
BUSINESS PROFILE	Business Profile	20%	Aa	Aa	Aa	Aa
SCALE	Revenue (USD Billion)	20%	\$15.00	A	\$15.00	A
PROFITABILITY	EBITA Margin	10%	15.00%	A	15.00%	A
LEVERAGE AND COVERAGE	EBITA / Interest Expense	10%	8.18x	A	7.63x	Baa
	Debt / EBITDA	10%	1.72x	A	1.84x	Baa
	Retained Cash Flow / Net Debt	10%	33.00%	Baa	29.10%	Baa
	Free Cash Flow / Debt	10%	15.00%	A	13.20%	Baa
FINANCIAL POLICY	Financial Policy	10%	A	A	A	A
SCORECARD-INDICATED OUTCOME		100%		A2		A3

<sup>10</sup> For details, see our methodology for rating the automobile manufacturer industry under the Moody's Related Publications section.

» Potential Liquidity Call Assessment:

A similar process is used for the potential liquidity call assessment in which we estimate the potential liquidity call which the captive might pose on the parent and assess how it would affect the scorecard-indicated outcome of the parent.

Captive finance companies generally seek to achieve a rough match between the average duration of their assets and the average duration of their liabilities. However, as the average maturity of a captive finance company's portfolio might be only 3 years, the funding structure might include a significant component of short-term debt. Analysts must therefore estimate the magnitude of the potential liquidity call that the captive might make on the parent based on their understanding of the liquidity planning process of the consolidated organization being assessed. There is significant variability in the way that different groups manage their liquidity. In some cases, captive finance subsidiaries maintain large cash positions or committed lines of credit with banks that are separate and distinct from the lines maintained by the parent. In other cases, the parent company might allocate availability of a portion of its lines to the captive, and in other cases, all of the alternate liquidity resources might be managed at the parent company level. For the purposes of this rating methodology, we therefore focus on the liquidity of the consolidated enterprise – including the industrial parent and its finance operations. Analysts may use both our methodologies for liquidity risk assessment and for finance companies in assessing the group's alternate liquidity planning, and gauge the amount of a potential liquidity call which the captive could pose on the parent.<sup>11</sup>

It is noted that the largest funding requirement of a captive finance company will generally be its need to finance debt maturities over the next 12 to 24 months. However, we also consider other potential funding needs such as long-term funding commitments which the captive might have entered into, or portfolio growth requirements (particularly during economic upturns, captives might be called upon by their parent to expand their funding of product sales which results in portfolio growth).

In some cases, captive finance subsidiaries carry large cash balances that are greater than the base levels needed to operate the business. We net these cash balances against the potential cash uses (such as the debt maturing during the coming twelve months) to arrive at the potential cash call on the parent. It is important to note that where the captive has committed long-term lines of credit that are separate and distinct from those of the parent, we will consider them as a cash source for the captive. If the lines are shared with the parent company, we do not consider them as a discrete source of funding for the captive. Rather, we would consider them a source which the parent might use to fund its contributions to the captive (acknowledging that this is a more conservative approach). For the purpose of this exercise, which is to assess the potential cash call on the parent, this conservative approach is appropriate. It is also noted that we generally do not assume that portfolio runoff will be a primary source of liquidity at the captive unless the parent has articulated a specific strategy to downsize the captive. As a general rule, captive finance subsidiaries are expected to support the sales activities of the parent, and therefore, absent a specific strategy to downsize the captive, we would expect proceeds from portfolio runoff to be reinvested by the captive in originating new receivables. Consequently, under normal circumstances we do not consider portfolio runoff as a source of liquidity for the captive.

One of the reasons that many parent companies maintain large liquidity positions is to be able to provide liquidity support to their captives when needed. Because of this, we net the surplus cash of the parent company (generally the amount of cash in excess of 3% of revenue) against the potential liquidity call from the captive. This leaves a net amount that the parent would likely need to fund through additional debt issuance. This might result in drawing of the group's committed bank lines or some other form of capital

<sup>11</sup> For details, see our general principles of liquidity risk assessment cross-sector methodology and our methodology for rating finance companies under the Moody's Related Publications section.

markets debt issuance. No matter the source, these borrowings would be treated as increased debt obligations at the parent level for the purposes of this analysis.

The changes in parent company cash balances and outstanding debt implied by this exercise are used to create pro forma adjustments to the rating methodology scorecard as was done under the capital call assessment. For example, if we estimate the potential liquidity call of "CaptiveSub" on "ParentCo" to be \$1.6 billion, and "ParentCo" has a surplus cash position (cash above an amount equal to 3% of revenue) of \$1.0 billion, the amount of additional borrowing necessary at "ParentCo" to fund "CaptiveSub's" shortfall would be \$600 million (\$1.6 billion less excess cash of \$1.0 billion). In recalculating the rating methodology scorecard, we would adjust "ParentCo's" metrics by reducing cash by \$1.0 billion and increasing debt by \$600 million.

This approach provides an indication for the degree to which the potential liquidity call posed by "CaptiveSub" likely affects the credit profile of "ParentCo". If these adjustments are made to "ParentCo's" rating methodology scorecard, the scorecard-indicated outcome would be pulled down by one notch as shown below.

## EXHIBIT 2

**Sample Parent Company Rating Methodology Scorecard with Pro forma Adjustments for Potential Liquidity Call from Finance Subsidiary**

Broad Factor	Specific Factor	Weight	Actual Results as of 12/31/14		12/31/14 Pro forma for Liquidity Call	
			Sub-factor	Scorecard- Indicated Outcome	Sub-factor	Scorecard- Indicated Outcome
BUSINESS PROFILE	Business Profile	20%	Aa	Aa	Aa	Aa
SCALE	Revenue (USD Billion)	20%	\$15.00	A	\$15.00	A
PROFITABILITY	EBITA Margin	10%	15.00%	A	15.00%	A
LEVERAGE AND COVERAGE	EBITA / Interest Expense	10%	8.18x	A	7.44x	Baa
	Debt / EBITDA	10%	1.72x	A	2.05x	Baa
	Retained Cash Flow / Net Debt	10%	33.00%	Baa	22.70%	Ba
	Free Cash Flow / Debt	10%	15.00%	A	12.80%	Baa
FINANCIAL POLICY	Financial Policy	10%	A	A	A	A
SCORECARD-INDICATED OUTCOME		100%		A2		A3

When making a capital call adjustment and a potential liquidity call adjustment to the scorecard-indicated outcome of the industrial parent, we generally put more weight on the lower of the two pro forma outcomes. In the example of "ParentCo", pro forma adjustments of the industry methodology scorecard suggest that the rating be pulled down by up to one notch (the scorecard-indicated outcome changes from A2 to A3) for both the capital call adjustment and the potential liquidity call adjustment. However, the decision on whether or not to pull down the parent rating and by how much is ultimately a qualitative judgment and this may not match the pull-down that is suggested from either approach.

### III: Assessing how the captive's credit quality is uplifted by the parental support

#### Why It Matters

It is critical to understand the business relationship and the contractual relationship between a parent and captive in assessing the credit quality of a captive finance subsidiary. Because captive finance subsidiaries are critical elements of the marketing and sales strategies of industrial companies, the credit quality of the captive can be directly influenced by the ability and willingness of the parent to provide support. We consider contractual support in the form of guarantees or support agreements that might exist between a parent and captive. However, in the absence of a strong guarantee, support agreements are typically less important than our assessment of how the business relationship might motivate the parent to support or not support the captive.

#### How We Assess It

A parent company's support for its captive subsidiary could be explicit, such as when an unconditional guarantee or a support or operating agreement exists. Alternatively, the formal commitment to provide support might be less legally clear. Such circumstances include comfort letters, management's public statements about the captive, or management's past behavior in managing the captive. In the case of a full guarantee that meets expectations for full credit substitution, this is a relatively straight forward process. Where the nature of the guarantee has certain shortfalls, the most important focus tends to be the business relationship between the parent and the captive as a means of assessing the motivations of the parent to support the captive. In the case of a support agreement, we use a qualitative assessment (Exhibit 3) of the contractual terms of the support agreement as well as the business relationship between the parent and captive which might motivate the parent to support its subsidiary. Weaker forms of support, such as comfort letters, are typically given no value in our analysis. In the absence of a contractual support agreement or guarantee, we still assess the nature of the relationship between the parent and the captive and the willingness of the parent to provide support. Where there is a strong likelihood that support would be provided but the parent does not evidence this with a guarantee, a support agreement or an operating agreement, the credit quality of the captive might still be lifted but it is unlikely to approach the rating of the parent.

The following sections provide a more complete description of how we assess guarantees, and support agreements issued by parent companies in favor of their captive finance subsidiaries.

#### Assessing Guarantees

Our assessment of guarantees can be better understood by reference to our rating methodology for rating transactions based on the credit substitution approach.<sup>12</sup> It identifies the core principles of guarantees as the following:

- » The guarantee is irrevocable and unconditional
- » The guarantee promises full and timely payment of the underlying obligations
- » The guarantee covers payment—not merely collection
- » The guarantee covers preference payments, fraudulent conveyance charges, or other payments that have been rescinded, repudiated or “clawed back”
- » The guarantor waives all defenses

<sup>12</sup> For details, see our cross-sector rating methodology for rating transactions based on the credit substitution approach including letter of credit-backed, insured and guaranteed debts, under the Moody's Related Publications section.

- » The term of the guarantee extends as long as the term of any underlying obligations that benefit from the guarantee
- » The guarantee is enforceable against the guarantor
- » The transfer, assignment or amendment of the guarantee by the guarantor does not result in a deterioration of the credit support provided by the guarantee
- » The guarantee is governed by the law of a jurisdiction that is hospitable to the enforcement of guarantees

When a guarantee departs from these core principles, we may consider whether the parent guarantor's self-interest in maintaining the creditworthiness and business viability of its captive subsidiary is sufficient to mitigate contractual deficiencies in the guarantee. The factors we consider include but are not limited to: a) the degree to which the operations of the companies are interwoven; b) the degree to which the operations of the captive are integral to the parent; and c) the degree of business or financial disruption that would result for the parent if payments by the guaranteed captive are not made on time.

The outcome of this fundamental analysis can range from no support being attributed (in which case the rating of the captive would be based on our assessment of the captive's stand-alone credit quality), to an equalization of the ratings of the captive with those of the industrial parent (meaning full support may be attributed in some cases despite weaknesses in the guarantee or even the absence of a guarantee)<sup>13</sup>.

Using our prior example, if a guarantee existed between "ParentCo" (whose assigned rating is A3 as noted above) and "CaptiveSub", and that guarantee met all of the core principles outlined above, "CaptiveSub's" rating would be lifted to A3. If the guarantee were deficient on one or more of the core principles the rating might still be lifted to A3 if we believed that there were significant reasons why the parent would honor the guarantee regardless of the noted deficiencies. Alternatively, if the deficiencies were of greater magnitude and/or we were less convinced of the parent's willingness to honor the guarantee, a lesser degree of rating uplift, or no uplift at all, could be applied to the rating of "CaptiveSub".

#### Support Assessment - Qualitative, Not Quantitative

There are situations in which a support agreement is used to evidence support provided by the industrial parent to the captive finance subsidiary. The rating lift provided to the captive as a result of such an agreement reflects our qualitative assessment of the importance of the finance operations to the parent and the features of the agreement. While our assessment of support and the resulting rating does not normally involve the mathematical calculations shown in the worksheet in Exhibit 3, we have included this worksheet to illustrate some of the considerations in our support decisions. In practice, we typically evaluate the specific and unique relationship between each captive and its parent without reliance on such a quantitative calculation.

<sup>13</sup> If no support is attributed and information is insufficient to assess stand-alone credit quality with the precision implied by an alpha-numeric rating, we may elect to not assign a rating.

## EXHIBIT 3

## Illustrative Example of Some Support Considerations

Assessment of Support Agreement Features	Possible Points	Feature	Definition		
			Weak Support	Medium Support	Strong Support
	10	Ownership	0	5	10
			No minimum ownership level defined	Parent required to own at least a simple majority of Captive	Parent required to own 100% of captive
	30	Contributions	0	20	30
			Agreement does not require contributions from parent	Contributions required from parent if a specific metric is breached (such as a minimum fixed charge coverage) and the threshold level is deemed to be set at a level that provides a moderate margin of safety	Contributions required from parent if a specific metric is breached (such as a minimum fixed charge coverage) and the threshold level is deemed to be set at a level that provides a good margin of safety
	40	Subtotal			
Assessment of Willingness of Parent to Provide Support	Possible Points	Feature	Definition		
			Weak Support	Medium Support	Strong Support
	20	Reputation or Brand risk	0	10	20
			Name of Captive is not obviously linked to the parent and the brand risk to the parent of failing to support the captive is not certain.	Captive name can be easily associated with parent or captive is recognized by the market as a member of the group, and failure to support the captive would likely pose brand risk to the parent although the consequences could potentially be managed.	Captive carries the name of the parent and failure to support the captive would likely pose a meaningful reputational risk to the parent. There are clear and meaningful brand risks for the parent if the captive is allowed to fail.
	20	Economic Risk	0	10	20
			Due to business and financial considerations, there is believed to be little or no economic value remaining in the captive that warrants defending by the parent.	The magnitude and durability of any economic value in the captive is uncertain. While the parent might choose to support the captive in the short term, it is not clear that support will be ongoing.	There is believed to be meaningful economic value in the captive that could be lost if the parent fails to provide support
	10	Strategic Fit/Event Risk	0	5	10
			Little or no strategic fit between parent and captive. It is believed that a separation could be accomplished without significant business difficulty for the parent.	Strategic fit is less clear, meaningful portions of the captive's portfolio are considered to be non-captive. Business lines or customer bases may be somewhat divergent and while consequences of a separation exist, they are believed to be manageable.	Captive subsidiary is viewed to provide a substantial tangible benefit to the parent and to be highly integrated with the parent's business lines, customers or product strategy. Any separation effort would likely be difficult.
	10	Track record	0	5	10
			Historic evidence of parent electing to not support the captive or another material subsidiary	No clear evidence of past support or failure to support	Historic evidence of parent providing support to the captive through financial contributions, advances, or other meaningful actions
	60	Subtotal			

Overall Support Score from worksheet

Support agreements are often constructed as bilateral contracts between the supporting entity (the industrial parent) and the supported entity (the captive finance subsidiary). Third parties, such as creditors, are not direct beneficiaries of the features of these agreements. Yet, because debt issued by the supported entity often identifies the existence of the support agreement (disclosure in offering memorandum) and debt holders often consider the existence of the agreement in their investment decision, some courts do recognize these agreements. It is essential that governing law of the financing transaction and of the support agreement be friendly to the enforcement of such agreements. In some cases, the support agreement will explicitly state that investors can take legal action to cause the supported entity to enforce its rights against the supporting entity on behalf of the debt holders.

Because support agreements do not constitute a legal credit substitution as seen in a guarantee, the worksheet considers the specific features and terms of the support agreement (40% weight) and the willingness of the parent to provide support (60% weight). There are many features seen in support agreements, but we believe that the most significant are those that define a minimum level of ongoing ownership of the captive by the parent and that provide for support payments to be made by the parent to the captive under certain circumstances, such as if the captive's fixed charge coverage falls below a certain level. The worksheet provides points based on the relative strength of these features, with the total available points for support agreement features being 40.

When assessing support agreements, it is essential to consider the willingness of the parent to provide support to the captive. The worksheet provides up to 60 points related to willingness of the parent to provide support based on four criteria:

1. Reputation or Brand Risk (up to 20 points): Where a parent would face significant reputation or brand risk if its captive finance subsidiary were allowed to fail, it is more likely that the parent will provide support. This might be the case when the captive's name can be directly linked to that of the parent or where the parent's business model would be severely impaired without the continued functioning of the captive.
2. Economic Risk (up to 20 points): Where there is meaningful economic value that exists in the captive, a parent company is more likely to defend that value and provide support. Examples might be a captive with an ongoing positive net worth or a captive with potential for improving earnings or cash flow following a temporary period of financial stress.
3. Strategic Fit/Event Risk (up to 10 points): When there is an important ongoing strategic business fit between the parent and the captive, the parent is more likely to provide support. This is most common when the captive's business is truly of a captive nature and the captive maintains a significant penetration rate of financing sales of the parent's product. It is less true when a captive has a meaningful portion of its business activity that does not support sales of the parent's product. In such cases, the need of the parent to provide ongoing support for the captive is less clear, and there could be event risk that the parent might choose to exit its ownership of the captive.
4. Track Record (up to 10 points): Where a parent has previously been willing to provide support to the captive, its track record can indicate potential for future support to be provided if needed. Conversely, historical evidence of a parent failing to provide support to a material subsidiary would be viewed negatively under this criterion.

Where the total worksheet points exceed 90 (i.e. there is a strong support agreement and there is believed to be a strong willingness of the parent to provide support), the rating of the captive would more likely be lifted to the rating level of the parent. Where the total worksheet points are between 50 and 90 (where the support agreement is less complete and/or the willingness of the parent to provide support is expected but not certain), the worksheet would suggest that the rating of the captive might be one or two notches below the rating of the parent. Where the total worksheet points are between 20 and 50 (there may or may not be a support agreement in existence and the willingness of the parent to provide support is questionable), the worksheet suggests that the rating would likely be no better than one or two notches above the stand-alone credit quality of the captive. Where the total worksheet points are less than 20 (the existence of a support agreement is unlikely and the willingness of the parent to provide support is very limited), this suggests that there might be no rating uplift from the stand-alone credit quality of the captive.



## Illustrative Example

The table in Appendix A illustrates the sample suggested impact of a captive finance subsidiary's ("CaptiveSub's") support for the rating of a parent industrial company ("ParentCo").

The table in Appendix B shows the component scoring from a sample support assessment worksheet for a "CaptiveSub", along with the suggested impact on its rating. Since we do not publish specific alpha-numeric stand-alone credit assessments for most captive finance companies, and complete analytical separation of captives from the parent is to some degree an artificial construct (the captives' operations and financial policies reflect their relationship to the parent), the table shows an approximate indication of lift based on support rather than a specific number of notches.

Appendix C explains some of the differences between captive finance companies and other finance companies.

## Assumptions and Limitations

The assessments described in this methodology do not constitute an exhaustive treatment of all of the considerations that are important for assessing the rating relationship between industrial companies and their finance captives and do not comprehensively cover every credit issue. In gauging the potential risks which the captive poses to the parent, our assessments tend to focus on capital adequacy and liquidity, which we view as highly important in assessing risks of finance companies but other risk elements and mitigants can also be important considerations. Examples include portfolio performance and the quality of management.

## Appendix A

### Sample Application of Capital Call Adjustment and Liquidity Call Adjustment to "ParentCo"

Industrial Parent Company	Principal Rated Captive Finance Subsidiary	Scorecard-Indicated Outcome of Parent Using Relevant Rating Methodology	Support-Adjusted Scorecard-Indicated Outcome of Parent		Suggested Impact of Captive Support on Parent Rating Using Historic Data
			Using Capital Call Adjustment	Using Potential Liquidity Call Adjustment	
"ParentCo"	"CaptiveSub"	Baa2	Baa3	Baa3	Modest Pull Down

## Appendix B

### Sample Support Assessment Outcome for "CaptiveSub"

	Support Agreement Features			Willingness of Parent to Provide Support					Overall Outcome	Suggested Outcome for Captive Rating
	Ownership	Contributions	Subtotal	Reputation or Brand Risk	Economic Risk	Strategic Fit & Event Risk	Track Record	Subtotal		
"CaptiveSub"	0	30	30	20	20	10	10	60	90	Full lift to parent rating

## Appendix C

### Differences Between Captive Finance Companies and Other Finance Companies

Unique rating considerations apply to captive finance companies stemming from their parent-related business purpose and relationships. The primary purpose of a captive finance company is to provide financing (loans and leases) and related services (such as insurance sales) to dealers and end-users of its parent's products. A captive may have business activities not related to its parent's products and services, but these activities will be of lesser importance to the captive's central mandate to facilitate the sale of its parent's goods. In some cases, captives are partially owned by financial investors. We may elect to treat as non-captive a finance company that is owned by an industrial parent but for whom captive finance represents a relatively small percentage of overall activities. Our approach to rating captive finance companies differs in significant ways from other companies covered by our finance companies methodology.<sup>14</sup>

1. Ratings of captive finance companies are usually highly influenced by the likelihood of parental support and the credit strength of the parent.

The support assessment considers economic and reputational incentives for the parent to provide support to its subsidiary, along with documents such as guarantees and support agreements. A captive finance company may play an important role in the consolidated company's strategy to sell its products and services. As a result, captives may be rated many notches higher than the rating that would apply for an identical independent finance company.

2. It is not always possible to derive a stand-alone rating for a captive finance company.

The activities of the finance company and its parent/affiliates may be significantly intertwined or there may be insufficient disclosure on the stand-alone characteristics of the captive. In such cases, we may rate the captive primarily or solely on the basis of parental support. In these cases, the assessment of the credit strength of the parent and the strategic importance of the captive, along with any support agreements, will be the driving elements for the rating. Depending upon the strength of these elements, the captive's rating may be equalized with the parent rating or may be notched down from the parent rating. Alternatively, we may use the finance company scorecard to generate an estimated stand-alone rating for the captive, but we may find it necessary to estimate or approximate the grade for some factors due to stand-alone disclosure limitations. In this case, the captive's rating could be notched up from its estimated stand-alone rating, depending upon its strategic importance and the strength of parental support.

3. The stand-alone rating of a captive may have limited meaning as a credit measure when the captive has an inseparable relationship within the parent's integrated business strategy.

The captive's franchise and risk positioning and its financial profile may be shaped by a consolidated enterprise strategy. For example, portfolio risk characteristics may vary significantly over time as shifts in the parent's consolidated marketing strategy drive changes in customer financing terms, and a captive may operate with weaker independent liquidity because liquidity management is integrated with the parent.

4. In some cases, a stand-alone rating will not be published for a captive.

<sup>14</sup> For details, see our methodology for rating finance companies under the Moody's Related Publications section.

This is particularly likely when a stand-alone rating could suggest greater precision than is warranted for a captive that is highly integrated into the operations of the parent, or where information is insufficient for a meaningful separate assessment of parent and captive.

5. Where stand-alone ratings are published, these may be shown by rating category (e.g. Baa, Ba, B, etc.) rather than by a more precise alphanumeric indicator (e.g. Baa1, Baa2, Baa3, etc.).

This is particularly likely when the finance company is highly integrated with its parent and/or its financial disclosures are limited.

## Moody's Related Publications

Credit ratings are primarily determined by sector credit rating methodologies. Certain broad methodological considerations (described in one or more cross-sector rating methodologies) may also be relevant to the determination of credit ratings of issuers and instruments. An index of sector and cross-sector credit rating methodologies can be found [here](#).

For data summarizing the historical robustness and predictive power of credit ratings, please click [here](#).

For further information, please refer to *Rating Symbols and Definitions*, which is available [here](#).

*Moody's Basic Definitions for Credit Statistics (User's Guide)* can be found [here](#).

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