Article Title: Criteria | Corporates | Industrials: Methodology For Rating General Trading And Investment Companies Data: (EDITOR'S NOTE: —On July 21, 2022, we republished this criteria article to make nonmaterial changes. See the "Revisions And Updates" section for details.) 1. These criteria represent S&P; Global Ratings' methodology for rating general trading and investment companies. The criteria articulate the steps in developing a stand-alone credit profile (SACP) and issuer credit rating (ICR) for general trading and investment companies (see "Stand-Alone Credit Profiles: One Component Of A Rating" for the definition of an SACP). This article is related to the criteria article "Principles Of Credit Ratings." I. SCOPE OF THE CRITERIA 2. These criteria apply to general trading and investment companies. We define these as companies that have significantly diversified business trading portfolios and exposure to various risks through long-term investments in multiple businesses. 3. In their trading business, general trading and investment companies act as intermediaries or wholesalers for their customers, with whom they typically have long-term contractual relationships that may encompass providing procurement and distribution services, trading finance and logistics, trade market intelligence, and consulting for a large variety of goods and markets. 4. Key characteristics of the sector's investment business are to maintain a broadly diversified portfolio of businesses across many different industries, as well as to establish vertical integration within each industry. The investment business does not aim for short-term capital gains from equity investments. Rather, it focuses more on creating value chains in various industries over the long term and is tied to customers' needs. General trading and investment companies must operate across at least three different industries to fall under the scope of these criteria. 5. While the criteria apply to Japanese general trading and investment companies (typically called "general trading companies" or "sogo-shosha"), companies with similar characteristics outside Japan would fall under the scope of these criteria. We intend to apply the same analytical framework to such non-Japanese general trading and investment companies that meet the characteristics described in these criteria. 6. These criteria do not apply to commodity traders (see "Commodities Trading Industry Methodology"). Although general trading and investment companies engage in commodity trading activities to some degree, their trading business extends well beyond commodities and is aimed at providing customers with wholesale services rather than at exploiting short-term arbitrage opportunities, and is more contractual in nature than transactional. These criteria also do not apply to investment holding companies, which manage portfolios of equity securities, typically as financial investors and often without pursuing synergies among investments (see "Methodology: Investment Holding Companies"). II. SUMMARY OF THE CRITERIA 7. In the criteria, we describe the methodology and assumptions we use to determine SACPs and ICRs for general trading and investment companies (see "Stand-Alone Credit Profiles: One Component Of A Rating" for the definition of an SACP). We arrive at a company's SACP by taking into account its: (1) Corporate Industry and Country Risk Assessment (CICRA), (2) competitive position, (3) capital adequacy, (4) profitability, (5) risk position and asset risk management capabilities, and (6) modifiers, as displayed in chart 1. If a group company or government body could exert extraordinary influence on the company we are rating, we determine the ICR by applying "Group Rating Methodology" and/or "Rating Government-Related Entities: Methodology And Assumptions." Otherwise, we determine the ICR without further adjusting the SACP, while taking into account the limitations for assigning an ICR that is above the relevant sovereign rating, according to "Ratings Above The Sovereign--Corporate And Government Ratings: Methodology And Assumptions." 8. The information in this paragraph has been moved to the "Revisions And Updates" section. 9. General trading and investment companies have significant exposure to investments and their varied risks. Thus, we believe the key credit factors in the sector--like those for financial institutions and in addition to those for other industrial companies--include: (1) the diversification of a company's business portfolio, (2) its strategic investment capability, (3) its risk buffer (capital and profitability) to absorb losses from investments, (4) its risk position and asset risk management capabilities, and (5) funding and liquidity. Chart 1 10. This paragraph has been deleted. 11. This paragraph has been deleted. 12. The information in this paragraph has been moved to the "Revisions And Updates" section. III. METHODOLOGY A. Framework 13. We view general trading and investment companies as a hybrid of other industrial companies and financial institutions. This is because they conduct two distinctly different businesses--trading and investment. Their trading activities make them similar to industrial companies.

However, their investment activities resemble those of financial institutions that make long-term investments. Accordingly, we apply a hybrid methodology as indicated in chart 1. Some parts of this methodology use a framework that draws on elements from our criteria "Corporate Methodology," such as determining the anchor from an assessment of the business risk profile and financial risk profile, and using modifiers to determine an SACP. 14. However, we differentiate general trading and investment companies from other industrial companies, in particular, by considering (1) the significant degree of diversification of their portfolios across their trading and investment businesses (see section B. Industry Risk Assessment) and (2) their ability to make strategic investments (see section D. Competitive Position Assessment) as key factors supporting their business risk profiles. The key credit factors for their financial risk profiles--like those for financial institutions and unlike those for other industrial companies--are (3) capital adequacy (see section E. Capital Adequacy Assessment), (4) profitability (see section F. Profitability Assessment), and (5) risk position and asset risk management capabilities (see section G. Risk Position And Asset Risk Management Capabilities Assessment). 15. Unlike our methodology for other industrial companies, our assessment of competitive position for general trading and investment companies does not take into account operating efficiency because we believe this is not a meaningful factor in determining a general trading and investment company's competitive position, particularly in its investment business. 16. Typically, such a company's fixed costs are not as material as those of manufacturers. Manufacturing processes and technology, which are key elements in assessing other industrial companies, are less relevant for general trading and investment companies, in our view. Similarly, working capital management is a minor factor in running an investment business. 17. We assess a general trading and investment company's profitability not in the competitive position within the business risk profile but in the financial risk profile because: Fluctuations in general trading and investment companies' profits are largely attributable to their investment business, rather than their trading business. We have observed this from past defaults of general trading and investment companies. The profitability of the investment business is often directly related to the risk nature of the investment portfolio, including market trends of natural resources (including mining) and commodities, and may not be a direct function of the investment business' competitive position. 18. The methodology combines the business risk profile and financial risk profile to form an "anchor" (see table 3 below). 19. We may then raise or lower the anchor based on an assessment of five modifiers: (1) capital structure, (2) financial policy, (3) funding and liquidity, (4) management and governance, and (5) comparable ratings analysis. The result will be the final SACP. If we expect any extraordinary influence from a group company or government body, we determine the ICR from the SACP by applying our "Group Rating Methodology" and/or "Rating Government-Related Entities: Methodology And Assumptions." Otherwise, we determine the ICR without further adjusting the SACP, while taking into account the potential limitations on an ICR due to the application of "Ratings Above The Sovereign--Corporate And Government Ratings: Methodology And Assumptions." 1. Determining the business risk profile assessment 20. We assess a company's business risk profile using a six-point scale that defines 1 as excellent; 2, strong; 3, satisfactory; 4, fair; 5, weak; and 6, vulnerable. 21. The combined assessments for country risk, industry risk, and competitive position determine a company's business risk profile. A general trading and investment company's strengths or weaknesses in both its trading business and investment business are key determinants of our assessment of its business risk profile. 22. Industry risk addresses the relative health and stability of the markets in which a company operates. The range of industry risk assessments is: 1, very low risk; 2, low risk; 3, intermediate risk; 4, moderately high risk; 5, high risk; and 6, very high risk. We establish industry risk for general trading and investment companies by applying, in a modified manner, our industry risk criteria (see "Methodology: Industry Risk"), and assigned an assessment of '3, intermediate risk' for the industry risk of all general trading and investment companies. Our methodology for industry risk is in section B. 23. Country risk addresses the economic risk, institutional and governance effectiveness risk, financial system risk, and payment culture or rule-of-law risk in the countries in which a company operates. The range of country risk assessments is: 1, very low risk; 2, low risk; 3, intermediate risk; 4, moderately high risk; 5, high risk; and 6, very high risk. Our methodology for country risk is in section C. 24. We call the combined assessment of country risk and industry risk the issuer's Corporate Industry and Country Risk Assessment (CICRA). Table 1 shows how to determine the combined assessment for country risk

and industry risk. Table 1 Determining The CICRA --COUNTRY RISK ASSESSMENT-- INDUSTRY RISK ASSESSMENT 1 (VERY LOW RISK) 2 (LOW RISK) 3 (INTERMEDIATE RISK) 4 (MODERATELY HIGH RISK) 5 (HIGH RISK) 6 (VERY HIGH RISK) 1 (very low risk) 1 1 1 2 4 5 2 (low risk) 2 2 2 3 4 5 3 (intermediate risk) 3 3 3 3 4 6 4 (moderately high risk) 4 4 4 4 5 6 5 (high risk) 5 5 5 5 5 6 6 (very high risk) 6 6 6 6 6 6 25. The CICRA, combined with a company's competitive position assessment (see section D), creates the issuer's business risk profile. Table 2 shows how we combine these assessments. Table 2 Determining The Business Risk Profile Assessment --CICRA-- COMBINED COMPETITIVE POSITION ASSESSMENT 1 2 3 4 5 6 1 (excellent) 1 1 1 2 3 5 2 (strong) 1 2 2 3 4 5 3 (satisfactory) 2 3 3 3 4 6 4 (fair) 3 4 4 4 5 6 5 (weak) 4 5 5 5 5 6 6 (vulnerable) 5 6 6 6 6 6 2. Determining the financial risk profile assessment 26. The methodology assesses the financial risk profile of a general trading and investment company based on a six-point scale that defines 1 as minimal; 2, modest; 3, intermediate; 4, significant; 5, aggressive; and 6, highly leveraged. 27. The starting point is S&P; Global Ratings' capital adequacy assessment (see section E), which is based primarily on a risk-based capital analysis and may be capped by a leverage ratio analysis. The capital adequacy assessment also uses six categories and is mapped to the financial risk profile assessment (see table 14) with two layers of modifications, first by a profitability assessment up to one category stronger or weaker (see section F), and second by our assessment of risk position and asset risk management capabilities by up to one category stronger or several categories weaker (see section G). Because the sector features long-term investment strategies and frequent selling or buying of businesses, we believe a stringent risk position and asset risk management capabilities are more important than for other industrial companies. Modifications at these two steps will be cumulative when negative adjustments apply, but cannot improve the financial risk profile assessment by more than one category. 28. Through the capital adequacy assessment, we measure the amount of capital that a general trading and investment company needs to absorb losses from disparate risks over defined stress scenarios. The methodology for assessing the financial risk profile differs from that covering other industrial companies in that it focuses on a company's capital adequacy rather than on cash flow adequacy. We do this for the following reasons: We believe general trading and investment companies' cash flow cannot be well captured by looking at funds from operations (FFO) or EBITDA. Unlike other industrial companies, general trading and investment companies have significant cash inflows or outflows from investment activities, in addition to cash flows from operations. Even if their FFO and/or EBITDA decreases, general trading and investment companies may still be able to manage cash needs by reducing new investments and/or monetizing existing investments. In defaults of Japanese general trading and investment companies in the late 1990s and early 2000s, we observed that the default trigger was generally losses from investment businesses, not a decline in operating cash flow. A key default trigger was significant equity erosion from investments reported as nonrecurring losses, not losses from trading. In fact, most companies maintained positive FFO shortly before defaulting. Therefore, their operating cash flow parameters were not a good leading indicator of default, in our view. Cash flow measures cannot capture earnings of a company's unconsolidated equity affiliates, and general trading and investment companies typically have sizable investments in such equity affiliates. 3. Merging the business risk profile and financial risk profile assessments 29. We combine our assessments of an issuer's business risk profile and its financial risk profile to determine an anchor for the issuer (see table 3). If we view an issuer's capital structure as unsustainable or if its obligations are currently vulnerable to nonpayment, and if the obligor depends on favorable business, financial, and economic conditions to meet its obligations, we will determine the issuer's SACP using "Criteria For Assigning 'CCC+', 'CCC', 'CCC-', And 'CC' Ratings." If the issuer meets the conditions for assigning a 'CCC+', 'CCC', 'CCC-', or 'CC' rating, we will not apply table 3. Table 3 Combining The Business And Financial Risk Profiles To Determine The Anchor --FINANCIAL RISK PROFILE-- BUSINESS RISK PROFILE 1 (MINIMAL) 2 (MODEST) 3 (INTERMEDIATE) 4 (SIGNIFICANT) 5 (AGGRESSIVE) 6 (HIGHLY LEVERAGED) 1 (excellent) aaa/aa+ aa a+/a a- bbb bbb-/bb+ 2 (strong) aa/aa- a+/a a-/bbb+ bbb bb+ bb 3 (satisfactory) a/a- bbb+ bbb/bbb- bbb-/bb+ bb b+ 4 (fair) bbb/bbb- bbb- bb+ bb bb- b 5 (weak) bb+ bb+ bb bb- b+ b/b- 6 (vulnerable) bb- bb- bb-/b+ b+ b b- 30. When two different anchor outcomes are possible for a given combination of business risk profile and financial risk profile, we determine an issuer's anchor as follows: When a company's financial risk profile is 4 or stronger

(meaning, 1-4), we base the anchor on the comparative strength of its business risk profile. We consider our assessment of the business risk profile for general trading and investment companies to be points along a range. Each assessment that ultimately generates the business risk profile can be at the upper or lower end of the range. Issuers with stronger business risk profiles for the range of anchor outcomes will have the higher anchor. Those with a weaker business risk profile for the range of outcomes will have the lower anchor. When a company's financial risk profile is 5 or 6, we base the anchor on the comparative strength of the company's financial risk profile. Issuers with stronger financial risk profiles for the range of anchor outcomes will have the higher anchor. Issuers with a weaker financial risk profile for the range of anchor outcomes will have the lower anchor. 4. Building on the anchor 31. The analysis of capital structure, financial policy, funding and liquidity, and management and governance may raise or lower the anchor for a company. Our assessment of each of these modifiers can raise or lower the anchor by one or more notches, or in some cases cap the SACP—or have no effect in other cases. However, this notching in aggregate can't lower an issuer's anchor below 'b-' (see "Criteria For Assigning 'CCC+', 'CCC', 'CCC-', And 'CC' Ratings" for the methodology we use to assign 'CCC' and 'CC' category SACPs and ICRs to issuers). 32. Table 4 below illustrates the impact of the first, second, and fourth modifier factors on the anchor. The impact of the third modifier, funding and liquidity, is shown in table 5. Table 4 Impact Of Three Modifier Factors On The Anchor --ANCHOR RANGE-- A- AND HIGHER BBB+ TO BBB- BB+ TO BB- B+ AND LOWER CAPITAL STRUCTURE 1 (neutral) 0 notches 0 notches 0 notches 0 notches 2 (negative) -1 notch -1 notch -1 notch -1 notch 3 (very negative) -2 or more notches -2 or more notches -2 or more notches -2 notches FINANCIAL POLICY 1 (positive) +1 notch if M&G; is at least satisfactory +1 notch if M&G; is at least satisfactory +1 notch if M&G; is at least satisfactory +1 notch if M&G; is at least satisfactory 2 (neutral) 0 notches 0 notches 0 notches 0 notches 3 (negative) -1 to -3 notches* -1 to -3 notches* -1 to -2 notches* -1 notch MANAGEMENT AND GOVERNANCE (M&G;) 1 (strong) 0 notches 0 notches 0 notches, +1 notch§ 0 notches, +1 notch§ 2 (satisfactory) 0 notches 0 notches 0 notches 0 notches 3 (fair) -1 notch 0 notches 0 notches 0 notches 4 (weak) -2 or more notches† -2 or more notches† -1 or more notches† -1 or more notches† *The number of notches depends on potential incremental leverage. §This adjustment is one notch if we have not already captured the benefits of strong management and governance in the analysis of the issuer's competitive position. †The number of notches depends upon the degree of negative impact on the enterprise's risk profile. 33. We apply the four modifiers in the order listed in paragraph 31. As we go down the list, a modifier may (or may not) change the anchor to a new range (one of the ranges in the four right-hand columns in table 4, except funding and liquidity, which is subject to table 5). We choose the appropriate value from the new range to determine the next modifier's effect on the anchor, and so on, until we get to the last modifier on the list--management and governance. For example, let's assume that the anchor is 'a'. If the capital structure assessment is very negative, the indicated anchor drops two notches, to 'bbb+'. So, to determine the impact of the next modifier, financial policy, we go to the column "bbb+ to bbb-" and find the appropriate assessment--in this theoretical example, positive. Applying that assessment moves the anchor up one notch, to the "a- and higher" category. In our example, funding and liquidity are both adequate while management and governance is satisfactory, and thus the anchor remains 'a-'. If the liquidity assessment caps the SACP, management and governance or comparable ratings analysis does not result in any uplift. 34. Funding and liquidity, the third modifier, may modify the anchor and cap the SACP. We assess each of funding and liquidity separately and then combine those two assessments (see section H. Modifiers, 3. Funding and liquidity), and the resulting combination affects the anchor and/or caps the SACP as indicated in table 5 below. Table 5 Impact Of Funding And Liquidity On The Anchor Or Restriction (Cap) On SACP --LIQUIDITY-- Funding Exceptional or Strong Adequate Less than adequate Weak Strong +1* 0 -1 ('bb+' cap on SACP) 'b-' cap on SACP Adequate 0 0 -1 ('bb+' cap on SACP) 'b-' cap on SACP Moderate 0 -1 -2 ('bb+' cap on SACP) 'b-' cap on SACP Weak -1 -2 -3 ('bb+' cap on SACP) 'b-' cap on SACP *As described in H. Modifiers, 3. Funding and Liquidity, we do not apply any additional upward revision if the anchor, before taking into account funding and liquidity, is 'bbb-' or higher. 5. Comparable ratings analysis 35. The anchor, after adjusting for the modifiers, could change one notch up or down in order to arrive at an issuer's SACP based on our comparable ratings analysis. This is a holistic review of a company's SACP, in which we evaluate an issuer's credit characteristics in aggregate (see H.

Modifier, 5. Comparable ratings analysis). B. Industry Risk Assessment 36. We assign to all general trading and investment companies an industry risk assessment of "intermediate risk" (3), as defined in our industry risk criteria (see "Methodology: Industry Risk"). 37. In assessing the industry risk of general trading and investment companies, we evaluate three subfactors: (1) cyclicality, (2) competitive risk and growth, and (3) diversification/portfolio effect. With these three subfactors, we determine the industry risk assessment in the following order (see table 6). (a) Assess the cyclicality for each of the sector's trading business and investment business. (b) Assess competitive risk and growth for each trading and investment business. (c) Determine the preliminary industry risk assessment for each trading and investment business without incorporating the diversification/portfolio effect. (d) Determine the preliminary industrial risk assessment by combining the two preliminary industrial risk assessments into one, based on our equal weighting assumption. (e) Incorporate the diversification/portfolio effect into the sector's final industry risk assessment. Table 6 Industry Risk Assessment For General Trading And Investment Companies A) CYCLICALITY ASSESSMENT B) COMPETITIVE RISK AND GROWTH ASSESSMENT C) INDUSTRY RISK ASSESSMENT FOR EACH BUSINESS LINE D) AGGREGATED PRELIMINARY INDUSTRY RISK ASSESSMENT FOR THE SECTOR BEFORE FACTORING IN DIVERSIFICATION/PORTFOLIO EFFECT E) AGGREGATED FINAL INDUSTRY RISK ASSESSMENT FOR THE SECTOR AFTER FACTORING IN DIVERSIFICATION/PORTFOLIO EFFECT General trading and investment company's trading business 3 (intermediate risk) 3 (intermediate risk) 3 (intermediate risk) General trading and investment company's investment business 5 (high risk) 4 (moderately high risk) 5 (high risk) Entire general trading and investment company 4 (moderately high risk) 3 (intermediate risk) 38. When deriving the industry risk assessment for the combined business, we view diversity as a positive factor. This sector's significant diversification reduces overall risk associated with companies' exposure to industry risks and stabilizes overall profits. While our methodology for other industrial companies analyzes diversity as a company-specific factor, the analysis of general trading and investment companies incorporates it as an industrywide factor because, by our definition (see part I. Scope Of The Criteria), all general trading and investment companies exhibit and benefit from significant diversification (see 4. Final industry risk assessment after factoring in diversification/portfolio effect). 39. We consider that general trading and investment companies' investment business are broadly divided into natural resource (including mining) investments and nonresource investments. The former usually accounts for a large portion of investment business profits and assets but the companies usually are not project operators or majority owners. The latter includes business management and equity investments through their subsidiaries and equity affiliates. Our industry risk assessment and competitive position assessment for the investment business focus on both types of investments. 1. Cyclicality assessment 40. The cyclicality assessment differs from the one in our industry risk criteria, in that we assess the cyclicality of the general trading and investment company's industry by looking at pretax net income, instead of revenue and the EBITDA margin. We believe this approach better captures the nature of general trading and investment companies, because they have some similarities to financial institutions. 41. The EBITDA margin does not fully capture a general trading and investment company's profitability because income statement items include noncash items such as capital gains or losses mainly in its investment business, and profits from its unconsolidated equity affiliates. Accordingly, we believe it is not useful to compare a general trading and investment company's volatility in revenues and EBITDA margin with those of other industrial companies. 42. While we assess the cyclicality of companies' trading and investment businesses separately, pretax net income for each business is not available separately. Therefore, we examine the pretax net income for the combined business and then determine the cyclicality assessment for each business using a qualitative judgment. Our historical data observations show that the profitability (pretax net income) of general trading and investment companies is less volatile than that of other industrial companies with a cyclicality assessment of '5' and similar to that of industries with cyclicality assessments of '4'. Accordingly, we assess the aggregated cyclicality assessment as "moderately high" (4). 43. At the business line level, we assess the cyclicality as "intermediate risk" (3) for the trading business. This is because general trading and investment companies can often pass on price fluctuations to their clients under purchase agreements (fixed price or market-linked price formula), or enter into hedging contracts for the remaining portion. We assess

the cyclicality of the investment business as "high risk" (5) because this business typically focuses on natural resources and/or equity investments. 2. Competitive risk and growth assessment 44. We assess general trading and investment companies as warranting an "intermediate risk" (3) for their trading business and a "moderately high risk" (4) for their investment business, for the purpose of determining their competitive risk and growth assessments. To assess competitive risk and growth for each business, we evaluate four subfactors as low, medium, or high risk. These subfactors are: Effectiveness of barriers to entry; Level and trend of profit margins; Risk of secular change and substitution by functions, services, and technologies; and Risk in growth trends. Trading business: 45. We assess the competitive risk and growth of general trading and investment companies' trading businesses as "intermediate risk" (3) because of the following factors (see Appendix I for details): Effectiveness of barriers to entry--'medium risk' Level and trend of profit margins--'medium risk' Risk of secular change and substitution by functions, services, and technologies--'medium risk' Risk in growth trends--'medium risk' Investment business: 46. We assess the competitive risk and growth of general trading and investment companies' investment businesses as "moderately high" (4) because of the following factors (see Appendix II for details): Effectiveness of barriers to entry--'medium risk' Level and trend of profit margins--'high risk' Risk of secular change and substitution by functions, services, and technologies--'medium risk' Risk in growth trends--'high risk' 3. Industry risk assessment for the trading and investment business 47. After assessing cyclicality as well as competitive risk and growth, respectively, for each of the sector's trading business and investment business, we determine the preliminary industry risk assessment for each of the two businesses by applying table 1 of "Methodology: Industry Risk." This results in an "intermediate risk" (3) assessment for the trading business and a "high risk" (5) assessment for the investment business. 48. Based on our view of the average profile of rated industry participants, for the purpose of determining industry risk, we use an equal weighting of the trading and investment businesses to determine the preliminary industry risk assessment. As a result, we set the preliminary industry risk assessment at "moderately high risk" (4). If a general trading and investment company exhibits a different mix of trading and investment operations, we capture this in our assessment of the company's competitive position. 4. Final industry risk assessment after factoring in diversification/portfolio effect 49. Based on the characteristics of the companies within the scope of the criteria, the diversification of general trading and investment companies' assets and profits far exceeds that of other industrial companies in terms of both horizontal industrial diversification and vertical business models. 50. Under our Corporate Methodology criteria, we assess the diversification/portfolio effect when evaluating conglomerates, which we define as companies that have at least three distinct business segments that each contribute materially to earnings and cash flow. 51. As an industrywide characteristic, all general trading and investment companies operate across quite many industries, which may include food, chemicals, energy, metals, machinery, infrastructure, plant and equipment, information technology (IT), real estate, and logistics. In addition, we believe that the degree of correlation between the various lines of business in these diversified companies is medium or low. 52. Accordingly, within the criteria, the benefits of this diversification mitigate the sector's overall industry risk and we include it in our industry risk assessment. In our opinion, this diversification/portfolio effect supports a one-category improvement from the preliminary industry risk score of "moderately high risk" (4), resulting in a final industry risk assessment of "intermediate risk" (3). C. Country Risk Assessment 53. We determine country risk for general trading and investment companies by applying the same methodology as for other industrial companies (see "Corporate Methodology" and "Country Risk Assessment Methodology And Assumptions"). General trading and investment companies typically have very diverse business franchises globally and adjust their exposure to various countries as business conditions and the companies' strategies change. We thus use an assessment for country risk that is weighted by asset or profit (see the first bullet of paragraph 27 in "Corporate Methodology"). D. Competitive Position Assessment 54. We determine the competitive position of general trading and investment companies by separately assessing the competitive strength of a company in pursuing and executing trading business and its competitive strength in pursuing and executing investment businesses, and then combining those two assessments. 55. For both businesses, we partially base our assessment of the competitive position on the methodology described in section D. Competitive Position of "Corporate

Methodology." However, unlike our analysis of other industrial companies, profitability is not a subfactor for the competitive position assessment but is analyzed in the financial risk profile owing to the reasons mentioned in paragraph 17. 56. For a trading business, our assessment of competitive position is based on: (1) competitive advantage; and (2) scale, scope, and diversity. 57. For an investment business, our assessment of competitive position is based on: (1) strategic investment capability; and (2) scale and scope. Strategic investment capability is critical in determining the competitive position of general trading and investment companies because they continually make investments. Diversity is not a subfactor for the competitive position of the investment business but is analyzed as a subfactor for the Risk Position assessment (see paragraphs 126 and 127). 58. When assessing scale, scope, and diversity for trading business, and scale and scope for investment business, we compare general trading and investment companies among themselves, but not with companies in other industries. Focusing on the relativity within the industry avoids double counting diversity, because the industry risk analysis already incorporates diversity as an industry characteristic. 59. In the first step, we assess each component of competitive position independently, as 1, strong; 2, strong/adequate; 3, adequate; 4, adequate/weak; or 5, weak. Where a component isn't clearly either strong or adequate, we may assess it as strong/adequate. A component that is not clearly adequate or weak may be assessed as adequate/weak. 60. In the second step, we calculate the weighted average of the two component assessments for each of the trading business and investment business by using the weights in table 7. 61. In the third step, we calculate the weighted average of the outcomes from the second step using the weights in table 8. In this step, we classify general trading and investment companies as one of three types: (1) companies with a greater focus on the trading business, (2) companies with a balanced profile, or (3) companies with a greater focus on investment. We weigh our second step outcomes of trading and investment at 70% and 30%, respectively, for companies of profile type one; 50% and 50% for profile type two; and 30% and 70% for profile type three (see table 8). We define "focus" as our assessment of the strategic direction companies take in shaping their portfolios. We generally put a greater weight on the company's focus on the investment business when the company has stronger focus on the following business or exposure: Resource business, which generally has the characteristics of the investment business, rather than of the trading business; or Exposure to unconsolidated affiliates including equity-method affiliates. As an exception, we may consider a substantial amount of exposure to an identifiable affiliate as a sign of focus on the trading business, rather than on the investment business, if we believe such an affiliate contributes to the general trading and investment company's competitive strength in pursuing and executing the trading business. 62. In the fourth step, the weighted average generated under the third step translates into a competitive position assessment on a scale of 1 to 6 for the entire company including both the trading and investment businesses. In this fourth step, we use table 9. Table 7 Competitive Position Category Weights COMPONENT TRADING BUSINESS INVESTMENT BUSINESS Competitive advantage 40% - Strategic investment capability - 40% Scale, scope, and diversity (for trading) or scale and scope (for investment) 60% 60% Total 100% 100% Table 8 Trading And Investment Business Weights ESTIMATED BALANCE OF TRADING AND INVESTMENT BUSINESS WEIGHT ON TRADING BUSINESS WEIGHT ON INVESTMENT BUSINESS (1) General trading and investment company with greater focus on trading business 70% 30% (2) General trading and investment company with balance between trading and investment business 50% 50% (3) General trading and investment company with greater focus on investment business 30% 70% Table 9 Translation Table For Converting Weighted-Average Assessments Into Competitive Position Assessments WEIGHTED-AVERAGE ASSESSMENT RANGE COMPETITIVE POSITION ASSESSMENT 1.00 - 1.50 1 >1.50 - 2.25 2 >2.25 - 3.00 3 >3.00 - 3.75 4 >3.75 - 4.50 5 >4.50 - 5.00 6 1. Trading business: 63. We take into consideration: (1) competitive advantage; and (2) scale, scope, and diversity in assessing the competitive position of a company's trading business. a) Competitive advantage 64. Our competitive advantage assessment of a trading business considers four subfactors: Customer base: We consider whether the company has a wide customer base, both domestically and globally; whether the company has long-standing or exclusive relationships with large corporate customers; whether the corporate customer base consists of strong market players; and whether the company has a customer base for trading that has strong growth potential and/or a favorable supply-demand balance. We evaluate a general trading and

investment company's relative success, or lack thereof, at establishing and retaining a strong customer base. We analyze the customer base in such terms as breadth, contract characteristics such as length and exclusiveness, competitiveness, growth potential, and supply-demand conditions of the business in which customers participate. Licenses, contracts, and commercial rights: We evaluate the existence (or absence) of signed long-term licenses, contracts, and/or commercial rights that will help maintain stable trading profits, and a company's positioning through past performance and prospects for commercial rights and licensing agreements. Those agreements are analyzed in the context of the industry segments in which the company operates. Brand reputation and business development skills: We evaluate the ability to gather information, analyze market trends, find new business opportunities, incubate new businesses, adjust the trading business portfolio ahead of peer companies, and attract and maintain experienced people and big-picture thinkers to create value chains. Business infrastructure and capabilities including logistics and IT operations: We evaluate the breadth of a company's business infrastructure and capabilities in terms of providing customers with differentiated offerings and fulfilling customers' needs throughout the value chain. Such infrastructure and capabilities includes IT operations, logistics and distribution channels such as distributors or dealership networks, the ability to support technical product sales, timeliness in responding to customer demand, and exclusivity characteristics. Strong distribution channels often act as an effective competitive strength. 65. A company whose trading business has a "strong," "adequate," or "weak" competitive advantage assessment typically would display a combination of the respective characteristics in table 10. Table 10 Assessing The Competitive Advantage Of The Trading Business STRONG ADEQUATE WEAK Customer base A customer base that is among the strongest of both its global and domestic peers and that is well established and stable. It is supported by long-standing, entrenched relationships with trading partners, providing a clear advantage over peers in securing new trading business. The majority of trading partners are well established. A customer base that is solid and attractive, both domestically and globally, but somewhat less robust than that of some other peers. This is possibly because the trading relationships are more recent or not entrenched by protective contract terms. The majority of trading partners are relatively well established. A weak customer base, characterized by unstable or easily substitutable relationships with key trading partners, or deteriorating relationships that undermine trading profits, or a reliance on weak trading partners. Licenses, contracts, and commercial rights A very good track record of negotiating, securing, and renewing licenses, contracts, and commercial rights at attractive and competitive terms, contributing to growth and attractive returns for the trading business, and continuing good prospects that such abilities are sustainable over the long-term. A reasonably good track record of, and overall sustainable good prospects for, maintaining a portfolio of licenses, contracts, and commercial rights whose terms are not significantly better or significantly worse than those achieved by peers. Weaker than average portfolio of licenses, contracts, and commercial rights and/or a lack of prospects for improvement. This is possibly because of deteriorating trading profits and fees, subpar contract renewal rates, or negotiated terms that are overall much less favorable than those achieved by peers. Brand reputation and business development skills A well-recognized and highly respected name in the key areas of trading where it operates, supported by a demonstrated ability to act as a reliable trading partner because it can provide a competitive advantage to its business partners. This is often supported by highly reliable, high-quality service, an extensive network, and an ability to retain excellent talent that allows the company to frequently identify and pursue attractive trading business opportunities ahead of peers. A good brand reputation, possibly with some strong positions in select trading areas, but not for the majority of its portfolio. Business development skills are sufficient to provide sustainable long-term prospects, but do not exhibit the same superior characteristics that industry peers with a "strong" assessment may demonstrate. The company's brand reputation is weak and its business development skills are subpar. This may result from, for instance, a third-tier positioning in its important trading markets where first- and second-tier players have a well-entrenched advantage, a history of operating mishaps that have damaged the franchise for a long period, or a lack of business acumen that has led to poor business decisions and that undermines the company's ability to be a competitive trading player. Business infrastructure and capabilities The company's business infrastructure is very efficient and well suited to support business needs and to manage operational risks. Capabilities in distribution and logistics, IT and technology, financing, and

the management of internal resources are strong and aligned to support sustainable growth in the trading operations. The company's business infrastructure adequately supports it trading operations, and there is no evidence of superior or inferior capabilities. The company's business infrastructure is not well adapted to business needs or is inefficient, and the company lacks certain important capabilities in distribution/logistics, IT, finance, or other critical areas that impede successful and profitable trading results. b) Scale, scope, and diversity 66. In assessing the scale, scope, and diversity of a general trading and investment company's trading business, we consider: The size of its trading revenues; The depth and breadth of its product and service offerings in trading; The geographic balance of its sales, profits, and assets in trading; The degree of vertical integration with its investment business to maximize synergies; and The degree of customer and asset concentration in its trading portfolio. 67. A company whose trading business warrants a "strong," "adequate," or "weak" assessment of scale, scope, and diversity typically would display a combination of the respective characteristics in table 11. Table 11 Assessing The Scale, Scope, And Diversity Of The Trading Business STRONG ADEQUATE WEAK Size of trading revenues Among the broadest revenue base in the industry, not only overall but also generally within key trading segments in which the company operates, as well as participation in broad, global markets. Revenue base is of average size compared with other industry players, both overall and within key trading segments, such that overall size isn't a particular advantage or disadvantage. Limited revenue base or target markets relative to those of other participants in the industry. Depth and breadth of product and service offerings in trading Significant product breadth and diverse business segments, revenue mix, and profit sources. Average for the industry, with relatively broad offerings and sources of trading profits. Trading operations are narrowly focused on a few segments, or the company lacks the breadth of product and service offerings that most of its peers can provide. Geographic balance of sales, profits, and assets in trading Geographically diversified revenue base and participation in various trading markets that have generally favorable long-term growth prospects, or in markets that are not closely correlated. Average for the industry, with a good level of diversity. Trading operations and the revenue base are largely domestic or are highly concentrated in certain countries or in highly correlated trading markets. Degree of vertical integration with investment business to maximize synergies Participation in many stages of value chains in various industries, enabling the company to achieve trading synergies across its upstream, midstream, and downstream activities and with the investment business. Average for the industry, typically spanning upstream to downstream across at least some industries. Participation in only a few stages of value chains in limited industries, or with a lack of synergies across its upstream, midstream, and downstream activities and with the investment business. Degree of customer and asset concentration in trading portfolio Among the most diversified of portfolios of trading customers and trading assets relative to peers and in absolute terms (both domestically and globally, without significant single-name concentrations). There are pockets of concentration in certain trading customers or in certain trading assets, but overall trading-related concentrations are not so material that they potentially create significant risks. There is significant concentration in the trading customer base or in certain trading assets that is not mitigated. 2. Investment business: 68. We take into consideration: (1) strategic investment capability, and 2) scale and scope in assessing a company's investment business. a) Strategic investment capability 69. The ability to make profitable investments as well as timely selling or buying of businesses is a key for this sector. As a result, we consider a company's strategic investment capability as a key factor in assessing its competitive position. 70. To assess "strategic investment capability," we consider a company's: Ability to make decisions on investment opportunities and divestitures; and Ability to manage the investment portfolio. 71. For general trading and investment companies, a demonstrated strong track record and good prospects for good execution, as well as a discerning ability to select partners, will often be a key advantage in securing new opportunities to participate in business and will enhance the sustainability of a company's investment business model. Conversely, a subpar track record and poor prospects for business execution will not only hurt profitability but also often hinder a company's ability to win new opportunities and may limit return on investment. 72. A company whose investment business warrants a "strong," "adequate," or "weak" assessment of strategic investment capability typically has a combination of the characteristics described in table 12. Table 12 Strategic Investment Capability Assessment Guidelines

STRONG ADEQUATE WEAK Ability to make decisions on investment opportunities and divestitures Timely and speedy decision-making on investment opportunities, supported by expertise and risk/return analysis. The company proactively manages its portfolio in the face of changing business conditions and is committed to an effective strategy of asset divestiture. Not particularly rapid or slow, but supported by an adequate degree of risk/return analysis. Investment timing is neither particularly good nor bad overall, or investments made are at neither particularly high nor low prices. The company actively manages its portfolio in the face of changing business conditions but may be more reactive than proactive in its strategy of asset divestiture. Slow decision-making, owing to a lack of expertise and risk/return analysis. Investment timing is generally poor or investments are made at high prices. The company does not have a proactive approach to asset disposals. Management may be hesitant to turn over specific assets, which may hinder an effective portfolio allocation strategy. Ability to manage the investment portfolio The company has a successful track record of using and leveraging its various resources to effectively support its investment portfolio, and of achieving synergies across its investment portfolio. Its capabilities are a positive differentiator among peers in the industry. This is supported by highly capable human resources. Not particularly successful or unsuccessful or with a mixed track record. Sometimes, investment businesses incur losses, although not in large amounts, and the track record doesn't point to a particular strength or weakness in achieving synergies between investments. The company is not successful at leveraging its various resources to effectively support its investment portfolio. This may partly result from a lack of capable human resources. There is evidence of a limited or weak track record of investments with business synergies and poor prospects for execution. b) Scale and scope 73. We believe that scale and scope are prerequisites for general trading and investment companies to maintain or expand their investment business franchise and portfolios. 74. Our assessment of the scale and scope of a company's investment business includes: The size of its investment business portfolio; The degree of vertical integration (upstream, midstream, and downstream) to create synergies; The extensiveness of its global network to gather information on attractive investment opportunities; and Its relationships with key global players. 75. A company whose investment business warrants a "strong," "adequate," or "weak" assessment of scale and scope typically has a combination of the respective characteristics described in table 13. Table 13 Assessing The Scale And Scope Of The Investment Business STRONG ADEQUATE WEAK Size of investment portfolio Large and broad in terms of products, business segments, revenue mix, and profit sources. Reasonably broad, but doesn't match the size of the largest players. Narrower or considerably narrower than most peers in the industry. Degree of vertical integration (upstream, midstream, and downstream) to create synergies Participation in many stages of value chains that lead to effective synergies between various investments. Generally present across several stages of value chains, although not among the most deeply integrated compared with peers, which may limit synergy potential. Participation in only a few stages of value chains, or with a lack of synergies between various investments. Extensiveness of global network to gather information on attractive investment opportunities Wide business franchise or extensive information network to access attractive investment opportunities. In line with the industry average profile, with good capabilities but not a premier network. Limited business franchise and poor information network to access attractive investment opportunities. Relationships with key global players Strong and long-standing relationships with many global players in various business lines. Neither particularly strong nor weak, but sufficiently good to contribute to profitable growth. Weak and non-established relationships, or mostly with subpar players in a narrow set of investment lines. E. Capital Adequacy Assessment 76. The capital adequacy assessment is the first and primary component in the financial risk profile assessment for general trading and investment companies. The framework for assessing the financial risk profile of general trading and investment companies differs from that for other industrial companies in that it focuses on capital adequacy rather than cash flow adequacy. The capital adequacy assessment measures a general trading and investment company's ability to absorb losses by assessing capital adequacy prospectively, using quantitative measures and qualitative considerations. We incorporate qualitative considerations in the assumptions we use to estimate prospective risk-based and adjusted capital. 77. The capital adequacy assessment is based primarily on a risk-based capital analysis. The risk-based capital analysis prospectively evaluates the amount of capital, at two different confidence levels, that a general trading

and investment company is likely to need to hold to cover losses from the various risks in its assets. Once the two levels of required capital are evaluated, the comparison of these two levels against prospective available capital is assessed to determine the capital adequacy assessment, which in turn establishes the base for the financial risk profile assessment (see table 14), subject to a potential cap explained below. Table 14 Capital Adequacy Assessment And Mapping To Financial Risk Profile Assessment CAPITAL ADEQUACY ASSESSMENT (BEFORE TAKING INTO ACCOUNT POTENTIAL CAP BY THE LEVERAGE RATIO*) CAPITAL ADEQUACY ASSESSMENT MEASURES§ CORRESPONDING FINANCIAL RISK PROFILE ASSESSMENT WHEN ALL MODIFIERS ARE NEUTRAL 1 (very strong) Prospective adjusted capital stands and will remain significantly above the prospective risk-based capital required at the 'A' scenario Minimal 2 (strong) Prospective adjusted capital stands and will remain at or moderately above the prospective risk-based capital required at the 'A' scenario Modest 3 (adequate) Prospective adjusted capital stands and will remain insufficient for the prospective risk-based capital required at the 'A' scenario, but will remain at or above the prospective risk-based capital required at the 'BBB' scenario Intermediate 4 (moderate) Prospective adjusted capital stands and will remain insufficient for the prospective risk-based capital required at the 'BBB' scenario, but stronger than the conditions for a "weak" assessment Significant 5 (weak) Prospective adjusted capital stands and will remain more than 50% below the prospective risk-based capital required at the 'BBB' scenario, but stronger than the conditions for a "very weak" assessment Aggressive 6 (very weak) Prospective adjusted capital stands and will remain more than 70% below the prospective risk-based capital required at the 'BBB' scenario Highly leveraged *As per table 16, the capital adequacy assessment will be capped at no higher than "strong" if debt to equity is higher than 1.5x, no higher than "adequate" if debt to equity is higher than 3.0x, and no higher than "moderate" if debt to equity is higher than 4.0x. §The prospective comparison of adjusted capital to risk-based capital is based on a weighted-average calculation as described in paragraph 106. 78. We supplement the risk-based capital analysis with a leverage ratio analysis, whereby if leverage is higher than the thresholds defined in table 16, we would cap the capital adequacy assessment. 79. After any potential applicable cap resulting from the leverage ratio analysis, we assess capital adequacy as Very strong ('1'), Strong ('2'), Adequate ('3'), Moderate ('4'), Weak ('5'), or Very weak ('6'). 1. Risk-based capital analysis 80. Risk-based capital analysis estimates the amount of risk-based capital, that is, the capital required to cover losses under two stress scenario levels: a 'A' stress level, and a 'BBB' stress level. The analysis is done for the last historical financial year-end, and for the end of the current and two subsequent fiscal years. 81. The estimate of the 'A' and 'BBB' stress levels of risk-based capital for the end of the current fiscal year is based on the estimated amount of risk assets by asset type and capital charge, at the two different confidence levels, for each asset type (see table 15). Risk-based capital for the end of the current fiscal year is the summation of asset values after applying the capital charge to each asset item. 82. The stress scenario for one asset may not always occur simultaneously with the stress scenario for another asset if the two assets are not fully correlated. However, as we cannot quantify the correlation in a reliable manner, we do not assume any benefit from lack of correlation or partial correlation of these risks. We assume a full correlation among various assets, but assess risk diversifications qualitatively at a later stage, together with any risk concentrations (see section G. Risk Position And Asset Risk Management Capabilities Assessment, 1. Risk position, subsection b) Risk concentration and diversification). 83. Once we estimate the risk-based capital for the end of the current fiscal year, we then estimate the risk-based capital for the end of two subsequent fiscal years by using the estimated growth or decrease of risk-based capital after the end of the current fiscal year (see paragraph 104 concerning our forecasts of adjusted capital). 2. Capital charges by asset 84. Under the methodology, we calculate risk-based capital at the end of the past and current fiscal years by multiplying a company's asset values by the applicable standard capital charge by asset type shown in table 15. The capital charges in table 15 reflect the unexpected loss--the possible loss that may arise in times of stress--of each asset item in light of that item's risk profile. For example, a capital charge of 10% at a 'BBB' stress indicates that losses in times of a 'BBB' stress may be equivalent to 10% of the asset value on the balance sheet, thereby requiring the same amount of capital to be set aside to absorb such unexpected losses for a 'BBB' stress. Long-term assets tend to have higher capital charges. 85. To calibrate the capital charges, we draw principally from our bank criteria "Risk-Adjusted

Capital Framework Methodology"; from our insurance criteria, "Refined Methodology And Assumptions For Analyzing Insurer Capital Adequacy Using The Risk-Based Insurance Capital Model"; from the stress scenarios presented in "S&P; Global Ratings Definitions"; and from our analysis of past defaults by general trading and investment companies. 86. Depending on the nature of the asset, we seek to capture credit risk, market risk, or operational risk. 87. For credit risk exposure, we have calibrated capital charges principally to those set forth in our bank criteria based on corporate exposure. Capital charges vary by our assessment of economic risk (ranked on a scale of 1 to 10, as defined in "Banking Industry Country Risk Assessment Methodology And Assumptions"), whereby higher charges are applied to assets located in countries of higher economic risk. However, for general trading and investment companies, we do not intend to apply charges to individual assets country-by-country; rather we determine the weighted average economic risk for a general trading and investment company based on its country exposure by asset, and then to apply the corresponding capital charge to the entire amount of a given asset type to reflect that asset type's exposure to credit risk. 88. We also apply the weighted-average approach to stock exposures. While our bank criteria differentiate stock exposure capital charges by country of exposure by using the "equity market group" on each country on a scale of 1 to 4 (as defined in table 11 of "Risk-Adjusted Capital Framework Methodology"), for general trading and investment companies, we determine the weighted-average equity market group assessment, and then apply the corresponding capital charge to the overall stock exposure. 89. Table 15 shows the capital charges that we apply when the weighted-average economic risk assessment is '4' and the weighted-average equity market group assessment is '2'. The capital charges we apply for other weighted-average economic risk assessments, or other weighted-average equity market group assessments, differ for some asset types and are shown in Appendixes III and IV. Table 15 Capital Charges By Asset (Applied For Japanese General Trading And Investment Companies) ASSET ITEM CAPITAL CHARGE (%) FOR 'BBB' STRESS CAPITAL CHARGE (%) FOR 'A' STRESS CURRENT ASSETS a* Notes and accounts receivables 5 7 b* Loan receivables and bonds 5 7 c-1 Inventories from resources 8/20 10/25 c-2* Inventories from nonresources (excluding real estate and vessels) 8 10 NONCURRENT ASSETS d-1§ Securities and investments (listed stock) 45 55 d-2§ Securities and investments (unlisted stock) 55 65 d-3* Long-term credit exposure (listed bonds) 3 4 d-4* Long-term credit exposure (unlisted bonds, loans, and guarantees) 8 10 e Investments in equity-affiliated companies (both listed and unlisted) 60 70 f Doubtful receivables 100 100 g Mineral rights 60 75 h-1 Real estate in inventory 18 25 h-2 Vessels (aircraft and ships) 20 30 i-1 Other assets in the company's own use 80 100 i-2 Other assets not integral to the company's business operations (could be sold or rented; for example, buildings and buildings under construction, machinery, and equipment; excluding goodwill and other intangible assets) 18 25 j Goodwill and other intangible assets 80 100 *This capital charge is under 'economic risk assessment 4'. §This capital charge is under the assessment of 'equity market group 2'. Current assets: a: Notes and accounts receivables: 90. The capital charges are 5% for a 'BBB' stress and 7% for a 'A' stress. This reflects the short-term nature of the exposure. This assessment is based on our economic risk assessment of '4' through a weighted-average approach. Accordingly, this capital charge would be changed if our economic risk assessment changes from '4'. b: Loan receivables and bonds: 91. The capital charges are 5% for a 'BBB' stress and 7% for a 'A' stress. This assessment is based on our economic risk assessment of '4' through a weighted-average approach. Accordingly, this capital charge would be changed if our economic risk assessment changes from '4'. c: Inventories: 92. We use different capital charges to represent the differing nature of risk assets. c-1. Inventories from resources: For oil, natural gas, coal, London Metal Exchange- (LME-) traded metals (aluminum, copper, lead, and zinc), precious metals, soybean, wheat, corn, and sugar, we apply 8% for a 'BBB' stress and 10% for a 'A' stress. For others, such as iron ore, rice, cotton, coffee, and perishable agricultural commodities, we apply 20% for a 'BBB' stress and 25% for a 'A' stress. Even though most general trading and investment company inventories are for contracted clients under fixed prices or market-linked price formulas, and their market exposures are usually small, some volumes are for their own use and are exposed to market fluctuations. To apply these capital charges, we use a broad breakdown of trading inventory by commodity. These charges are adapted from the haircuts that we apply to commodity inventories at commodities traders. These percentages are fixed capital charge numbers (not a function of either the economic risk assessment or equity

market group). c-2. Inventories from nonresources (excluding real estate and vessels): We apply 8% for a 'BBB' stress and 10% for a 'A' stress. These are applied only for Japanese general trading and investment companies, and are estimated based on our past research on three defaults of Japanese general trading companies in the late 1990s. We also incorporate the shorter duration of nonresource inventories, at less than 12 months. This capital charge would be changed if our economic risk assessment changes from '4'. A large portion of nonresource inventories at Japanese general trading and investment companies are also primarily derived from wholesale/intermediary trading business with their contracted corporate customers. For example, revenues of the automotive business are mostly generated by exporting vehicles and key auto components to their Japanese clients consisting of automakers and auto suppliers. We understand that some of these inventories (c-2. Inventories from nonresources) are less liquid than resource inventories (c-1), but we regard this nonresource inventory risk as counterparty risk, not market fluctuation or illiquidity risk, because any market fluctuation or illiquidity would not turn into an actual loss as long as trade counterparts honor their purchase obligations. Real estate in inventories is excluded from this category. Because the c-2 capital charge is estimated based on the past default cases only for Japanese general trading and investment companies, this charge is valid only for Japanese general trading and investment companies. Noncurrent assets: d: Securities and investments: 93. We use different capital charges to represent the varying nature of securities and investments as below. The charges for (d-1) and (d-2) are applicable when the weighted equity market group assessment is '2'. The charges for (d-3) and (d-4) are applicable when the weighted economic risk assessment is '4'. Accordingly, these capital charges would change if our weighted economic risk assessment and/or equity market group assessments change from '4' and '2', respectively. For listed stock (d-1), 45% for a 'BBB' stress and 55% for a 'A' stress. For unlisted stock (d-2), 55% for a 'BBB' stress and 65% for a 'A' stress. For listed bonds (d-3), 3% for a 'BBB' stress and 4% for a 'A' stress; this assumes that the listed bond portfolio is of 'BBB' credit quality (reflecting typical holdings of Japanese government bonds and high quality corporate bonds) and reflects our default-rate and loss-given-default assumptions for 'BBB'-rated securities. For long-term credit exposure (d-4) such as unlisted bonds, loans, and guarantees: 8% for a 'BBB' stress and 10% for a 'A' stress. These include similar assets to those of b: Loan receivables and bonds (current assets), but with longer durations. This assessment is based on our economic risk assessment '4' through a weighted-average approach. Accordingly, this capital charge would be changed if our weighted economic risk assessment changes. e: Investments in equity-affiliated companies: 94. We apply 60% for a 'BBB' stress and 70% for a 'A' stress. These are slightly higher than those of d: Securities and investments to reflect the higher likelihood of support for equity-affiliated companies. These percentages are fixed capital charge numbers (not a function of either the economic risk assessment or equity market group). f: Doubtful receivables: 95. The capital charge is 100% for both a 'BBB' stress and a 'A' stress. These percentages are also fixed capital charge numbers. g: Mineral rights: 96. The capital charge is 60% for a 'BBB' stress and 75% for a 'A' stress. These capital charges are the highest ones, except for f: Doubtful receivables and j: Goodwill and other intangible assets, to reflect the volatile nature of commodity market prices and the asset type's inherent risk. These percentages are fixed capital charge numbers. h-1: Real estate in inventory: 97. The capital charge is 18% for a 'BBB' stress and 25% for a 'A' stress. These percentages are fixed capital charge numbers. h-2: Vessels (aircraft and ships): 98. The capital charges are 20% for a 'BBB' stress and 30% for a 'A' stress. Most of the assets are for leasing business rather than aircraft- or ship-operation businesses. These percentages are fixed capital charge numbers. i: Other assets: 99. We apply different capital charges to represent different risk asset natures as below. For i-1: Other assets in the company's own use, we apply 80% for a 'BBB' stress and 100% for a 'A' stress to reflect their illiquid nature. For i-2: Other assets not integral to the company's business operations that could be sold or rented (for example, buildings and buildings under construction, machinery and equipment; excluding goodwill and other intangible assets), we apply 18% for a 'BBB' stress and 25% for a 'A' stress, the same as those for h-1: Real estate in inventory. These percentages are fixed capital charge numbers. j: Goodwill and other intangible assets: 100. The capital charge is 80% for a 'BBB' stress and 100% for a 'A' stress. Even though our industrial corporate criteria do not subtract any goodwill or other intangible assets from the adjusted capital, we apply an approach that is similar to the one in our bank criteria. As the bank

criteria subtract virtually all of the goodwill and other intangible assets from the adjusted capital, we also apply the same 100% capital charge for a 'A' stress. For a 'BBB' stress, we apply an 80% risk charge. These percentages are fixed capital charge numbers. 3. Adjustments for unconsolidated affiliates 101. We may analytically consolidate any equity-method affiliates when we think doing so would better reflect the company's business and financial ties with its affiliates. It is common for a general trading and investment company to conduct a meaningful portion of its business through partly owned subsidiaries or joint ventures, thereby sharing risks with other owners, by frequently utilizing nonrecourse loans (e.g. project finance) for specific projects. 4. Calculation for adjusted capital 102. Once the risk-based capital is estimated at two different confidence levels and at four time points, we then compare them with the amount of capital expected to be available. The calculation of this available capital uses the analytical adjustments for equity defined in "Corporate Methodology: Ratios And Adjustments." In addition, we make the following adjustments to equity to reflect factors specific to this sector: (-) Tax loss carryforwards net of valuation allowance; and (+) Loan-loss reserves other than the portion allocated to doubtful receivables. Loan-loss reserves allocated to doubtful receivables are netted against doubtful receivables when calculating the risk-based capital for doubtful receivables. 103. For the purpose of determining the amount of hybrid capital that we recognize as high or intermediate equity content, we follow the corporate approach, rather than the approach we use for financial institutions, because general trading and investment companies are not regulated entities and because the trading business is corporate-like in nature. 104. We forecast the amount of adjusted capital, consisting of our projections for net income, dividends, and other items that may affect capital accumulation or depletion, for the current year and the next two fiscal years. We incorporate our key assumptions, including commodity price assumptions and profit forecasts from key investments, in detail in forecasting the amount of capital. 5. Capital adequacy assessment 105. The capital adequacy assessment follows the below steps: For the past and current fiscal year-end, we calculate the general trading and investment company's risk-based capital at two different stress levels through the capital adequacy's quantitative analysis. For the end of the two subsequent years, the risk-based capital is projected based on the requirement at the end of the previous fiscal year and growth or contraction in risk-based capital over the year based on expected business growth or contraction and changes in risk profile. 106. The capital adequacy assessment is set by comparing the redundancy or deficiency of adjusted capital relative to the risk-based capital at two different stress levels at the end of the past fiscal year-end and for the projection periods. To arrive at the capital adequacy assessment (before taking into account the potential cap due to the leverage ratio), we consider either or both of the results of the two different stress scenarios (e.g. 'A' and/or 'BBB' stress scenarios) as explained in the capital adequacy assessment guidance in table 14. For each of four time points, adjusted capital is divided by the risk-based capital under 'A' stress and 'BBB' stress scenarios. Then, we calculate two stress levels of capital adequacy using the below periods and weights. The capital adequacy calculation is generally a four-year weighted average of the results. In averaging 'A' stress ratios and 'BBB' stress ratios for four consecutive periods, we generally apply 20% for the past fiscal year, 25% for the current fiscal year, 30% for the next fiscal year, and 25% for the year after the next fiscal year. We may change the weightings, however, to place greater emphasis on the current and forecast years if a company is undergoing a transformational event or if we do not view the last historical year as representative. The weights applied will then generally be 30%, 40%, and 30% for the current and two subsequent years, respectively. 6. Leverage ratio 107. To complement our risk-based capital analysis, we also analyze capital adequacy by calculating a leverage ratio (debt to equity) to assess the extent of balance sheet leverage and trends. We use the leverage ratio as a cap for the capital adequacy assessment (see table 16). 108. The leverage ratio analysis does not differentiate various types of assets by their risk nature, but represents a general trading and investment company's risk buffer (equity) against its financed debt. We calculate the leverage ratio over three years of forecasts, with weights of 30%, 40%, and 30% for the current fiscal year, the next year, and the year after, respectively. 109. We use the following thresholds and caps. Table 16 Leverage Ratio Thresholds And Applicable Capital Adequacy Assessment Caps IF DEBT TO EQUITY EXCEEDS… THE CAPITAL ADEQUACY ASSESSMENT IS CAPPED AT… 1.5x Strong (2) 3.0x Adequate (3) 4.0x Moderate (4) F. Profitability Assessment 110. Under the criteria, we assess profitability, the first line of defense against losses and the primary way

that a general trading and investment company builds or maintains capital adequacy. We consider profitability analysis to help develop a fuller understanding of a company's financial risk profile. We assess a general trading and investment company's profitability as "strong," "adequate," or "weak" based on its profitability compared with the long-term average in the sector. We also consider trends in track record and our forward-looking views on the profitability measure. We can modify the capital adequacy assessment by one category, either weaker or stronger. 111. We use return (pretax net income) on risk-weighted assets (RORA). We use pretax net income as the numerator. As a denominator, we use risk-based assets reflecting required capital levels under our 'BBB'-stress scenario. The RORA calculation is generally a four-year weighted average whereby we apply a 20% weight for the past fiscal year, 25% for the current fiscal year, 30% for the next fiscal year, and 25% for the year after the next fiscal year. We may change the weightings, however, to place greater emphasis on the current and forecast years if a company is undergoing a transformational event or if we do not view the last historical year as representative. The weights applied will then generally be 30%, 40%, and 30% for the current and two subsequent years, respectively. We think pretax net income is a useful parameter for analyzing general trading and investment companies' earnings because, unlike operating income, which is a key profitability parameter for most other industrial companies, pretax net income captures the following items, which are important profitability contributors at general trading and investment companies: Equity in the earnings of affiliated companies; and Various gains and losses from investment business, such as those from investment sales, revaluations, and liquidations. 112. As shown in table 17, we assess profitability as generally measured by a general trading and investment company's RORA on a three-point scale: "strong," "adequate," and "weak." We consider RORA above 20% to be "strong," between 10% and 20% "adequate," and below 10% "weak." 113. There may be situations where we exclude material gains or losses to smooth out the calculation, if we believe they are gains and losses from one-off events. 114. When we derive the financial risk profile assessment from the capital adequacy assessment using table 14, the financial risk profile assessment will be one category weaker than that derived from the capital adequacy assessment for any company with a capital adequacy assessment of "moderate" (4) or stronger and a profitability assessment of "weak." On the other hand, the financial risk profile assessment will be one category stronger for any company with a capital adequacy assessment of "moderate" (4) or weaker and a profitability assessment of "strong." However, when the capital adequacy assessment is capped by the leverage ratio test, we do not adjust by one category stronger. Table 17 Profitability Assessment As Measured By General Trading And Investment Company RORA (%) PROFITABILITY ASSESSMENT WEAK ADEQUATE STRONG Return on risk-weighted assets (RORA) <10% 10%-20% >20% G. Risk Position And Asset Risk Management Capabilities Assessment 115. Compared with other industrial companies, general trading and investment companies are more exposed to asset risks because of their investment activities and hence share some characteristics with financial institutions and insurance companies. We believe that the evaluation of a general trading and investment company's risk position and asset risk management capabilities is a key component of the rating analysis. 116. We analyze both risk position and asset risk management capabilities, and then combine the two assessments by using table 18. 117. The financial risk profile assessment, after any adjustment for the profitability assessment, could be adjusted by one category stronger, or by one or several categories weaker, based on table 18. However, the financial risk profile assessment would not be adjusted upward when: The capital adequacy assessment is capped by the leverage ratio test; An upward adjustment has already been applied through the profitability assessment; or Our financial risk profile assessment, after taking into account the profitability assessment, is "modest." Table 18 A Combined Assessment Of Risk Position And Asset Risk Management Capabilities, And Its Impact On The Financial Risk Profile Assessment --ASSET RISK MANAGEMENT CAPABILITIES (SEE TABLE 20)-- RISK POSITION (SEE TABLE 19) ADEQUATE WITH STRONG RISK CONTROLS ADEQUATE WEAK Strong +1* 0 0 Average 0 0 -1 Weak -1 -1 or -2§ -2 or more§ *Subject to the limitations described in paragraph 117. §The magnitude of the adjustment would depend on the severity of the identified weaknesses in the underlying factors of risk position or asset risk management capabilities, whereby the more severe the deficiencies, the more significant the downward adjustment. 1. Risk position 118. Risk position is one of the financial risk profile factors and serves to refine our view derived from the capital adequacy analysis. It focuses on

the existing and potential risk in a general trading and investment company's portfolio. Such risk includes specific business risk to a company, which may not be sufficiently captured by the capital adequacy analysis. 119. The analysis of risk position draws from our criteria "Financial Institutions Rating Methodology," which we adapt to general trading and investment companies. Unlike six categories for banks, we use three categories for assessing the risk position of general trading and investment companies: strong, average, or weak. 120. Individual assessment factors are as below: (a) Growth and change in exposure---How a general trading and investment company manages growth and changes in its risk positions; (b) Risk concentration and diversification--The impact of risk concentration or risk diversification; (c) Complexity--How increased complexity adds additional risk; (d) Risks that the capital adequacy assessment does not capture--Whether material risks are not adequately captured by the capital adequacy assessment; and (e) Evidence of stronger or weaker loss experience--How past and expected losses on the current mix of businesses compare with those of peers and how loss experience during past economic downturns compares with our standard risk assumptions. Greater-than-average losses may indicate a weaker risk position assessment. 121. The combination of the five factors captures the degree to which the standard risk assumptions under- or overstate a general trading and investment company's specific risks. For guidance on how these five factors are combined to form a single opinion on risk position, see table 19. The descriptive characteristics are applied on a "best-fit" basis. 122. A general trading and investment company's risk position will be average, at best, if its investment business accounts for more than 50% of pretax net income or total assets of the company over the long term. Table 19 Determining The Risk Position Assessment DESCRIPTOR WHAT IT MEANS GUIDANCE Strong A general trading and investment company is better able to withstand economic stress than the descriptor of the capital adequacy assessment would indicate. (a) Growth and change in exposure is limited and therefore is unlikely to represent risk that cannot be captured by the capital adequacy assessment; (b) Either there are no risk concentrations, or if they exist, all risk concentrations are more than compensated for by other lower-risk characteristics; (c) Complexity is limited; (d) The capital adequacy analysis does not miss material risk exposures or the diversification benefits outweigh any risk that the capital adequacy assessment misses; and (e) A strong risk position is supported by evidence that the general trading and investment company's recent loss experience and the prospective loss trends are stronger relative to peers, the general trading and investment company's loss experience during past economic downturns was better than average, and its investment business does not account for more than 50% of its pretax net income or total assets over the long term (see paragraph 122). Average A general trading and investment company is able to withstand economic stress in line with or somewhat weaker than that indicated by the descriptor of the capital adequacy assessment. All of following conditions are satisfied, fully or to a large extent: (a) Growth and change in exposure is limited and therefore is unlikely to represent risk that cannot be captured by the capital adequacy assessment; (b) Either there are no material risk concentrations, or any potential diversification effect is offset by other higher-risk characteristics; (c) Complexity is limited; (d) Either the capital adequacy analysis does not miss material risk exposures or, if it does, other lower-risk characteristics more than offset them; and (e) An average risk position is supported by evidence that the general trading and investment company's recent loss experience and the prospective loss trends are at least average relative to peers, and the general trading and investment company's loss experience during past economic downturns was close to average. Weak A general trading and investment company is far less able to withstand economic stress than the descriptor of the capital adequacy assessment would indicate. (a) Growth and change in exposure is so material that the capital adequacy assessment is likely to underestimate the risk arising from such growth and change; or (b) There are material risk concentrations; or (c) Complexity is material and therefore the capital adequacy assessment is likely to underestimate the risk arising from such complexity; or (d) The capital adequacy analysis does not adequately capture material risk exposures; or (e) The general trading and investment company's recent or prospective losses are much greater than peers, or the general trading and investment company's loss experience during past economic downturns was greater than our risk assumptions. a) Growth and change in exposure 123. Since rapid expansion tends to presage outsized losses in both the trading and investment businesses, it is important to monitor a general trading and investment company's portfolio of risks and its

movement and direction on the risk spectrum. A change in a general trading and investment company's risk means that the traditional expertise that has helped it to survive previous economic downturns may not help during the next one. 124. Growth and change in exposure is limited when we observe one or more of the below trends. Lower recent organic or acquisitive growth and modest prospects for future growth than in the past and compared with peers, when the lower growth is based on avoiding risk and declining riskier growth opportunities that other general trading and investment companies are willing to take; Decreasing risk exposure, for example by exit or sales of risky activities; Remaining focus on the company's core customer base with traditional expertise in trading and limited exposure to large or risky investment activities; or Limited change in a portfolio of risks that limited losses experienced in previous economic downturns. 125. Growth and change in exposure is material when we observe one or more of the following trends: More aggressive recent organic or acquisitive growth and more significant prospects for future growth than in the past and compared with those of peers due to riskier strategies; or Material move into new country or market activities outside of the company's traditional area of expertise. b) Risk concentration and diversification 126. Excessive risk concentration in specific types of assets is often a primary reason of financial stress or failures for a general trading and investment company. Most companies demonstrate that risk diversification has contributed to their stable profitability and overall limited losses. We consider the negative impact of risk concentration in illiquid and large investment projects because the capital adequacy analysis does not capture it fully. The risk position factor focuses on the concentration of exposures to individual projects and counterparties, or aggregations of risk across asset classes and risk types. 127. Material risk concentration for a company arises from one or more of the following: Risk exposures by sector, country, or single name in the investment portfolio and the trading book that are more concentrated than for peers; A limited number but material amount of counterparties for trading and investment; and The degree of asset diversification and single-name concentration. c) Complexity 128. A greater scale of investment assets may bring not only the advantage of diversification to a general trading and investment company but also the disadvantage of complexity. The ever-increasing complexity in counterparties, business lines, regions, and organizational structure can outstrip the capacity of a general trading and investment company to manage risk. 129. Complexity is material when a general trading and investment company has one or more of the following: Limited transparency into underlying risk positions, risk management, or earnings generation; A portfolio that contains significant risks with a low probability of occurrence but high loss severity, otherwise known as tail risk; Operations in many jurisdictions or with an organizational structure with many legal entities, which may grow beyond management's capacity to control; and An investment structure that is too complex to capture a general trading and investment company's overall risk level. d) Risks not captured by the capital adequacy assessment 130. Our capital adequacy assessment is based on a number of simplifying assumptions that we may make when applying capital charges. These include, but are not limited to: The application of capital charge percentages uniformly at the asset category level rather than at the individual asset level; For assets where the capital charge is a function of the economic risk assessment, the use of the same economic risk assessment for all those assets rather than asset by asset, or asset category by asset category; The assumption of a uniform equity market group for listed securities; and The absence in this industry of standardized adjustments to capital charges for concentration or correlation considerations. 131. When those assumptions result in lower capital charges than what our analysis of individual asset characteristics might otherwise indicate, certain risks may not be adequately covered by the capital adequacy assessment. Conversely, when those assumptions result in capital charges that are in line with what our analysis of individual asset characteristics might indicate, capital adequacy analysis does not miss material risk exposures or, if it does, other lower-risk characteristics more than offset them. 132. Other common risks that the capital adequacy analysis may not sufficiently cover are interest rate risk and currency risk. 133. Substantial differences among investment portfolios in the same industry are also considered here. Such differences are material when general trading and investment companies have more significant exposure than peers in the same specific sub-industrial sectors or new fields, such as unconventional oil and gas among energy investments and emerging markets among overseas investments. e) Evidence of stronger or weaker loss experience 134. Evidence of a stronger risk position is reflected in relatively lower recent and projected losses than for

peers with a similar mix of risk assets in their portfolio, and a better-than-average track record of losses during periods of similar economic stress. Conversely, weaker risk positions are associated with losses that are greater than the average for peers with a similar mix of risk assets in their portfolio, or a worse-than-average track record of losses during recent periods of similar economic stress. 135. Deviations from the average peer performance are explained by highlighting the root causes as any combination of growth, concentration, and complexity, or by considering how a risk specific to a general trading and investment company is materially different from the standard risk assumptions in the capital adequacy analysis or our calculation of normalized losses. 136. Examples of such material differences may be any of the following: Provisioning and loss recognition by a general trading and investment company that may be more aggressive or less so than peers'; Legal or regulatory costs or fines that can be higher or lower than for peers in similar lines of business; or Deviations in the performance of individual large investments, compared with our initial projections. 2. Asset risk management capabilities 137. For a general trading and investment company's asset risk management capabilities, we aim to examine whether the company's strategy for reshaping the business portfolio and buying and selling assets to optimize the risk/return balance is reasonably managed under controlled risk management. Market risk, credit risk, and business investment risk are key risk areas. 138. Our analysis of asset risk management capabilities examines whether general trading and investment companies execute risk management practices in a systematic, consistent, and strategic manner across the enterprise that effectively limits future losses within an optimal risk/return framework. Asset risk management analysis also provides a prospective view of the general trading and investment company's risk profile and necessary risk buffer, equity. 139. All else being equal, a general trading and investment company with stronger asset risk management capabilities is less likely to experience losses outside the predetermined risk tolerances set under its risk management framework than a company with weaker asset risk management capabilities. 140. Our analysis of asset risk management capabilities for general trading and investment companies draws from our methodology for assessing risk management for insurers, but we adapt it for general trading and investment companies. 141. We assess asset risk management capabilities on a three point scale as "adequate with strong risk controls," "adequate," or "weak" (see table 20), based on the analysis of six subfactors, which we each assess as "positive," "neutral," or "negative" (see table 21). The six subfactors are: Risk management culture, Risk controls, Risk appetite, Emerging risk management, Risk models, and Strategic risk management. Table 20 Determining The Asset Risk Management Capabilities Assessment For General Trading And Investment Companies ASSESSMENT GUIDELINE WHAT IT MEANS IN OUR OPINION ADEQUATE WITH STRONG RISK CONTROLS The risk management culture, risk controls, and risk appetite subfactors are assessed as positive, and no subfactor is assessed as negative. The company's asset risk management capabilities are comprehensive, well established, and effective; there are no known deficiencies in key areas and we see the risk management culture as well entrenched and transparent, its risk appetite appropriately balances risk and opportunities, and it has also established various risk controls that we view in aggregate as positive. This results in a demonstrated and expected ability to consistently identify, measure, and manage risk exposures and losses with chosen risk tolerances. There is sufficient, clear evidence of the company's practice of optimizing risk-adjusted returns. The company has a sufficient track record of success. Risk and risk management are important considerations in the company's corporate decision making. In our opinion, the company is relatively unlikely to experience unexpected losses that are outside of its risk tolerances. ADEQUATE The risk management culture, risk controls, and risk appetite subfactors are assessed as at least neutral but, overall, the assessments don't satisfy the requirements for "adequate with strong risk controls." The company has capabilities to identify, measure, and manage most key risk exposures and losses, but the process has not been extended to all significant risks facing the enterprise. The company's loss/risk tolerance guidelines are less developed than those of companies with a higher assessment. The company demonstrates sufficient execution of its existing risk management programs, although the execution is less comprehensive than those of companies with a higher assessment. Risk and risk management are often important considerations in the company's decision making. In our opinion, the company is more likely to incur unexpected losses than a company with a higher assessment. WEAK Any of the risk management culture, risk controls, or risk appetite,

subfactors are assessed as negative. The company has limited capabilities to consistently identify, measure, and manage risk exposures across the enterprise and, thereby, limit losses. The company demonstrates sporadic execution of its risk management program; losses aren't expected to be limited in accordance with a set of predetermined risk tolerance guidelines. The company has yet to adopt a risk management framework; or it has very recently adopted a risk management system that has yet to be tested. Risk appetite is aggressive and other subfactors would not offset this. Risk and risk management are only sometimes considered in the company's corporate decision-making process. Table 21 Assessing The Six Subfactors For Asset Risk Management Capabilities SUBFACTOR POSITIVE NEUTRAL NEGATIVE 1. RISK MANAGEMENT CULTURE Risk management is well entrenched in the organization, with a formal risk management framework, an independent and well-staffed risk management department, and active board participation. The company has some risk management functions at the enterprise level that cover most material risks. Risk management is not practiced, or is practiced inconsistently, across the enterprise, with limited board participation. The company has a clear vision of its asset risk profile and risks are managed, both at a business-unit and enterprise level, within risk tolerances. There is limited or infrequent board participation. The company lacks a clear understanding of its asset risk profile. The company has a culture of risk communication and information sharing, internally and externally. The company understands its asset risk profile around key risk exposures and manages them within chosen risk tolerances. The company lacks a formal asset risk management framework supported by clear rationales; risk limits do not exist or are very basic. 2. RISK CONTROLS The company has identified all material asset risks from all sources and frequently monitors its risk exposures with multiple metrics. The company has identified and monitors its main sources of material asset risks. The company has a comprehensive asset risk limit system and strict formal limit breach policies. The company has an asset risk limit system to deal with material asset risks, but the limits are relatively simple or lack linkage to risk appetite. The company has a limited formal asset risk limit system, or its asset risk limit system is overly aggressive, providing no practical value in controlling exposures. The company has strict "exit rules" for its investments and the exit rules work in practice at a corporate management level with good track records. The company has adequate "exit rules" for its investments and the exit rules work in practice at a corporate management level. The company does not have "exit rules" for its investments. The company has formal risk limits including limits for asset concentration and multiple risk management strategies to effectively manage exposures Even though the company has formal risk limits including limits for asset concentration, they are not enforced. The company has no formal risk limits so there is no enforcement. 3. RISK APPETITE The company has a low risk appetite. The company has a modest risk appetite. The company has an aggressive risk appetite far beyond its risk management capability. Investment targeting (for example, internal rate of return [IRR] hurdles) is reasonably conservative (i.e., high), with a good track record relative to the industry average. Investment targets are average for the industry. Investment targets are quite aggressive and far below industry averages and historical track records. The company has a track record of significant negative free cash flow (cash flow from operations plus net investment cash flow) in multiple years and we expect this to continue mainly because of planned large investments or losses. The company's asset risk appetite framework is clearly communicated and linked directly to risk limits. Asset risk management is mainly the responsibility of business functions, with limited enterprise overview. The company manages asset risks predominantly in silos. The company publicly discloses free cash flow targets and shows a strong commitment to meet the targets even during times of stress by selling assets or halting investments. The company publicly discloses its free cash flow targets, but may miss the targets in times of stress or as a result of changes in the business environment. 4. EMERGING RISK MANAGEMENT The company has well-established processes for identifying and monitoring emerging asset risks, analyzing their significance, and preparing for and/or potentially mitigating them. The company has some processes in place to identify and analyze the impact of emerging asset risks; but these processes are more ad-hoc and do not lead to risk mitigations. The company does not have processes for identifying and evaluating emerging asset risks. 5. RISK MODELS The company's risk models capture all material asset risks and asset risk interrelationships in aggregating exposures. The company's risk models capture major asset risks. However, the models are less comprehensive or the processes used to aggregate enterprise asset risk

exposures are less sophisticated than those at companies assessed positive. The company does not use asset risk models or the risk models often fail to capture major asset risks. The company understands model limitations and these are compensated for within the organization. There are general concerns about data quality, assumptions, and governance. The company uses model results extensively in the decision-making process ("use test" in industry parlance). 6. STRATEGIC RISK MANAGEMENT The company has a track record of consistently using a risk vs. reward decision-making framework to optimize risk-adjusted returns at an enterprise level. The company uses some risk vs. reward analysis in decision making, but the metrics and processes applied are inconsistent across the company. The company does not optimize risk-adjusted returns; risk and risk vs. reward analysis is not reflected in the company's decision making. H. Modifiers 1. Capital structure 142. To assess a general trading and investment company's capital structure, we largely follow the methodology used for other corporate issuers (see "Corporate Methodology," section G, paragraphs 136-156). However, for general trading and investment companies, the capital structure analysis does not assess the investment subfactor, since investments are included within our analysis of capital adequacy. We assess capital structure as either "neutral," "negative," or "very negative" as per table 21 of "Corporate Methodology." 143. The assessment rests on the evaluation of three subfactors: i) currency risk of debt, ii) debt maturity, and iii) interest risk of debt, which we each assess as either neutral or negative in accordance with "Corporate Methodology," paragraphs 142-152. However, we modify the assessment for currency risk of debt by applying a debt-to-equity test of 4.0x in place of the debt-to-EBITDA test of 3.0x set forth in paragraphs 143 and 144 of "Corporate Methodology." 2. Financial policy 144. In assessing the financial policy of a general trading and investment company, the analysis uses the same methodology as that used for other corporate issuers (see "Corporate Methodology," section H), except that the section relative to financial sponsors would not apply to general trading and investment companies. 3. Funding and liquidity 145. We assess funding and liquidity on a combined basis. Funding and liquidity assesses a general trading and investment company's capacity to support its business performance through effective funding, while managing liquidity requirements both on an ongoing basis and in periods of stress. 146. We believe that stable funding carries far more importance for general trading and investment companies than for other industrial companies. Similar to financial institutions, we believe that stable long-term funding is essential to maintain their long-term investment business. The way general trading and investment companies fund their business directly affects their ability to maintain their investment business and to meet obligations in adverse circumstances. In funding, the analysis is guided by the basic principle that stable, long-term funding sources generally should finance long-term and less liquid assets, and that the use of short-term funding generally should be limited to financing of short-term and more liquid assets. 147. At the same time, we believe liquidity is as critical for general trading and investment companies as for other industrial companies. In our view, general trading and investment companies are less confidence-sensitive than banks or financial companies, but share comparable sensitivity to other industrial companies. 148. The aggregate impact on the anchor (or SACP if caps apply) of the funding and liquidity assessments is shown in table 5 above. If the anchor is 'bbb-' or higher, before applying the funding and liquidity modifier, funding and liquidity will not modify the anchor upward. As for other nonfinancial corporate entities, we apply a cap on the SACP if liquidity is assessed as "less than adequate" or "weak." 149. We assess funding and liquidity in the below three steps. First, we determine the funding assessment by analyzing the funding stability ratio (FSR), which we define as the ratio of long-term debt plus equity to long-term assets, a measure to evaluate the balance between funding sources and uses; we also consider several qualitative factors to determine the funding assessment. Second, we determine the liquidity assessment by applying our corporate liquidity criteria (see "Methodology And Assumptions: Liquidity Descriptors For Global Corporate Issuers"). In the calculation, we use our expectations, including cash flow and investment forecasts. And third, we combine the two resulting assessments for funding and liquidity to determine their aggregate impact on SACP. 150. In addition to the characteristics in table 22, for companies that are subsidiaries of larger corporate or financial groups, we also factor in the role that the parent group plays in the ongoing funding and liquidity of the subsidiary. If a general trading and investment company has, prior to considering ongoing parent support, a funding assessment of "moderate" or "weak," or if the liquidity

assessment is "less than adequate" or "weak" but its group status is "moderately strategic" or higher (as defined in "Group Rating Methodology"), then we raise both the funding and liquidity assessments to "adequate" if all of the following characteristics are met: The parent has the capacity to meet the company's current and expected funding and liquidity needs. The parent has a demonstrated history of providing funding and supporting the liquidity of its subsidiary. There are no regulatory or other barriers to the parent providing this support. a) Funding 151. Funding is assessed based on the FSR and qualitative characteristics (see table 22). A general trading and investment company's FSR is defined as its long-term debt plus equity divided by its long-term assets. The ratio provides a holistic view of a general trading and investment company's available stable long-term funding sources relative to its stable long-term funding needs. We define funding sources as the sum of total equity and long-term debt including hybrid instruments with minimal equity content maturing after one year. We define funding needs as the sum of long-term assets (noncurrent assets). 152. Under the criteria, an FSR of 120% or higher is necessary to achieve a funding assessment of "strong." The FSR is combined with qualitative considerations to determine the funding assessment. If the FSR is less than 120%, positive qualitative considerations can improve the funding assessment. Conversely, negative qualitative considerations can shift the funding assessment down by one or more levels (for example, to "adequate" from "strong") even if the FSR is 120% or more. Qualitative considerations include an evaluation of the assumptions made in the FSR calculation as well as company-specific funding strengths and weaknesses. 153. Among five characteristics that we analyze to assess funding stability (see table 22), we believe strong relationships with creditor banks is a key supporting factor. For companies that have ongoing, well-entrenched banking relationships, we can reflect these relationships in our funding assessment. These relationships may take the form of historical links, as well as shareholdings and management influence by the main banks, and interaction between the main banks and the company. Based on their bank relationships, these companies often have lower funding costs and longer funding terms than those who do not benefit from such relationships, even if the economy worsens. Table 22 Funding Assessment For General Trading And Investment Companies THE FOLLOWING CHARACTERISTICS SUPPORT FUNDING. WE ASSESS FUNDING AS "STRONG," "ADEQUATE," "MODERATE," OR "WEAK" BASED ON WHICH OF THESE POSITIVE CHARACTERISTICS APPLY TO THE COMPANY. The company has ongoing, well-entrenched relationships with banks, as demonstrated even in past stress periods. The majority of the company's funding consists of stable long-term or medium-term debt, and the company does not rely significantly on short-term debt or debt sources that have proven highly unstable in the past (such as certain forms of debt secured by assets whose credit quality is not easily observed in public markets, or cash flows and other types of complex off-balance-sheet funding). We believe the company could easily access multiple sources of secured and unsecured debt in the capital markets, even in stress periods. The company has no significant maturity concentrations (staggered debt maturities) and is strongly positioned to manage its refinancing requirements. We do not expect a sharp increase in the cost of funding or refinancing for the company or for the sector and we do not expect the company to have difficulty retaining funding over the next year. STRONG We expect the FSR to be 120% or higher, and all of the above positive funding characteristics apply. ADEQUATE We expect the FSR to be 120% or higher, but one of the positive funding characteristics does not apply; or We expect the ratio to be 90% or more but less than 120%, and all of the positive funding characteristics apply. MODERATE We expect the FSR to be 120% or higher, but more than one of the positive funding characteristics do not apply; We expect the FSR to be 90% or more but less than 120%, but one of the positive funding characteristics does not apply; or We expect the ratio to be less than 90%, and all of the positive funding characteristics apply. WEAK The conditions for a Strong, Adequate, or Moderate assessment are not met. b) Liquidity 154. In assessing a general trading and investment company's liquidity, we apply the corporate liquidity criteria (see "Methodology And Assumptions: Liquidity Descriptors For Global Corporate Issuers") with certain modifications as described in paragraphs 155 and 157 below. 155. General trading and investment companies typically hold some commodity inventories (like companies in the commodity trading industry). If we identify those commodity inventories as readily marketable inventories, we include those in our liquidity analysis with certain adjustments as described (and subject to the same conditions, including applicable haircuts by commodity) in paragraphs 86 and

87 of "Commodities Trading Industry Methodology." 156. Unlike other industrial companies, general trading and investment companies regularly have large cash flows in their investment activity, one of their core businesses. However, the liquidity criteria primarily focus on FFO under "Methodology And Assumptions: Liquidity Descriptors For Global Corporate Issuers," while cash flows from investment activities are incorporated into the liquidity analysis only when they are confidently predictable, typically when relevant investment transactions are contracted. For example, we include expected cash proceeds from loan receivables from customers over the next 24 months because collections of such loan receivables are confidently predictable under contract. But we do not treat cash flow from planned asset sales as liquidity sources unless contracted. This is because our liquidity analysis is meant to be an analysis under certain stresses, and it's generally difficult to identify which investment divestitures are certain under stress. 157. On the other hand, given general trading and investment companies' greater flexibility to generate cash by divesting some investments, thereby adding stability to cash inflow when needed (even if not identifiable in advance), we differentiate a threshold between these companies and other industrial corporate issuers. More specifically, while the corporate liquidity criteria assess the liquidity as "less than adequate" when the ratio of liquidity sources to liquidity uses is less than 1.2x, we use a 1.1x threshold for general investment and trading companies. 4. Management and governance 158. In assessing the management and governance of a general trading and investment company, we adopt our general management and governance criteria (see "Methodology: Management And Governance Credit Factors For Corporate Entities And Insurers") but apply it only to areas other than asset risk management, which the asset risk management capabilities assessment addresses. A company's management and governance can be assessed as: "strong," "satisfactory," "fair," or "weak." 5. Comparable ratings analysis 159. The comparable ratings analysis for a general trading and investment company uses the same methodology as that described in section K of the "Corporate Methodology" criteria. IV. APPENDIXES Appendix I 160. This section of the appendix explains how we assess the competitive risk and growth of the general trading and investment industry's trading business at "intermediate risk" (3), as described in the paragraph 45. Competitive risk and growth assessment for the trading business a) Effectiveness of barriers to entry--medium risk 161. We assess the effectiveness of barriers to entry in the trading business as medium risk. Barriers to entry in the trading business tend to entail medium risk overall. Primarily, general trading and investment companies act as intermediaries for their customers and generally do not speculate for their own accounts. Factors such as trading know-how, customer relationships, access to distribution channels, information intelligence, the ability to provide financing, and logistics network are typically the biggest barriers to entry. 162. The prevalence of these factors is not homogenous across various segments in general trading and investment companies' trading business, however, resulting in our assessment of overall medium risk. Some segments, for instance, have a near-oligopolistic nature dominated by a few participants where well-established and extensive networks form effective barriers to entry. Conversely, other segments are fragmented and often comprise both large participants and many small, local operators with limited networks and know-how, resulting in low protection against new entrants. b) Level and trend of the trading business' profit margins--medium risk 163. We assess trading business profit margins as medium risk. Trading businesses can typically generate thin but relatively stable margins by acting as intermediaries for customers. Moreover, general trading and investment companies' trading businesses generally are not exposed to currency or price fluctuation risks because they usually hedge their market risk or can often pass on such risk to their customers by contract. This helps support stable profit margins. c) Risk of secular change and substitution by functions, services, and technologies--medium risk 164. In the criteria, we assess the risk of substitution as medium risk for general trading and investment companies' trading business. In making such a judgment, we take into account the possibility that new services and functions could emerge to provide a company's trading customers with alternative options. It is also possible that a general trading and investment company's end customers could begin to directly trade with some of their upstream or midstream suppliers. Other potential threats to a trading business may include in-sourcing (customers bringing activities such as raw material procurement, logistics, and distribution in-house). 165. However, we think general trading and investment companies can usually fend off these threats by differentiating their services to meet the needs of specific customers. More importantly, general trading

and investment companies often have dominant positions in upstream businesses, allowing them to enjoy strong positions in downstream businesses, to the point of establishing somewhat exclusive distribution channels with their customers. Technological change in trading is generally irrelevant and technological displacement is typically not a major risk factor. Government mandates and subsidies--for instance, global or country-specific energy or environmental policies--can underpin demand for certain types of trading activities, depending on the sustainability of such mandates or subsidies. d) Risk in trading business growth trends--medium risk 166. We also assess the risk in the industry's growth trends as medium risk for general trading and investment companies' trading business. Factors that generally support long-term demand for a trading business include a desire by its customers to utilize industry intelligence and networking to find new business partners, to outsource business, and to reduce logistics costs. Growth in a trading business is generally tied to economic conditions, whether in mature, low-growth markets or in newer, faster-growing markets. 167. Key trading functions include market research/marketing, serving as a business intermediary, serving as a buyer's trading agent, providing logistics and IT operations, and providing trade financing. We do not expect significant growth or shrinkage in these businesses. Rather, we expect them to display relatively stable growth over the long term. Appendix II 168. This section of the appendix explains how we assess the competitive risk and growth of the general trading and investment industry's investment business at "moderately high" (4), as described in paragraph 46. Competitive risk and growth assessment for the investment business a) Effectiveness of the investment business' barriers to entry--medium risk 169. In the criteria, we assess that barriers to entry in the resource investment business entail medium risk overall. Entry requires investment in infrastructure, including scale, scope, and in-depth networking with global key players to obtain valuable investment information, as well as the ability to actually invest. 170. Another barrier is capital. As the scale and scope of a resource project increases, the amount of investment required for construction and operation increases. Even as a minority owner, a general trading and investment company often has to provide financing for infrastructure such as railroads or ports. Technological know-how generally isn't a prerequisite because these projects usually have separate project managers or operators. 171. As most resource projects are large, only a limited number of players have the global network to find customers for the project's products, plus sufficient financial strength to operate in the resource investment to successfully complete the project, in our view. 172. In the criteria, we also presume medium barrier-to-entry risk for nonresource investments. Typically, as a majority owner of such businesses, general trading and investment companies are "hands-on" investors, not only as financial investors, but also as business managers. This makes the barrier to entry in a nonresource investment business higher than it would be otherwise. b) Level and trend of the investment business' profit margins--high risk 173. We assess the level and trend of the industry's investment profit margins as high risk. For general trading and investment companies' investment business, we include the evaluation of operating profits plus capital gains and losses in the analysis of this subfactor. We expect profits from resource investments to fluctuate with economic and commodity cycles. Generally, profits can come under consistent pressure from the following factors: Price-based competition in pure commodities, making even the soundest mining projects unable to differentiate their products to get better or more stable pricing; A high degree of operating risk from hazards such as explosions, fires, weather disruptions (including floods), and other natural disasters. This risk is, however, generally lower than that in the oil and gas upstream industry; and Regulation and high taxation in many countries that may include export duties, royalties, "super-profit" taxes, license payments, and environmental obligations. 174. For nonresource investments, we also expect profit to be volatile, in line with fluctuations in the invested industries, such as auto manufacturing, foods and retail, and commodity chemicals. c) Risk of secular change and substitution by functions, services, and technologies--medium risk 175. In the criteria, we assume medium risk of product and service obsolescence, because we believe substitutes will make modest inroads into demand for both resource and nonresource products in the near to medium term, as detailed below. In the near to medium term, industrialization in emerging markets and dependence on hydrocarbon-based economic development should continue to support meaningful demand growth for oil and natural gas. We believe natural gas in particular should face little substitution risk in the near to medium term because it's more friendly environmentally than other hydrocarbon fuels. Even though a particular metal may from time to time be

displaced in some applications by another metal or plastics, in the past the scope of such substitution has been limited, the change has been gradual, and new applications for the metal have emerged. In the long term, traditional resource products might become vulnerable to new competitors, including shale gas, forms of renewable energy such as wind power and solar power, or new energy sources. Spurred by environmental concerns, some governments have mandated increasingly stringent energy efficiency standards and have provided incentives to use renewable energy or other alternatives. This is likely to slow down secular growth in demand for petroleum products and mining products in mature, developed economies. Increased political and social emphasis on demand management and energy efficiency could reduce demand for energy sources. Nonresource businesses held by general trading and investment companies usually are closely linked to their trading businesses. For example, general trading and investment companies may invest in automakers or food producers and marketers--companies at the top of "industry pyramids"--that help support their auto-dealer or retail supermarkets businesses. d) Risk in investment business growth trends--high risk 176. In our observation, resource investing is cyclical and prone to overinvestment. Sales declined significantly during recessions, but then outpaced GDP growth during expansions. Accordingly, we assume that investments aimed at spurring growth are often high risk. Granted, the risk of unsuccessful exploration has receded somewhat thanks to technological advances in reservoir mapping and resource extraction, particularly when targeting onshore shale formations. Even though most general trading and investment companies usually take minority stakes in brownfield projects, some of their investment businesses are on a pro rata basis. Unsuccessful investment risk may, in aggregate, be relatively low, but we take a conservative view, given the sector's various investment types. 177. For nonresource businesses, growth trends in this sector's investment businesses are affected by industries such as auto manufacturing, food and retail, and commodity chemicals. Appendix III Table 23 (a) Capital Charges By Weighted-Average Economic Risk Assessment A. NOTES AND ACCOUNTS RECEIVABLES, AND B. LOAN RECEIVABLES AND BONDS (CURRENT ASSETS) WEIGHTED-AVERAGE ECONOMIC RISK ASSESSMENT CAPITAL CHARGE FOR 'BBB' STRESS (%) CAPITAL CHARGE FOR 'A' STRESS (%) 1 3 5 2 4 5 3 4 6 4 5 7 5 6 8 6 7 10 7 8 11 8 10 13 9 11 16 10 13 18 Table 23 (b) Capital Charges By Weighted-Average Economic Risk Assessment C-2. INVENTORIES FROM NONRESOURCES (EXCLUDING REAL ESTATE AND VESSELS) WEIGHTED-AVERAGE ECONOMIC RISK ASSESSMENT CAPITAL CHARGE FOR 'BBB' STRESS (%) CAPITAL CHARGE FOR 'A' STRESS (%) 1 6 7 2 6 8 3 7 9 4 8 10 5 9 12 6 11 14 7 13 16 8 15 19 9 18 22 10 21 26 Table 23 (c) Capital Charges By Weighted-Average Economic Risk Assessment D-3. LONG-TERM CREDIT EXPOSURE (LISTED BONDS) WEIGHTED-AVERAGE ECONOMIC RISK ASSESSMENT CAPITAL CHARGE FOR 'BBB' STRESS (%) CAPITAL CHARGE FOR 'A' STRESS (%) 1 2 3 2 2 3 3 3 3 4 3 4 5 4 5 6 4 6 7 5 7 8 6 8 9 7 9 10 8 10 Table 23 (d) Capital Charges By Weighted-Average Economic Risk Assessment D-4. LONG-TERM CREDIT EXPOSURE (UNLISTED BONDS, LOANS, AND GUARANTEES) WEIGHTED-AVERAGE ECONOMIC RISK ASSESSMENT CAPITAL CHARGE FOR 'BBB' STRESS (%) CAPITAL CHARGE FOR 'A' STRESS (%) 1 6 7 2 6 8 3 7 9 4 8 10 5 9 12 6 11 14 7 13 16 8 15 19 9 18 22 10 21 26 Appendix IV Table 24 (a) Capital Charges By Weighted-Average Equity Market Group D-1. SECURITIES AND INVESTMENTS (LISTED STOCK) WEIGHTED-AVERAGE EQUITY MARKET GROUP CAPITAL CHARGE FOR 'BBB' STRESS (%) CAPITAL CHARGE FOR 'A' STRESS (%) 1 35 45 2 45 55 3 55 65 4 65 75 Table 24 (b) Capital Charges By Weighted-Average Equity Market Group D-2. SECURITIES AND INVESTMENTS (UNLISTED STOCK) WEIGHTED-AVERAGE EQUITY MARKET GROUP CAPITAL CHARGE FOR 'BBB' STRESS (%) CAPITAL CHARGE FOR 'A' STRESS (%) 1 45 55 2 55 65 3 65 75 4 75 85 V. REVISIONS AND UPDATES This article was originally published on June 10, 2015. The criteria described in this article became effective immediately upon publication, except in markets that require prior notification to, or registration by, the local regulator. In these markets, the criteria became effective when so notified by S&P; Global Ratings or registered by the regulator. Changes introduced after original publication: Following our periodic review completed on June 10, 2016, we updated the contact information and removed outdated sections that were related to the original publication of the criteria. Following our periodic review completed on June 9, 2017, we updated criteria references. Following our periodic review completed on May 30, 2018, we updated the contact information and criteria

references. On April 25, 2019, we republished this criteria article to make nonmaterial changes. Specifically, we removed noncriteria text in paragraph 101, updated references to other articles in paragraph 102 and "Related Criteria and Research," and updated the contact information. On July 18, 2019, we republished this criteria article to make nonmaterial changes. We updated numerous references to criteria articles throughout this article by removing the dates of publication. These dates are provided in the "Related Criteria And Research" section. On Sept. 3, 2019, we republished this criteria article to correct an error in paragraph 92 related to the determination of capital charges for inventories. We also made nonmaterial changes to remove or update outdated criteria references. On July 20, 2020, we republished this criteria article to make nonmaterial changes to update criteria references. On June 9, 2021, we republished this criteria article to make nonmaterial changes to paragraph 76 to clarify how we incorporate qualitative considerations in our assessment of capital adequacy. On Dec. 15, 2021, we republished this criteria article to make nonmaterial changes to update criteria and research references. On July 21, 2022, we republished this criteria article to make nonmaterial changes to remove or update outdated criteria references. VI. RELATED CRITERIA AND RESEARCH Related Criteria General Group Rating Methodology, July 1, 2019 Hybrid Capital: Methodology and Assumptions, July 1, 2019 Rating Government-Related Entities: Methodology And Assumptions, March 25, 2015 Ratings Above The Sovereign--Corporate And Government Ratings: Methodology And Assumptions, Nov. 19, 2013 Country Risk Assessment Methodology And Assumptions, Nov. 19, 2013 Criteria For Assigning 'CCC+', 'CCC', 'CCC-', And 'CC' Ratings, Oct. 1, 2012 Principles Of Credit Ratings, Feb. 16, 2011 Stand-Alone Credit Profiles: One Component Of A Rating, Oct. 1, 2010 Industrial corporate (general) Corporate Methodology: Ratios And Adjustments, April 1, 2019 Methodology And Assumptions: Liquidity Descriptors For Global Corporate Issuers, Dec. 16, 2014 Corporate Methodology, Nov. 19, 2013 Methodology: Industry Risk, Nov. 19, 2013 Methodology: Management And Governance Credit Factors For Corporate Entities, Nov. 13, 2012 Financial institutions Financial Institutions Rating Methodology, Dec. 9, 2021 Risk-Adjusted Capital Framework Methodology, July 20, 2017 Insurance Insurers Rating Methodology, July 1, 2019 Refined Methodology And Assumptions For Analyzing Insurer Capital Adequacy Using The Risk-Based Insurance Capital Model, June 7, 2010 Industrial (specific industries) Commodities Trading Industry Methodology, Jan. 19, 2017 Methodology: Investment Holding Companies, Dec. 1, 2015 Related Research S&P; Global Ratings Definitions, Nov. 10, 2021 Banking Industry Country Risk Assessment Update, republished from time to time