3. Analyzing subfactors for operating efficiency

226 In assessing the relative strength of this component, we consider four subfactors:

- Cost structure,
- Manufacturing processes,
- Working capital management, and
- Technology.

227 To the extent a company has high operating efficiency, it should be able to generate better profit margins than peers that compete in the same markets, whatever the prevailing market conditions. The ability to minimize manufacturing and other operational costs and thus maximize margins and cash flow--for example, through manufacturing excellence, cost control, and diligent working capital management--will provide the funds for research and development, marketing, and customer service.

a) Cost structure

228 Companies that are well positioned from a cost standpoint will typically enjoy higher capacity utilization and be more profitable over the course of the business cycle. Cost structure and cost control are keys to generating strong profits and cash flow, particularly for companies that produce commodities, operate in mature industries, or face pricing pressures. It is important to consider whether a company or any of its competitors has a sustainable cost advantage, which can be based on access to cheaper energy, favorable manufacturing locations, or lower and more flexible labor costs, for example.

229 Where information is available, we examine a company's fixed versus variable cost mix as an indication of operating leverage, a measure of how revenue growth translates into growth in operating income. A company with significant operating leverage may witness dramatic declines in operating profit if unit volumes fall, as during cyclical downturns. Conversely, in an upturn, once revenues pass the breakeven point, a substantial percentage of incremental revenues typically becomes profit.

b) Manufacturing process

230 Capital intensity characterizes many heavy manufacturing sectors that require minimum volumes to produce acceptable profits, cash flow, and return on assets. We view capacity utilization through the business cycle (combined with the cost base) as a good indication of manufacturers' ability to maintain profits in varying economic scenarios. Our capacity utilization assessment is based on a company's production capacity across its manufacturing footprint. In addition, we consider the direction of a company's capacity utilization in light of our unit sales expectations, as opposed to analyzing it plant-by-plant.

231 Labor relations remain an important focus in our analysis of operating efficiency for manufacturers. Often, a company's labor cost structure is driven by its history of contractual negotiations and the countries in which it operates. We examine the rigidity or flexibility of a company's labor costs and the extent to which it relies on labor rather than automation. We analyze labor cost structure by assessing the extent of union representation, wage and benefit costs as a share of cost of goods sold (when available), and by assessing the balance of capital equipment vs. labor input in the manufacturing process. We also incorporate trends in a company's efforts to transfer labor costs from high-cost to low-cost regions.

c) Working capital management

232 Working capital management--of current or short-term assets and liabilities--is a key factor in our evaluation of operating efficiency. In general, companies with solid working capital management skills exhibit shorter cash conversion cycles (defined as days' investment in inventory and receivables less days' investment in accounts payable) than their lower-skilled peers. Short cash-conversion cycles could, for instance, demonstrate that a company has a stronger position in the supply chain (for example, requiring suppliers or dealers to hold more of its inventory). This allows a company to direct more capital than its peers can to other areas of investment.

d) Technology

233 Technology can play an important role in achieving superior operating efficiency through effective yield management (by improving input/output ratios), supply chain automation, and cost optimization.

234 Achieving high yield management is particularly important in industries with limited inventory and high fixed costs, such as transportation, lodging, media, and retail. The most efficient airlines can achieve higher revenue per available seat mile than their peers, while the most efficient lodging companies can achieve a higher revenue per available room than their peers. Both industries rely heavily on technology to effectively allocate inventory (seats and rooms) to maximize sales and profitability.

235 Effective supply chain automation systems enable companies to reduce investments in inventory and better forecast future orders based on current trends. By enabling electronic data interchange between supplier and retailer, such systems help speed orders and reorders for goods by quickly pinpointing which merchandise is selling well and needs restocking. They also identify slow moving inventory that needs to be marked down, making space available for fresh merchandise.

236. Effective use of technology can also help hold down costs by improving productivity via automation and workflow management. This can reduce selling, general, and administrative costs, which usually represent a substantial portion of expenditures for industries with high fixed costs, thus boosting earnings.

4. Industry-specific SER parameters

Table 28

SER Calibration By Industry Based On EBITDA

	--Volatility of profitability assessment*--					
	1	2	3	4	5	6
Transportation cyclical	=<10%	>10%-14%	>14%-22%	>22%-33%	>33%-76%	>76%
Auto OEM	=<25%	>25%-33%	>33%-35%	>35%-40%	>40%-46%	>46%
Metals and mining downstream	=<16%	>16%-31%	>31%-42%	>42%-53%	>53%-82%	>82%
Metals and mining upstream	=<16%	>16%-23%	>23%-28%	>28%-34%	>34%-59%	>59%
Homebuilders and developers	=<19%	>19%-33%	>33%-46%	>46%-65%	>65%-95%	>95%
Oil and gas refining and marketing	=<14%	>14%-21%	>21%-35%	>35%-46%	>46%-82%	>82%
Forest and paper products	=<9%	>9%-18%	>18%-26%	>26%-51%	>51%-114%	>114%
Building materials	=<9%	>9%-16%	>16%-19%	>19%-24%	>24%-33%	>33%
Oil and gas integrated, exploration and production	=<12%	>12%-19%	>19%-22%	>22%-28%	>28%-38%	>38%
Agribusiness and commodity foods	=<12%	>12%-19%	>19%-25%	>25%-39%	>39%-57%	>57%

Table 28

SER Calibration By Industry, Based On EBITDA (cont.)						
Real estate investment trusts (REITs)	=<5%	>5%-9%	>9%-13%	>13%-20%	>20%-32%	>32%
Leisure and sports	=<5%	>5%-9%	>9%-12%	>12%-16%	>16%-24%	>24%
Commodity chemicals	=<14%	>14%-19%	>19%-28%	>28%-37%	>37%-51%	>51%
Auto suppliers	=<15%	>15%-20%	>20%-26%	>26%-32%	>32%-45%	>45%
Aerospace and defense	=<6%	>6%-9%	>9%-15%	>15%-24%	>24%-41%	>41%
Technology hardware and semiconductors	=<11%	>11%-15%	>15%-22%	>22%-31%	>31%-58%	>58%
Specialty chemicals	=<5%	>5%-10%	>10%-14%	>14%-23%	>23%-36%	>36%
Capital goods	=<12%	>12%-16%	>16%-21%	>21%-30%	>30%-45%	>45%
Engineering and construction	=<9%	>9%-14%	>14%-20%	>20%-28%	>28%-39%	>39%
Railroads and package express	=<5%	>5%-8%	>8%-10%	>10%-13%	>13%-22%	>22%
Business and consumer services	=<4%	>4%-8%	>8%-11%	>11%-16%	>16%-30%	>30%
Midstream energy	=<5%	>5%-9%	>9%-11%	>11%-15%	>15%-31%	>31%
Technology software and services	=<4%	>4%-9%	>9%-14%	>14%-19%	>19%-33%	>33%
Consumer durables	=<7%	>7%-10%	>10%-13%	>13%-19%	>19%-35%	>35%
Containers and packaging	=<5%	>5%-7%	>7%-12%	>12%-18%	>18%-26%	>26%
Media and entertainment	=<6%	>6%-10%	>10%-14%	>14%-20%	>20%-29%	>29%
Oil and gas drilling, equipment and services	=<16%	>16%-22%	>22%-28%	>28%-44%	>44%-62%	>62%
Retail and restaurants	=<4%	>4%-8%	>8%-11%	>11%-16%	>16%-26%	>26%
Health care services	=<4%	>4%-5%	>5%-9%	>9%-12%	>12%-19%	>19%
Transportation infrastructure	=<2%	>2%-4%	>4%-7%	>7%-12%	>12%-19%	>19%
Environmental services	=<5%	>5%-9%	>9%-13%	>13%-22%	>22%-29%	>29%
Regulated utilities	=<4%	>4%-7%	>7%-9%	>9%-14%	>14%-26%	>26%
Unregulated power and gas	=<7%	>7%-16%	>16%-20%	>20%-29%	>29%-47%	>47%
Pharmaceuticals	=<5%	>5%-8%	>8%-11%	>11%-17%	>17%-32%	>32%
Health care equipment	=<3%	>3%-5%	>5%-6%	>6%-10%	>10%-25%	>25%
Branded nondurables	=<4%	>4%-7%	>7%-10%	>10%-15%	>15%-43%	>43%
Telecommunications and cable	=<3%	>3%-6%	>6%-9%	>9%-13%	>13%-23%	>23%
Overall	=<5%	>5%-9%	>9%-15%	>15%-23%	>23%-43%	>43%

*The data ranges include the values up to and including the upper bound. As an example, for a range of 5%-9%, a value of 5% is excluded while a value of 9% is included; the numbers are rounded to the nearest whole number for presentation purposes.

Table 29

SER Calibration By Industry Based On EBITDA Margin						
	--Volatility of profitability assessment*--					
	1	2	3	4	5	6
Transportation cyclical	=<4%	>4%-8%	>8%-16%	>16%-28%	>28%-69%	>69%
Auto OEM	=<15%	>15%-19%	>19%-29%	>29%-31%	>31%-45%	>45%
Metals and mining downstream	=<10%	>10%-18%	>18%-26%	>26%-36%	>36%-56%	>56%
Metals and mining upstream	=<8%	>8%-10%	>10%-14%	>14%-19%	>19%-31%	>31%
Homebuilders and developers	=<10%	>10%-18%	>18%-30%	>30%-56%	>56%-114%	>114%
Oil and gas refining and marketing	=<12%	>12%-22%	>22%-28%	>28%-42%	>42%-71%	>71%
Forest and paper products	=<8%	>8%-13%	>13%-21%	>21%-41%	>41%-117%	>117%
Building materials	=<4%	>4%-8%	>8%-13%	>13%-18%	>18%-23%	>23%

Table 29

SER Calibration By Industry Based On EBITDA Margin (cont.)

Oil and gas integrated, exploration and production	=<4%	>4%-6%	>6%-8%	>8%-13%	>13%-22%	>22%
Agribusiness and commodity foods	=<9%	>9%-14%	>14%-18%	>18%-27%	>27%-100%	>100%
Real estate investment trusts (REITs)	=<2%	>2%-5%	>5%-8%	>8%-13%	>13%-34%	>34%
Leisure and sports	=<3%	>3%-5%	>5%-6%	>6%-9%	>9%-18%	>18%
Commodity chemicals	=<9%	>9%-14%	>14%-18%	>18%-25%	>25%-37%	>37%
Auto suppliers	=<9%	>9%-13%	>13%-18%	>18%-23%	>23%-40%	>40%
Aerospace and defense	=<3%	>3%-6%	>6%-7%	>7%-12%	>12%-24%	>24%
Technology hardware and semiconductors	=<7%	>7%-10%	>10%-15%	>15%-21%	>21%-62%	>62%
Specialty chemicals	=<3%	>3%-6%	>6%-10%	>10%-19%	>19%-28%	>28%
Capital goods	=<6%	>6%-9%	>9%-13%	>13%-20%	>20%-33%	>33%
Engineering and construction	=<6%	>6%-8%	>8%-12%	>12%-17%	>17%-26%	>26%
Railroads and package express	=<2%	>2%-6%	>6%-8%	>8%-10%	>10%-17%	>17%
Business and consumer services	=<3%	>3%-5%	>5%-7%	>7%-12%	>12%-22%	>22%
Midstream energy	=<3%	>3%-6%	>6%-9%	>9%-14%	>14%-28%	>28%
Technology software and services	=<3%	>3%-6%	>6%-10%	>10%-15%	>15%-30%	>30%
Consumer durables	=<4%	>4%-8%	>8%-11%	>11%-15%	>15%-26%	>26%
Containers and packaging	=<5%	>5%-7%	>7%-9%	>9%-15%	>15%-22%	>22%
Media and entertainment	=<4%	>4%-6%	>6%-9%	>9%-14%	>14%-24%	>24%
Oil and gas drilling, equipment and services	=<6%	>6%-12%	>12%-16%	>16%-22%	>22%-32%	>32%
Retail and restaurants	=<3%	>3%-5%	>5%-7%	>7%-12%	>12%-21%	>21%
Health care services	=<3%	>3%-5%	>5%-6%	>6%-8%	>8%-15%	>15%
Transportation infrastructure	=<1%	>1%-3%	>3%-5%	>5%-7%	>7%-15%	>15%
Environmental services	=<3%	>3%-4%	>4%-6%	>6%-10%	>10%-24%	>24%
Regulated utilities	=<4%	>4%-7%	>7%-9%	>9%-14%	>14%-24%	>24%
Unregulated power and gas	=<6%	>6%-10%	>10%-15%	>15%-23%	>23%-41%	>41%
Pharmaceuticals	=<4%	>4%-5%	>5%-7%	>7%-10%	>10%-21%	>21%
Health care equipment	=<2%	>2%-4%	>4%-5%	>5%-10%	>10%-16%	>16%
Branded nondurables	=<3%	>3%-6%	>6%-9%	>9%-13%	>13%-28%	>28%
Telecommunications and cable	=<2%	>2%-4%	>4%-5%	>5%-7%	>7%-13%	>13%
Overall	=<3%	>3%-6%	>6%-10%	>10%-16%	>16%-32%	>32%

*The data ranges include the values up to and including the upper bound. As an example, for a range of 5%-9%, a value of 5% is excluded, while a value of 9% is included. the numbers are rounded to the nearest whole number for presentation purposes.

Table 30

SER Calibration By Industry Based On Return On Capital

	--Volatility of profitability assessment*--					
	1	2	3	4	5	6
Transportation cyclical	=<14%	>14%-28%	>28%-39%	>39%-53%	>53%-156%	>156%
Auto OEM	=<42%	>42%-64%	>64%-74%	>74%-86%	>86%-180%	>180%
Metals and mining downstream	=<25%	>25%-32%	>32%-43%	>43%-53%	>53%-92%	>92%
Metals and mining upstream	=<22%	>22%-30%	>30%-38%	>38%-45%	>45%-93%	>93%
Homebuilders and developers	=<12%	>12%-31%	>31%-50%	>50%-70%	>70%-88%	>88%

Table 30

SER Calibration By Industry Based On Return On Capital* (cont.)

Oil and gas refining and marketing	=<14%	>14%-30%	>30%-48%	>48%-67%	>67%-136%	>136%
Forest and paper products	=<10%	>10%-22%	>22%-40%	>40%-89%	>89%-304%	>304%
Building materials	=<13%	>13%-20%	>20%-26%	>26%-36%	>36%-62%	>62%
Oil and gas integrated, exploration and production	=<16%	>16%-22%	>22%-31%	>31%-43%	>43%-89%	>89%
Agribusiness and commodity foods	=<12%	>12%-15%	>15%-29%	>29%-55%	>55%-111%	>111%
Real estate investment trusts (REITs)	=<8%	>8%-14%	>14%-20%	>20%-26%	>26%-116%	>116%
Leisure and sports	=<11%	>11%-17%	>17%-26%	>26%-34%	>34%-64%	>64%
Commodity chemicals	=<19%	>19%-28%	>28%-41%	>41%-50%	>50%-73%	>73%
Auto suppliers	=<20%	>20%-39%	>39%-50%	>50%-67%	>67%-111%	>111%
Aerospace and defense	=<7%	>7%-13%	>13%-19%	>19%-27%	>27%-61%	>61%
Technology hardware and semiconductors	=<8%	>8%-21%	>21%-34%	>34%-49%	>49%-113%	>113%
Specialty chemicals	=<5%	>5%-18%	>18%-28%	>28%-43%	>43%-64%	>64%
Capital goods	=<15%	>15%-24%	>24%-31%	>31%-45%	>45%-121%	>121%
Engineering and construction	=<12%	>12%-21%	>21%-23%	>23%-33%	>33%-54%	>54%
Railroads and package express	=<3%	>3%-11%	>11%-17%	>17%-20%	>20%-27%	>27%
Business and consumer services	=<9%	>9%-17%	>17%-23%	>23%-40%	>40%-87%	>87%
Midstream energy	=<5%	>5%-11%	>11%-17%	>17%-22%	>22%-34%	>34%
Technology software and services	=<8%	>8%-21%	>21%-35%	>35%-65%	>65%-105%	>105%
Consumer durables	=<8%	>8%-13%	>13%-20%	>20%-35%	>35%-60%	>60%
Containers and packaging	=<6%	>6%-14%	>14%-23%	>23%-35%	>35%-52%	>52%
Media and entertainment	=<9%	>9%-17%	>17%-26%	>26%-40%	>40%-86%	>86%
Oil and gas drilling, equipment and services	=<25%	>25%-33%	>33%-45%	>45%-65%	>65%-90%	>90%
Retail and restaurants	=<6%	>6%-14%	>14%-18%	>18%-26%	>26%-69%	>69%
Health care services	=<6%	>6%-10%	>10%-15%	>15%-25%	>25%-44%	>44%
Transportation infrastructure	=<5%	>5%-9%	>9%-12%	>12%-16%	>16%-27%	>27%
Environmental Services	=<7%	>7%-12%	>12%-24%	>24%-35%	>35%-72%	>72%
Regulated utilities	=<6%	>6%-9%	>9%-13%	>13%-20%	>20%-36%	>36%
Unregulated power and gas	=<14%	>14%-19%	>19%-29%	>29%-55%	>55%-117%	>117%
Pharmaceuticals	=<6%	>6%-8%	>8%-15%	>15%-20%	>20%-33%	>33%
Health care equipment	=<4%	>4%-8%	>8%-19%	>19%-31%	>31%-81%	>81%
Branded nondurables	=<6%	>6%-10%	>10%-17%	>17%-29%	>29%-63%	>63%
Telecommunications and cable	=<7%	>7%-13%	>13%-19%	>19%-26%	>26%-60%	>60%
Overall	=<7%	>7%-15%	>15%-23%	>23%-38%	>38%-81%	>81%

*The data ranges include the values up to and including the upper bound. As an example, for a range of 5%-9%, a value of 5% is excluded, while a value of 9% is included; the numbers are rounded to the nearest whole number for presentation purposes.

C. Cash Flow/Leverage Analysis

1. The merits and drawbacks of each cash flow measure

a) EBITDA

237 EBITDA is a widely used, and therefore a highly comparable, indicator of cash flow, although it has significant limitations. Because EBITDA derives from the income statement entries, it can be distorted by the same accounting issues that limit the use of earnings as a basis of cash flow. In addition, interest can be a substantial cash outflow for speculative-grade companies and therefore EBITDA can materially overstate cash flow in some cases. Nevertheless, it serves as a useful and common starting point for cash flow analysis and is useful in ranking the financial strength of different companies.

b) Funds from operations (FFO)

238 FFO is a hybrid cash flow measure that estimates a company's inherent ability to generate recurring cash flow from its operations independent of working capital fluctuations. FFO estimates the cash flow available to the company before working capital, capital spending, and discretionary items such as dividends, acquisitions, etc.

239 Because cash flow from operations tends to be more volatile than FFO, FFO is often used to smooth period-over-period variation in working capital. We consider it a better proxy of recurring cash flow generation because management can more easily manipulate working capital depending on its liquidity or accounting needs. However, we do not generally rely on FFO as a guiding cash flow measure in situations where assessing working capital changes is important to judge a company's cash flow generating ability and general creditworthiness. For example, for working-capital-intensive industries such as retailing, operating cash flow may be a better indicator than FFO of the firm's actual cash generation.

240 FFO is a good measure of cash flow for well-established companies whose long-term viability is relatively certain (i.e., for highly rated companies). For such companies, there can be greater analytical reliance on FFO and its relation to the total debt burden. FFO remains very helpful in the relative ranking of companies. In addition, more established, healthier companies usually have a wider array of financing possibilities to cover potential short-term liquidity needs and to refinance upcoming maturities. For marginal credit situations, the focus shifts more to free operating cash flow--after deducting the various fixed uses such as working capital investment and capital expenditures--as this measure is more directly related to current debt service capability.

c) Cash flow from operations (CFO)

241 The measurement and analysis of CFO forms an important part of our ratings assessment, in particular for companies that operate in working-capital-intensive industries or industries in which working capital flows can be volatile. CFO is distinct from FFO as it is a pure measure of cash flow calculated after accounting for the impact on earnings of changes in operating assets and liabilities. CFO is cash flow that is available to finance items such as capital expenditures, repay borrowing, and pay for dividends and share buybacks.

242 In many industries, companies shift their focus to cash flow generation in a downturn. As a result, even though they typically generate less cash from ordinary business activities because of low capacity utilization and relatively low fixed-cost absorption, they may generate cash by reducing inventories and receivables. Therefore, although FFO is likely to be lower in a downturn, the impact on CFO may not be as great. In times of strong growth the opposite will be true, and consistently lower CFO compared to FFO without a corresponding increase in revenue and profitability can indicate an untenable situation.

243 Working capital is a key element of a company's cash flow generation. While there tends to be a need to build up working capital and therefore to consume cash in a growth or expansion phase, changes in working capital can also act as a buffer in case of a downturn. Many companies will sell off inventories and invest a lower amount in raw materials because of weaker business activities, both of which reduce the amount of capital and cash that is tied up in working capital. Therefore, working capital fluctuations can occur both in periods of revenue growth and contraction and analyzing a company's near-term working capital needs is crucial for estimating future cash flow developments.

244 Often, businesses that are capital intensive are not working-capital-intensive: most of the capital commitment is upfront in equipment and machinery, while asset-light businesses may have to invest proportionally more in inventories and receivables. That also affects margins, because capital-intensive businesses tend to have proportionally lower operating expenses (and therefore higher EBITDA margins), while working-capital-intensive businesses usually report lower EBITDA margins. The resulting cash flow volatility can be significant: because all investment is made upfront in a capital-intensive business, there is usually more room to absorb subsequent EBITDA volatility because margins are higher. For example, a capital-intensive company may remain reasonably profitable even if its EBITDA margin declines from 30% to 20%. By contrast, a working-capital-intensive business with a lower EBITDA margin (due to higher operating expenses) of 8% can post a negative EBITDA margin if EBITDA volatility is large.

d) Free operating cash flow (FOCF)

245 By deducting capital expenditures from CFO, we arrive at FOCF, which can be used as a proxy for a company's cash generated from core operations. We may exclude discretionary capital expenditures for capacity growth from the FOCF calculation, but in practice it is often difficult to discriminate between spending for expansion and replacement. And, while companies have some flexibility to manage their capital budgets to weather down cycles, such flexibility is generally temporary and unsustainable in light of intrinsic requirements of the business. For example, companies can be compelled to increase their investment programs because of strong demand growth or technological changes. Regulated entities (for example, telecommunications companies) might also face significant investment requirements related to their concession contracts (the understanding between a company and the host government that specifies the rules under which the company can operate locally).

246 Positive FOCF is a sign of strength and helpful in distinguishing between two companies with the same FFO. In addition, FOCF is helpful in differentiating between the cash flows generated by more and less capital-intensive companies and industries.

247 In highly capital-intensive industries (where maintenance capital expenditure requirements tend to be high) or in other situations in which companies have little flexibility to postpone capital expenditures, measures such as FFO to debt and debt to EBITDA may provide less valuable insight into relative creditworthiness because they fail to capture potentially meaningful capital expenditures. In such cases, a ratio such as FOCF to debt provides greater analytical insight.

248 A company serving a low-growth or declining market may exhibit relatively strong FOCF because of diminishing fixed and working capital needs. Growth companies, in contrast, exhibit thin or even negative FOCF because of the investment needed to support growth. For the low-growth company, credit analysis weighs the positive, strong current cash flow against the danger that this high level of cash flow might not be sustainable. For the high-growth company,

the opposite is true: weighing the negatives of a current cash deficit against prospects of enhanced cash flow once current investments begin yielding cash benefits. In the latter case, if we view the growth investment as temporary and not likely to lead to increased leverage over the long-term, we'll place greater analytical importance on FFO to debt rather than on FOCF to debt. In any event, we also consider the impact of a company's growth environment in our business risk analysis, specifically in a company's industry risk analysis (see section B).

e) Discretionary cash flow (DCF)

249 For corporate issuers primarily rated in the investment-grade universe, DCF to debt can be an important barometer of future cash flow adequacy as it more fully reflects a company's financial policy, including decisions regarding dividend payouts. In addition, share buybacks and potential M&A, both of which can represent very significant uses of cash, are important components in cash flow analysis.

250 The level of dividends depends on a company's financial strategy. Companies with aggressive dividend payout targets might be reluctant to reduce dividends even under some liquidity pressure. In addition, investment-grade companies are less likely to reduce dividend payments following some reversals--although dividends ultimately are discretionary. DCF is the truest reflection of excess cash flow, but it is also the most affected by management decisions and, therefore, does not necessarily reflect the potential cash flow available.

D. Diversification/Portfolio Effect

1. Academic research

251 Academic research recently concluded that, during the global financial crisis of 2007-2009, conglomerates had the advantage over single sector-focused firms because they had better access to the credit markets as a result of their debt co-insurance and used the internal capital markets more efficiently (i.e., their core businesses had stronger cash flows). Debt co-insurance is the view that the joining-together of two or more firms whose earnings streams are less-than-perfectly correlated reduces the risk of default of the merged firms (i.e., the co-insurance effect) and thereby increases the "debt capacity" or "borrowing ability" of the combined enterprise. These financing alternatives became more valuable during the crisis. (Source: "Does Diversification Create Value In The Presence Of External Financing Constraints? Evidence From The 2007-2009 Financial Crisis," Venkat Kuppuswamy and Belen Villalonga, Harvard Business School, Aug. 19, 2011.)

252 In addition, fully diversified, focused companies saw more narrow credit default swap spreads from 2004-2010 vs. less diversified firms. This highlighted that lenders were differentiating for risk and providing these companies with easier and cheaper access to capital. (Source: "The Power of Diversified Companies During Crises," The Boston Consulting Group and Leipzig Graduate School of Management, January 2012.)

253 Many rated conglomerates are either country- or region-specific; only a small percentage are truly global. The difference is important when assessing the country and macroeconomic risk factors. Historical measures for each region, based on volatility and correlation, reflect regional trends that are likely to change over time.

E. Financial Policy

1. Controlling shareholders

254 Controlling shareholder(s)--if they exist--exert significant influence over a company's financial risk profile, given their ability to use their direct or indirect control of the company's financial policies for their own benefit. Although the criteria do not associate the presence of controlling shareholder(s) to any predefined negative or positive impact, we assess the potential medium- to long-term implications for a company's credit standing of these strategies. Long-term ownership--such as exists in many family-run businesses--is often accompanied by financial discipline and reluctance to incur aggressive leverage. Conversely, short-term ownership--such as exists in private equity sponsor-owned companies--generally entails financial policies aimed at achieving rapid returns for shareholders typically through aggressive debt leverage.

255 The criteria define controlling shareholder(s) as:

- A private shareholder (an individual or a family) with majority ownership or control of the board of directors;
- A group of shareholders holding joint control over the company's board of directors through a shareholder agreement. The shareholder agreement may be comprehensive in scope or limited only to certain financial aspects; and
- A private equity firm or a group of private equity firms holding at least 40% in a company or with majority control of its board of directors.

256 A company is not considered to have a controlling shareholder if it is publicly listed with more than 50% of voting interest listed or when there is no evidence of a particular shareholder or group of shareholders exerting 'de facto' control over a company.

257 Companies that have as their controlling shareholder governments or government-related entities, infrastructure and asset-management funds, and diversified holding companies and conglomerates are assessed in separate criteria.

2. Financial discipline

a) Leverage influence from acquisitions

258 Companies may employ more or less acquisitive growth strategies based on industry dynamics, regulatory changes, market opportunities, and other factors. We consider management teams with disciplined, transparent acquisition strategies that are consistent with their financial policy framework as providing a high degree of visibility into the projected evolution of cash flow and credit measures. Our assessment takes into account management's track record in terms of acquisition strategy and the related impact on the company's financial risk profile. Historical evidence of limited management tolerance for significant debt-funded acquisitions provides meaningful support for the view that projected credit ratios would not significantly weaken as a result of the company's acquisition policy. Conversely, management teams that pursue opportunistic acquisition strategies, without well-defined parameters, increase the risks that the company's financial risk profile may deteriorate well beyond our forecasts.

259 Acquisition funding policies and management's track record in this respect also provide meaningful insight in terms of credit ratio stability. In the criteria, we take into account management's willingness and capacity to mobilize all funding resources to restore credit quality, such as issuing equity or disposing of assets, to mitigate the impact of sizable

acquisitions on credit ratios. The financial policy framework and related historical evidence are key considerations in our assessment.

b) Leverage influence from shareholder remuneration policies

260 A company's approach to rewarding shareholders demonstrates how it balances the interests of its various stakeholders over time. Companies that are consistent and transparent in their shareholder remuneration policies, and exhibit a willingness to adjust shareholder returns to mitigate adverse operating conditions, provide greater support to their long-term credit quality than other companies. Conversely, companies that prioritize cash returns to shareholders in periods of deteriorating economic, operating, or share price performance can significantly undermine long-term credit quality and exacerbate the credit impact of adverse business conditions. In assessing a company's shareholder remuneration policies, the criteria focus on the predictability of shareholder remuneration plans, including how a company builds shareholder expectations, its track record in executing shareholder return policies over time, and how shareholder returns compare with industry peers'.

261 Shareholder remuneration policies that lack transparency or deviate meaningfully from those of industry peers introduce a higher degree of event risk and volatility and will be assessed as less predictable under the criteria. Dividend and capital return policies that function primarily as a means to distribute surplus capital to shareholders based on transparent and stable payout ratios--after satisfying all capital requirements and leverage objectives of the company, and that support stable to improving leverage ratios--are considered the most supportive of long term credit quality.

c) Leverage influence from plans regarding investment decisions or organic growth strategies

262 The process by which a company identifies, funds, and executes organic growth, such as expansion into new products and/or new markets, can have a significant impact on its long-term credit quality. Companies that have a disciplined, coherent, and manageable organic growth strategy, and have a track record of successful execution are better positioned to continue to attract third-party capital and maintain long-term credit quality. By contrast, companies that allocate significant amounts of capital to numerous, unrelated, large and/or complex projects and often incur material overspending against the original budget can significantly increase their credit risk.

263. The criteria assess whether management's organic growth strategies are transparent, comprehensive, and measurable. We seek to evaluate the company's mid- to long-term growth objectives--including strategic rationales and associated execution risks--as well as the criteria it uses to allocate capital. Effective capital allocation is likely to include guidelines for capital deployment, including minimum return hurdles, competitor activity analysis, and demand forecasting. The company's track record will provide key data for this assessment, including how well it executes large and/or complex projects against initial budgets, cost overruns, and timelines.

3. Financial policy framework

a) Comprehensiveness of financial policy framework

264. Financial policies that are clearly defined, unambiguous, and provide a tight framework around management behavior are the most reliable in determining an issuer's future financial risk profile. We assess as consistent with a supportive assessment, policies that are clear, measurable, and well understood by all key stakeholders. Accordingly, the financial policy framework must include well-defined parameters regarding how the issuer will manage its cash flow protection

strategies and debt leverage profile. This includes at least one key or a combination of financial ratio constraints (such as maximum debt to EBITDA threshold) and the latter must be relevant with respect to the issuer's industry and/or capital structure characteristics.

265 By contrast, the absence of established financial policies, policies that are vague or not quantifiable, or historical evidence of significant and unexpected variation in management's long-term financial targets could contribute to an overall assessment of a non-supportive financial policy.

b) Transparency of financial policies

266 We assess as supportive financial policy objectives that are transparent and well understood by all key stakeholders and we view them as likely to influence an issuer's financial risk profile over time. Alternatively, financial policies, if they exist, that are not communicated to key stakeholders and/or where there is limited historical evidence to support the company's commitment to these policies, are non-supportive, in our view. We consider the variety of ways in which a company communicates its financial policy objectives, including public disclosures, investor presentation materials, and public commentary.

267 In some cases, however, a company may articulate its financial policy objectives to a limited number of key stakeholders, such as its main creditors or to credit rating agencies. In these situations, a company may still receive a supportive classification if we assess that there is a sufficient track record (more than three years) to demonstrate a commitment to its financial policy objectives.

c) Achievability and sustainability of financial policies

268 To assess the achievability and sustainability of a company's financial policies, we consider a variety of factors, including the entity's current and historical financial risk profile; the demands of its key stakeholders (including dividend and capital return expectations of equity holders); and the stability of the company's financial policies that we have observed over time. If there is evidence that the company is willing to alter its financial policy framework because of adverse business conditions or growth opportunities (including M&A), this could support an overall assessment of non-supportive.

4. Financial policy adjustments--examples

269 Example 1: A moderately leveraged company has just been sold to a new financial sponsor. The financial sponsor has not leveraged the company yet and there is no stated financial policy at the outset. We expect debt leverage to increase upon refinancing, but we are not able to factor it precisely in our forecasts yet.
Likely outcome: FS-6 financial policy assessment, implying that we expect the new owner to implement an aggressive financial policy in the absence of any other evidence.

270 Example 2: A company has two owners—a family owns 75%, a strategic owner holds the remaining 25%. Although the company has provided Standard & Poor's with some guidance on long-term financial objectives, the overall financial policy framework is not sufficiently structured nor disclosed to a sufficient number of stakeholders to qualify for a supportive assessment. Recent history, however, does not provide any evidence of unexpected, aggressive financial transactions and we believe event risk is moderate.
Likely outcome: Neutral financial policy impact, including an assessment of neutral for financial discipline. Although the company's financial framework does not support long-term visibility, historical evidence and stability of management suggest that event risk is not significant. The unsupportive financial framework assessment, however,

prevents the company from qualifying for an overall positive financial policy assessment, should the conditions for positive financial discipline be met.

271 Example 3: A company (not owned by financial sponsors) has stated leverage targets equivalent to a significant financial risk profile assessment. The company continues to make debt-financed acquisitions yet remains within its leverage targets, albeit at the weaker end of these. Our forecasts are essentially built on expectations that excess cash flow will be fully used to fund M&A or, possibly pay share repurchases, but that management will overall remain within its leverage targets.
Likely outcome: Neutral financial policy impact. Although management is fairly aggressive, the company consistently stays within its financial policy targets. We think our forecasts provide a realistic view of the evolution of the company's credit metrics over the next two years. No event risk adjustment is needed.

272 Example 4: A company (not owned by a financial sponsor) has just made a sizable acquisition (consistent with its long-term business strategy) that has brought its credit ratios out of line. Management expressed its commitment to rapidly improve credit ratios back to its long-term ratio targets—representing an acceptable range for the SACP—through asset disposals or a rights issue. We see their disposal plan (or rights issue) as realistic but precise value and timing are uncertain. At the same time, management has a supportive financial policy framework, a positive track record of five years, and assets are viewed as fairly easily tradable.
Likely outcome: Positive financial policy impact. Although forecast credit ratios will remain temporarily depressed, as we cannot fully factor in asset disposals (or rights issue) due to uncertainty on timing/value, or without leaking confidential information, the company's credit risk should benefit from management's positive track record and a satisfactory financial policy framework. The anchor will be better by one notch if management and governance is at least satisfactory and liquidity is at least adequate.

273 Example 5: A company (not owned by a financial sponsor) has very solid financial ratios, providing it with meaningful flexibility for M&A when compared with management's long-term stated financial policy. Also, its stock price performance is somewhat below that of its closest industry peers. Although we have no recent evidence of any aggressive financial policy steps, we fundamentally believe that, over the long-term term, the company will end up using its financial flexibility for the right M&A opportunity, or alternatively return cash to shareholders.
Likely outcome: Negative financial policy impact. Long-term event risk derived from M&A cannot be built into forecasts nor shareholder returns (share buybacks or one-off dividends) be built into forecasts to attempt aligning projected ratios with stated long-term financial policy levels. This is because our forecasts are based on realistic and reasonably predictable assumptions for the medium term. The anchor will be adjusted down, by one notch or more, because of the negative financial policy assessment.

F. Corporate Criteria Glossary

Anchor: The combination of an issuer's business risk profile assessment and its financial risk profile assessment determine the anchor. Additional rating factors can then modify the anchor to determine the final rating or SACP.

Asset profile: A descriptive way to look at the types and quality of assets that comprise a company (examples can include tangible versus intangible assets, those assets that require large and continuing maintenance, upkeep, or

reinvestment, etc.).

Business risk profile: This measure comprises the risk and return potential for a company in the market in which it participates, the country risks within those markets, the competitive climate, and the competitive advantages and disadvantages the company has. The criteria combine the assessments for Corporate Industry and Country Risk Assessment (CICRA), and competitive position to determine a company's business risk profile assessment.

Capital-intensive company: A company exhibiting large ongoing capital spending to sales, or a large amount of depreciation to sales. Examples of capital-intensive sectors include oil production and refining, telecommunications, and transportation sectors such as railways and airlines.

Cash available for debt repayment: Forecast cash available for debt repayment is defined as the net change in cash for the period before debt borrowings and debt repayments. This includes forecast discretionary cash flow adjusted for our expectations of: share buybacks, net of any share issuance, and M&A. Discretionary cash flow is defined as cash flow from operating activities less capital expenditures and total dividends.

Competitive position: Our assessment of a company's: 1) competitive advantage; 2) operating efficiency; 3) scale, scope, and diversity; and 4) profitability.

- Competitive advantage--The strategic positioning and attractiveness to customers of the company's products or services, and the fragility or sustainability of its business model.
- Operating efficiency--The quality and flexibility of the company's asset base and its cost management and structure.
- Scale, scope, and diversity--The concentration or diversification of business activities.
- Profitability--Our assessment of both the company's level of profitability and volatility of profitability.

Competitive Position Group Profile (CPGP): Used to determine the weights to be assigned to the four components of competitive position. While industries are assigned to one of the six profiles, individual companies and industry subsectors can be classified into another CPGP because of unique characteristics. Similarly, national industry risk factors can affect the weighing. The six CPGPs are:

- Services and product focus,
- Product focus/scale driven,
- Capital or asset focus,
- Commodity focus/cost driven,
- Commodity focus/scale driven, and
- National industry and utilities.

Conglomerate: Companies that have at least three distinct business segments, each contributing between 10%-50% of EBITDA or FOCF. Such companies may benefit from the diversification/portfolio effect.

Controlling shareholders: Equity owners who are able to affect decisions of varying effect on operations, leverage, and shareholder reward without necessarily being a majority of shareholders.

Corporate Industry and Country Risk Assessment (CICRA): The result of the combination of an issuer's country risk assessment and industry risk assessment.

Debt co-insurance: The view that the joining-together of two or more firms whose earnings streams are less-than-perfectly correlated reduces the risk of default of the merged firms (i.e., the co-insurance effect) and thereby increases the "debt capacity" or "borrowing ability" of the combined enterprise. These financing alternatives became more valuable during the global financial crisis of 2007-2009.

Financial headroom: Measure of deviation tolerated in financial metrics without moving outside or above a pre-designated band or limit typically found in loan covenants (as in a debt to EBITDA multiple that places a constraint on leverage). Significant headroom would allow for larger deviations.

Financial risk profile: The outcome of decisions that management makes in the context of its business risk profile and its financial risk tolerances. This includes decisions about the manner in which management seeks funding for the company and how it constructs its balance sheet. It also reflects the relationship of the cash flows the organization can achieve, given its business risk profile, to its financial obligations. The criteria use cash flow/leverage analysis to determine a corporate issuer's financial risk profile assessment.

Financial sponsor: An entity that follows an aggressive financial strategy in using debt and debt-like instruments to maximize shareholder returns. Typically, these sponsors dispose of assets within a short to intermediate time frame. Financial sponsors include private equity firms, but not infrastructure and asset-management funds, which maintain longer investment horizons.

Profitability ratio: Commonly measured using return on capital and EBITDA margins but can be measured using sector-specific ratios. Generally calculated based on a five-year average, consisting of two years of historical data, and our projections for the current year and the next two financial years.

Shareholder remuneration policies: Management's stated shareholder reward plans (such as a buyback or dividend amount, or targeted payout ratios).

Stand-alone credit profile (SACP): Standard & Poor's opinion of an issue's or issuer's creditworthiness, in the absence of extraordinary intervention or support from its parent, affiliate, or related government or from a third-party entity such as an insurer.

Transfer and convertibility assessment: Standard & Poor's view of the likelihood of a sovereign restricting nonsovereign access to foreign exchange needed to satisfy the nonsovereign's debt service obligations.

Unconsolidated equity affiliates: Companies in which an issuer has an investment, but which are not consolidated in an issuer's financial statements. Therefore, the earnings and cash flows of the investees are not included in our primary metrics unless dividends are received from the investees.

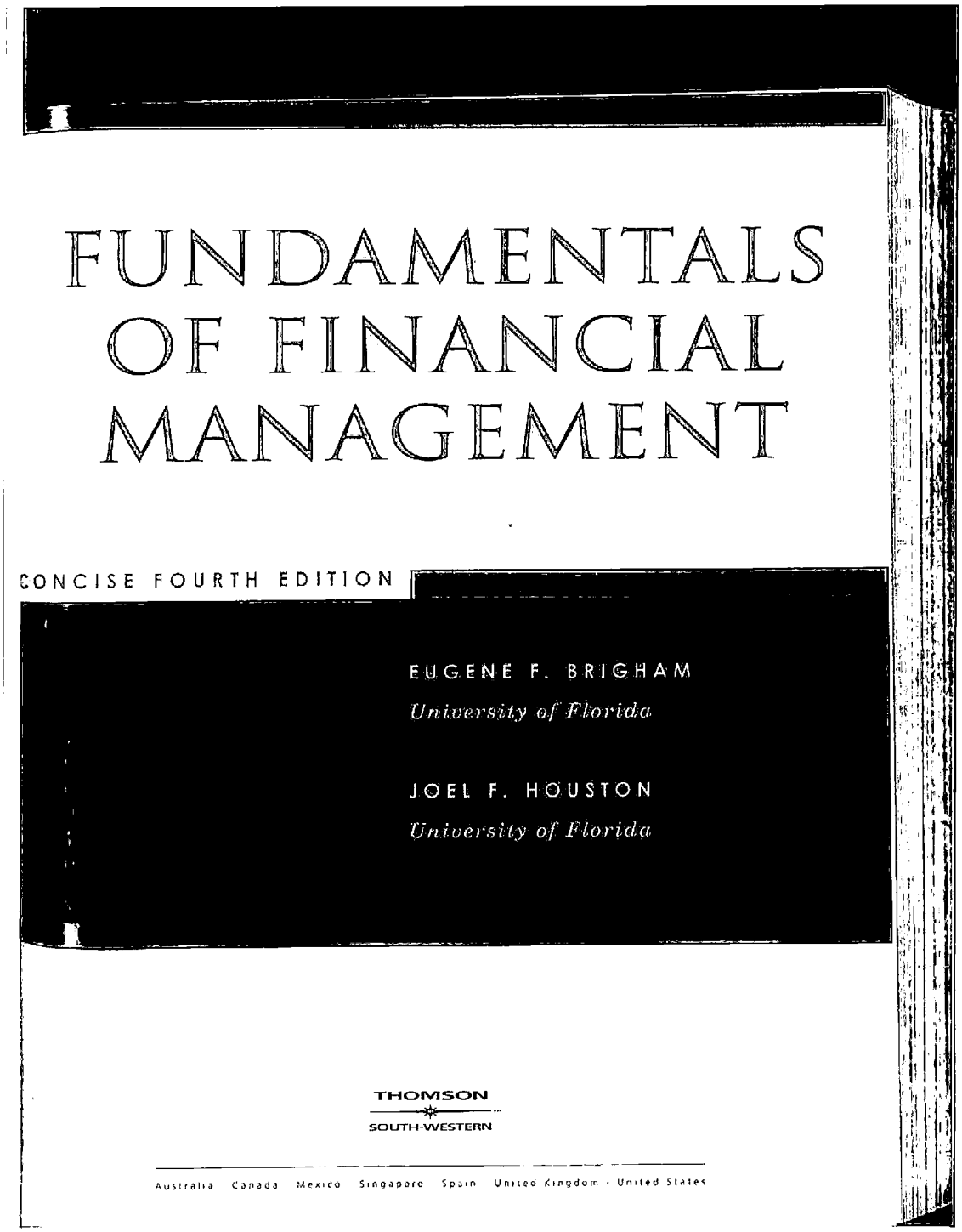
Upstream/midstream/downstream: Referring to exploration and production, transport and storage, and refining and distributing, respectively, of natural resources and commodities (such as metals, oil, gas, etc.).

Volatility of profitability/SER: We base the volatility of profitability on the standard error of the regression (SER) for a company's historical EBITDA. The SER is a statistical measure that is an estimate of the deviation around a 'best fit' trend line. We combine it with the profitability ratio to determine the final profitability assessment. We only calculate

SER when companies have at least seven years of historical annual data, to ensure that the results are meaningful.

Working-capital-intensive companies: Generally a company with large levels of working capital in relation to its sales in order to meet seasonal swings in working capital. Examples of working-capital-intensive sectors include retail, auto manufacturing, and capital goods.

These criteria represent the specific application of fundamental principles that define credit risk and ratings opinions. Their use is determined by issuer- or issue-specific attributes as well as Standard & Poor's Ratings Services' assessment of the credit and, if applicable, structural risks for a given issuer or issue rating. Methodology and assumptions may change from time to time as a result of market and economic conditions, issuer- or issue-specific factors, or new empirical evidence that would affect our credit judgment.


FUNDAMENTALS OF FINANCIAL MANAGEMENT
CONCISE FOURTH EDITION
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University of Florida
JOEL F. HOUSTON
University of Florida
THOMSON
SOUTH-WESTERN
Australia Canada Mexico Singapore Spain United Kingdom · United States

Maturity Matching or "Self-Liquidating," Approach

Maturity Matching, or "Self-Liquidating," Approach
A financing policy that matches asset and liability maturities. This is a moderate policy.

The **maturity matching, or "self-liquidating," approach** calls for matching asset and liability maturities as shown in Panel a of Figure 14-3. This strategy minimizes the risk that the firm will be unable to pay off its maturing obligations. To illustrate, suppose a company borrows on a one-year basis and uses the funds obtained to build and equip a plant. Cash flows from the plant (profits plus depreciation) would not be sufficient to pay off the loan at the end of only one year, so the loan would have to be renewed. If for some reason the lender refused to renew the loan, then the company would have problems. Had the plant been financed with long-term debt, however, the required loan payments would have been better matched with cash flows from profits and depreciation, and the problem of renewal would not have arisen.

At the limit, a firm could attempt to match exactly the maturity structure of its assets and liabilities. Inventory expected to be sold in 30 days could be financed with a 30-day bank loan; a machine expected to last for 5 years could be financed with a 5-year loan; a 20-year building could be financed with a 20-year mortgage bond; and so forth. Actually, of course, two factors prevent this exact maturity matching: (1) there is uncertainty about the lives of assets, and (2) some common equity must be used, and common equity has no maturity. To illustrate the uncertainty factor, a firm might finance inventories with a 30-day loan, expecting to sell the inventories and then use the cash to retire the loan. But if sales were slow, the cash would not be forthcoming, and the use of short-term credit could end up causing a problem. Still, if a firm makes an attempt to match asset and liability maturities, we would define this as a moderate current asset financing policy.

In practice, firms don't finance each specific asset with a type of capital that has a maturity equal to the asset's life. However, academic studies do show that most firms tend to finance short-term assets from short-term sources and long-term assets from long-term sources.[16]

Aggressive Approach

Students can access various types of historical interest rates, including fixed and variable rates, at the St. Louis Federal Reserve's FRED site. The address is http://research.stlouisfed.org/fred/.

Panel b of Figure 14-3 illustrates the situation for a relatively aggressive firm that finances all of its fixed assets with long-term capital and part of its permanent current assets with short-term, nonspontaneous credit. Note that we used the term "relatively" in the title for Panel b because there can be different *degrees* of aggressiveness. For example, the dashed line in Panel b could have been drawn *below* the line designating fixed assets, indicating that all of the permanent current assets and part of the fixed assets were financed with short-term credit; this would be a highly aggressive, extremely nonconservative position, and the firm would be very much subject to dangers from rising interest rates as well as to loan renewal problems. However, short-term debt is often cheaper than long-term debt, and some firms are willing to sacrifice safety for the chance of higher profits.

Conservative Approach

Panel c of Figure 14-3 has the dashed line *above* the line designating permanent current assets, indicating that long-term capital is being used to finance all permanent

[16] For example, see William Beranek, Christopher Cornwell, and Sunho Choi, "External Financing, Liquidity, and Capital Expenditures," *Journal of Financial Research*, Vol. 18, No. 2, 207–222.

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SOAH DOCKET NO. 473-21-2606
PUC DOCKET NO. 52195

APPLICATION OF EL PASO ELECTRIC COMPANY TO CHANGE RATES	§ § §	BEFORE THE STATE OFFICE OF ADMINISTRATIVE HEARINGS

EL PASO ELECTRIC COMPANY'S RESPONSE TO
TEXAS INDUSTRIAL ENERGY CONSUMERS'
NINTH REQUEST FOR INFORMATION
QUESTION NOS. TIEC 9-1 THROUGH TIEC 9-10

TIEC 9-3:

At page 43 of Ms. Nelson's rebuttal testimony, she describes her support for use of forecasted interest rates within a CAPM. With respect to this testimony, please answer the following:

a. Did Ms. Nelson use forecasted interest rates to be available with the market data used to develop the CAPM return including the published beta? If Ms. Nelson does not confirm, please explain how she used forecasted interest rates.
b. In Ms. Nelson's opinion, is it possible that the Value Line beta for companies in her proxy group will change over the next five years? Please explain her answer.
c. Were the beta estimates she relied on based on five years of historical data ending at or near the publish date from the Value Line source from which she relied? Please explain the answer.
d. Does Ms. Nelson agree that the use of forecasted GDP in growth rates for multi-stage growth assumed that those factors will come into play many years beyond the initial year where the stock dividend yield and short-term growth rates are measured? Please explain her answer.

RESPONSE:

a. In developing her CAPM analysis, Ms. Nelson applied Blue Chip Financial Forecast's ("Blue Chip") near-term and long-term projected 30-year Treasury bond yields published in its November 1, 2021, publication and its June 1, 2021, publication, respectively. Blue Chip publishes its long-term projections only in June and December of each year, so the June 1, 2021 publication was the most recent forecast of long-term 30-year Treasury bond yields available to Ms. Nelson as she prepared her Rebuttal Testimony. Her expected market return used data downloaded from Value Line on October 31, 2021. Her Value Line Beta coefficients reflect the Beta coefficients for her proxy companies published in Value Line's individual company reports as of October 31, 2021.

b. Yes, it is possible that the Value Line Beta coefficient will change over the next five years. As explained in Ms. Nelson's direct and rebuttal testimonies, the Beta coefficient is the product of two components: (1) the volatility of a utility's returns relative to the overall market, and (2) the correlation of those returns with the overall market. It is Ms. Nelson's understanding that Value Line calculates its Beta coefficients using weekly returns over the last five years, and the companies on the New York Stock Exchange ("NYSE") are used as the proxy for the overall market. If a utility's weekly returns relative to the NYSE become more volatile, its Value Line Beta coefficient will increase, all else equal, and vice versa. If a utility's weekly returns become more correlated with the NYSE (i.e., move in the same direction), its Value Line Beta coefficient will increase, all else equal, and vice versa.

c. Ms. Nelson used Beta coefficients reported in Value Line's individual company reports issued as of October 31, 2021. The electric utilities that Value Line covers are categorized into three geographic segments – East, West, and Central – and the individual company reports in these segments are published quarterly on a staggered schedule. As of October 31, 2021, the Electric Utility East companies' Value Line reports were published August 13, 2021; the Electric Utility Central companies' Value Line reports were published September 10, 2021; and the Electric Utility West companies' Value Line reports were published October 22, 2021.

   It is Ms. Nelson's understanding that Value Line calculates its Beta coefficients using weekly returns over the last five years. She assumes that Value Line's Beta coefficient calculations use data relatively near the date of publication, but does not know the exact dates of the data Value Line used to calculate its Beta coefficients.

d. Ms. Nelson understands that Mr. Gorman's Multi-Stage DCF analysis assumes his projected GDP growth rate occurs in the third and terminal stage of his Multi-Stage DCF model, in years 11-200. However, as Ms. Nelson's rebuttal testimony explains, Mr. Gorman's position that analysts' earnings growth rate projections are "unsustainable" simply because they are above the projected U.S. GDP growth rate is flawed because the foundation of his argument – that utility growth is linked to growth in the overall U.S. economy – is not supported by his own data.

Preparer: Jennifer E. Nelson — Title: Assistant Vice President – Concentric Energy Advisors

Sponsor: Jennifer E. Nelson — Title: Assistant Vice President – Concentric Energy Advisors

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TIEC 9-4:

At pages 46 and 47 of Ms. Nelson's rebuttal testimony, she outlines her support for use of both utility and Treasury forecasted yields in a risk premium analysis. With respect to this testimony, please provide the following:

a. Is it accurate that Ms. Nelson did not use current observable Treasury and utility yields in measuring a risk premium analysis in this case? Please explain the answer.
b. Please provide any analysis of whether or not Ms. Nelson has any academic studies that support Ms. Nelson's implication that forecasted yields will more accurately reflect the market's demanded cost of capital for utilities than current observable bond yields.
c. Does Ms. Nelson agree that a utility's ability to access capital would be determined by the capital demands from investors, and not projections of economists? Please explain her answer.
d. Is Ms. Nelson's risk premium methodology driven primarily by her representation that risk premiums will move inversely with interest rates over time in a predictable manner? Please explain the answer.

RESPONSE:

a. Ms. Nelson applied both current observable and projected Treasury bond yields in her Bond Yield Plus Risk Premium analysis.

b. Ms. Nelson has not asserted that forecasted yields are more accurate than current observable bond yields. As Ms. Nelson explains at page 41 of her rebuttal testimony, the accuracy of projected interest rates in hindsight is not relevant to the Cost of Equity. As the FERC has found, the Cost of Equity depends on what investors expect, not whether the expectations of investors in the past turned out to be accurate.

c. A utility's access to capital is not the same as its cost of capital. Because the cost of equity is forward looking, investors' expectations are likely informed by economists' projections among other data.

d. Ms. Nelson's Bond Yield Plus Risk Premium analysis models the relationship between the Equity Risk Premium and interest rates over a period of over 40 years. As that analysis demonstrates, the relationship is a strong, highly statistically significant, inverse relationship, consistent with academic literature. The relationship is not static, however, which is why Ms. Nelson did not use a linear regression to model the relationship. Because the analysis includes data from more than 1,670 electric rate cases over more than 40 years, it reflects the changes in the relationship between the Equity Risk Premium and interest rates over several business cycles and economic environments.

Preparer: Jennifer E. Nelson — Title: Assistant Vice President – Concentric Energy Advisors

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TIEC 9-5:

Referring to page 51 of Ms. Nelson's rebuttal testimony where she maintains that she corrected Mr. Gorman's risk premium analysis, please specifically identify: (1) the risk premium; and (2) bond yields, used to produce the risk premium estimates of 9.47%, 9.62%, and 9.77% as referenced at line 18.

RESPONSE:

Please see Ms. Nelson's rebuttal testimony, at pages 50-51.

At page 50, lines 15-23, Ms. Nelson explains that the 9.47% Risk Premium-based ROE estimate is the sum of Mr. Gorman's 3.22% 13-week average utility bond yield and his 2021 risk premium of 6.25%.

At page 50, lines 9-12, Ms. Nelson explains that the 9.62% Risk Premium-based ROE estimate is the sum of Mr. Gorman's 2.60% Treasury bond yield and a risk premium of 7.02%.

At page 51, lines 7-12, Ms. Nelson explains that the 9.77% Risk Premium-based ROE estimate is the sum of a projected utility bond yield of 3.84% and Mr. Gorman's five-year average utility bond yield risk premium of 5.89%.

Preparer: Jennifer E. Nelson — Title: Assistant Vice President– Concentric Energy Advisors

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QUESTION NOS. TIEC 9-1 THROUGH TIEC 9-10

TIEC 9-6:

Referring to pages 58 and 59 of Ms. Nelson's rebuttal testimony concerning the development of credit metric financial ratios, please answer the following:

a. Is it Ms. Nelson's perspective that the authorized return on equity is irrelevant in measuring the utility's financial integrity and credit standing? Please explain her answer.
b. Does Ms. Nelson agree that as the authorized return on equity decreases from 10.3% to 9.2%, the Debt/EBITDA ratio improves to 3.93x at 10.3% from 4.13x at 9.2%? If Ms. Nelson disagrees, please explain her perspective.
c. Does Ms. Nelson agree that as the authorized return on equity decreases from 10.3% to 9.2%, that her estimated FFO/Debt ratio improves from 18% to 17%? If Ms. Nelson disagrees, please explain her answer.
d. Does Ms. Nelson agree that the EBITDA largely reflects revenue requirement that supports rate base investments? Please explain her answer.
e. Does Ms. Nelson agree that the Funds From Operations ("FFO") is a cash flow metric that measures internally generated funds for the utility and is largely based on after-tax net income, deferred taxes, depreciation expense and other non-cash items? If Ms. Nelson disagrees, please explain her understanding of FFO.

RESPONSE:

a. No, it is not Ms. Nelson's position that the authorized ROE is irrelevant in measuring a utility's financial integrity. Throughout her direct and rebuttal testimonies, Ms. Nelson emphasizes the importance of the authorized ROE in maintaining a strong financial profile to the benefit of customers and shareholders.

   As explained below and in Ms. Nelson's rebuttal testimony at pages 57-60, Ms. Nelson's position is that Mr. Gorman and Mr. Lawton's financial integrity analyses are fundamentally flawed and should not be relied on to conclude that Mr. Gorman and

Mr. Lawton's ROE recommendations are sufficient from an equity investors' perspective.

First, EPE is not rated by S&P; therefore, as Mr. Gorman acknowledges, S&P's methodology cannot be applied to EPE. Second, Mr. Gorman and Mr. Lawton's financial integrity analyses do not adequately reflect the rating agencies' assessment process, primarily because the rating agencies' processes are more complex than Mr. Gorman's and Mr. Lawton's analyses suggest. Whereas Mr. Gorman's and Mr. Lawton's analyses and conclusions are a simplistic one-year analysis based on EPE's historical test year data, the rating agencies' review is over several years with a clear forward-looking bias. For example, Mr. Gorman's and Mr. Lawton's analyses do not consider EPE's $1.6 billion capital expenditure plan over the next four years and the effect of its capital expenditure plan on cash flows. Additionally, rating agencies review more than just the select quantitative credit metrics Mr. Gorman and Mr. Lawton calculated; they also review qualitative factors in addition to other quantitative metrics.

Lastly, it is important to remember that the credit rating agencies' methodologies reflect the rating agencies' assessment of a company's risk profile from the perspective of *debt investors* not equity investors, as a credit rating is an assessment of a company's ability to repay its financial obligations in full and on time. Debt investors have a contractual, senior claim on cash flows; therefore, equity investors bear the residual risk of ownership. Moreover, debt investors' exposure to a company's business and financial risk is finite, whereas equity investors are exposed to residual risk in perpetuity. Consequently, equity investors require a premium on the return available to debt investors to compensate them for bearing that residual risk in perpetuity.

Because the rating agencies' methodologies and their ultimate credit ratings reflect the rating agencies' assessment of creditworthiness from the perspective of debt investors, to the extent Mr. Gorman's and Mr. Lawton's analyses provide any value, they may provide limited insight into the sufficiency of their ROE recommendations to maintain a credit rating in a single, historical year based on a narrow quantitative calculation of select credit metrics. Their conclusions, therefore, cannot be extrapolated to equity investors' forward-looking return requirements.

b. As explained in part a. above and in her rebuttal testimony, Ms. Nelson does not support the financial integrity analyses presented by Mr. Gorman and Mr. Lawton. As noted in part a. above, equity investors require a return higher than that considered to be sufficient by debt investors.

With that clarification, Ms. Nelson agrees that under Mr. Gorman's construct, applying Ms. Nelson's ROE recommendation to Mr. Gorman's analysis produces a Debt/EBITDA ratio of 3.93x, which is lower than the 4.13x Debt/EBITDA ratio that results from Mr. Gorman's ROE recommendation.

c. As explained above and in her rebuttal testimony, Ms. Nelson does not support the financial integrity analyses presented by Mr. Gorman and Mr. Lawton. As noted in part a. above, equity investors require a return higher than that considered to be sufficient by debt investors.

With that clarification, Ms. Nelson agrees that under Mr. Gorman's construct, applying Ms. Nelson's ROE recommendation to Mr. Gorman's analysis produces an FFO/Debt ratio of 18%, which is higher than the 17% FFO/Debt ratio that results from Mr. Gorman's ROE recommendation.

d. Ms. Nelson understands EBITDA to be a historical accounting measure of earnings that includes the following components of the revenue requirement: interest, taxes, depreciation, amortization, and earnings that accrue to shareholders. Because EBITDA is after operating expenses, it excludes the operation & maintenance ("O&M") expense component of the revenue requirement.

Further, Ms. Nelson understands EBITDA to reflect internally generated funds that serve as one source of funds for a utility's rate base investments. Utilities can also issue debt and/or equity, as well as draw down retained earnings to fund rate base investments.

e. Ms. Nelson agrees FFO is a cash flow metric. She understands that S&P calculates FFO as:

FFO = EBITDA – cash interest paid – cash tax paid.

Please see TIEC 9-6, Attachment 1, for S&P's ratios and adjustments definitions for the entities it rates under its Corporate methodology, which includes regulated utilities.

Preparer: Jennifer E. Nelson — Title: Assistant Vice President – Concentric Energy Advisors

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S&P Global
Ratings

RatingsDirect®

Criteria | Corporates | General:

Corporate Methodology: Ratios And Adjustments

April 1, 2019

OVERVIEW AND SCOPE

1. S&P Global Ratings is publishing its methodology for making analytical adjustments to companies' reported financial data.
2. These criteria would apply to entities we rate globally using our corporate methodology, including traditional corporates as well as financial companies in scope of our "Key Credit Factors For Asset Managers," "Key Credit Factors For Financial Market Infrastructure Companies," and "Key Credit Factors For Financial Services Finance Companies." The criteria will also apply to companies we rate under our methodology for investment holding companies, commodities trading companies, the operating leasing industry, and mid-market evaluations. The criteria would not apply to project finance entities and corporate securitizations because of their unique characteristics. For the related guidance article, see "Guidance: Corporate Methodology: Ratios And Adjustments," published April 1, 2019.

IMPACT ON OUTSTANDING RATINGS

3. We are revising and updating our methodology to provide greater clarity and transparency. We have reorganized our analytical adjustments into four overarching principles and the adjustments associated with these principles. We also modified our adjustments for lease accounting changes. Based on our preliminary testing, we expect these updated criteria to result in negligible rating changes and none by more than one notch.

Key Publication Information

- Original publication date: April 1, 2019
- Effective date: Immediately.
- These criteria address the fundamentals set out in "Principles Of Credit Ratings," published on Feb. 16, 2011.

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METHODOLOGY

4. An entity's financial statements and data are core inputs to our cash flow/leverage and competitive position analysis. We may make adjustments to the reported financial statements to calculate adjusted credit ratios in order to:

   - Better align an entity's reported financial data with our view of the underlying economics of specific transactions, as well as continuing operations. This may include adjustments for transformational events.
   - Improve the global comparability of financial data between companies and across industries and geographies. For example, we may adjust reported financial figures when credit ratios are affected by different applicable accounting principles, measurements, and recognition or disclosure practices.
   - Adjust the consolidation approach embedded in reported financials to best reflect our opinion of an entity's business, economic, and financial ties to other members of the group including subsidiaries, holding companies, and affiliates.

5. We organize our ratios and adjustments methodological framework around key adjustment principles applied in the calculation of adjusted debt, earnings, cash flow, and interest, and three categories of adjustments that are consistent with these principles. The categories are:

   - "Routine" adjustments generally made to all entities, where applicable. Examples of these would be adjustments for leases and post-retirement obligations.
   - "Situational" adjustments expected to be applied only in rare circumstances and only if we believe that they will significantly affect a company's credit metrics and are not factored elsewhere in our rating analysis. Examples of these adjustments include foreign currency hedges of debt principal and other exposures such as litigation.
   - "Sector-specific" adjustments pertain only to particular sectors.

Key Terms

When we use the following terms in our methodology, we define them as described below. All elements considered in these definitions should be read in conjunction with our Adjustment Principles, and are computed including all applicable adjustments as described in the accompanying guidance.

Capital: Debt plus equity.

Capitalization: Capital less goodwill that exceeds 10% of total adjusted assets.

Cash interest paid: Cash interest paid is the reported amount in the statement of cash flows adjusted for capitalized interest, coupon payments on debt-like hybrid instruments, and any imputed lease-related cash interest for companies where lease payments are characterized as operating expenses.

Cash flow from operations (CFO): CFO is also referred to as operating cash flow. This measure takes reported cash flows from operating activities (as opposed to investing and financing activities), and includes all cash interest received and paid, dividends received, and cash tax paid in the period.

Cash tax paid: Income taxes paid on taxable profit, or income tax refunded.

Discretionary cash flow (DCF): Free operating cash flow (FOCF) minus cash dividends paid on common and preferred stock, less share buybacks.

Debt: Financial debt including bank borrowings, loans, and debt capital market instruments.

Dividends paid: Dividends to common and preferred shareholders and to minority shareholders of consolidated subsidiaries.

EBIT: Revenue minus operating expenses. We then include interest income, the company's share of equity earnings of associates and joint ventures, and other recurring, non-operating items.

EBITDA: Revenue minus operating expenses (excluding depreciation, amortization, and non-current asset impairment and impairment reversals). We include cash dividends received from investments accounted for under the equity method, and exclude the company's share of these investees' profits. We also exclude share-based compensation expense payable in shares.

Equity: Common equity, minority interests, and certain other forms of non-debt financing.

Funds from operations (FFO): EBITDA, minus cash interest paid minus cash tax paid.

Free operating cash flow (FOCF): CFO minus capital expenditures.

Interest: This is the reported interest expense, including non-cash interest on conventional debt instruments (such as payment-in-kind, zero-coupon, and inflation-linked debt), minus any interest income derived from assets structurally linked to a debt instrument.

Revenues: Total sales and other revenues from operating activities.

Key Ratios

The key credit ratios that we use in the cash flow/leverage and competitive position analysis under our corporate methodology include core ratios, supplementary ratios, and profitability ratios.

Core ratios:

- FFO to debt
- Debt to EBITDA

Supplementary ratios:

- CFO to debt
- FOCF to debt
- DCF to debt
- FFO plus cash interest paid to cash interest paid (FFO cash interest cover)
- EBITDA to interest

Profitability ratios:

- EBIT to revenues (EBIT margin)
- EBITDA to revenues (EBITDA margin)
- EBIT to average of the beginning-of-year and end-of-year capital (return on capital)

ADJUSTMENT PRINCIPLES

6. We apply four key principles in our adjustments to reported financial data:
   - Adjusted debt principle
   - Adjusted earnings principle
   - Adjusted cash flow principle
   - Adjusted interest principle

Adjusted Debt Principle

7. Many of the analytical adjustments we make reflect our view of certain implicit financing transactions as being debt-like. Our depiction of these transactions as akin to debt can be contrary to how a company reports them and affects not only our quantification of debt, but also the measures of earnings we use in our analysis.
8. Our objective, where practicable, is to use an amortized cost method to calculate debt, consistent with the amortized cost method under accounting standards like International Financial Reporting

Standards (IFRS) and U.S. Generally Accepted Accounting Principles (U.S. GAAP). This method reflects debt as the amount of the original proceeds, plus interest calculated using the effective interest rate, minus repayments of principal and interest. We include accumulated payment-in-kind interest in our adjusted debt measure.

9. In general, items that we add to reported debt to calculate adjusted debt include:

   - Incurred liabilities that provide no future offsetting operating benefit (such as underfunded postretirement employee benefits and asset retirement obligations);
   - On- and off-balance-sheet commitments to purchase or use of long-life assets (such as lease obligations) or businesses (such as deferred purchase consideration) where the benefits of ownership are accruing to the company; and
   - Amounts relating to certain instances when a company accelerates the monetization of assets in lieu of borrowing (such as through securitization, sale, or factoring of accounts receivable).

10. Many of these adjustments reflect probable future calls on cash, but not all future calls on cash are forms of debt. We do not consider a company's future commitments to purchase goods or services it has not received as akin to debt. This is because these are executory contracts, which means a counterparty must still perform an action and the benefits of ownership have yet to accrue to the company. On the contrary, certain non-executory contracts are seen as debt.

11. Not all incurred liabilities are added to reported debt. The adjusted debt figure excludes obligations, such as accounts payable and other accrued liabilities, because we regard them as trade credit. However, if a company defers payment beyond the term customary for its supply chain (which can occur with reverse factoring, for example), we may adjust debt.

12. Additionally, in certain cases our adjusted debt measure may exclude obligations a company reports as debt. This is, for example, because we consider those obligations as equity-like rather than debt, e.g. certain hybrid instruments and certain shareholder loans.

Adjusted Earnings Principle

13. We adjust reported earnings to capture our view of the results of a company's continuing business activities and its ability to generate recurring cash flow from its operations. Our three measures of adjusted earnings are EBITDA, EBIT, and FFO.

14. Our adjusted EBITDA metric aims to capture the results of a company's operating activities before interest, taxes, and depreciation and amortization. In other words, EBITDA excludes the impact on earnings of capital spending and other investing and financing activities. Generally, this means that any income statement activity, the cash effects of which have been (or will be) classified as being from operating activities (excluding interest and taxes), is included in our definition of EBITDA.

15. Our adjusted EBIT metric measures profit after depreciation and amortization costs (and thereby factors in capital intensity and capital spending), as well as operating and non-operating factors. Our measure of EBIT includes most income statement activity except for interest and taxes. This includes activity we view as non-operating (which is, however, excluded from EBITDA).

16. Our FFO metric indicates a company's ability to generate recurring cash flows from operations independent of changes in working capital. We derive our FFO metric from adjusted EBITDA and subtract cash interest and cash taxes.

Adjusted Cash Flow Principle

17. We typically only adjust reported cash flows to reclassify transactions between the different categories in the statement of cash flows in order to facilitate comparing operating cash flows. We do this because our analysis focuses on the actual cash flows a company derives from its different activities.

18. Accordingly, we do not carry through all our debt and earnings adjustments to our adjusted cash flow measures. For example, although we consider pension obligations as debt, we accept the reporting of pension cash contributions as operating cash flows rather than reclassifying them as financing outflows (i.e. a repayment of debt principal).

19. We primarily rely on three measures of adjusted cash flow: CFO, FOCF, and DCF.

Adjusted Interest Principle

20. We adjust interest to reflect the reported and imputed borrowing costs associated with our adjusted debt measure. Our adjusted interest expense is primarily used for supplementary coverage ratios. We generally do not net interest income from our adjusted interest expense unless it is generated by assets which we view as structurally linked to debt-like instruments, such as post-retirement obligations and asset retirement obligations.

ANALYTICAL ADJUSTMENTS

21. Our use of analytical adjustments typically depends on whether the transactions and items a company reports could materially affect our view of the company's credit metrics. Therefore, we may not make certain adjustments if we believe the related amounts are immaterial to our analysis. There are three categories of analytical adjustments: routine, situational, and sector-specific.

Routine Adjustments

22. We typically make the following routine adjustments to all companies, where applicable and material:

- Accessible cash and liquid investments
- Leases
- Postretirement employee benefits and deferred compensation
- Asset-retirement obligations
- Capitalized development costs
- Securitization, sale, and factoring of receivables and other assets
- Hybrid capital instruments
- Capitalized interest
- Financial guarantees
- Earn outs and deferred consideration for business acquisitions

Accessible cash and liquid investments

23. We calculate adjusted debt net of accessible cash and liquid investments (accessible cash), because a company that has cash available to repay debt on short notice has more financial flexibility than a company with no such cash available. In analyzing a company's cash and investments, we focus on their accessibility and liquidity. Our adjustment for accessible cash is company-specific; we calculate the amount based on information of a company's quickly accessible cash holdings and investment portfolio.

24. Accessible cash includes:

- All cash and cash equivalents as reported by the company, unless we have evidence that the cash might be inaccessible as described in the ratios and adjustments guidance document;
- Short-term investments as reported by the company, unless we have evidence they are illiquid or inaccessible; and
- Long-term investments and other assets in situations where we have evidence that they are liquid and accessible.

25. In situations where we determine that a company's weaker business characteristics or its ownership by financial sponsors do not support this adjustment, we do not net accessible cash against debt (please see our ratios and adjustments guidance document for more information).

Leases

26. Under lease arrangements, the lessee contracts for the use of an asset, entering into a debt-like financing obligation to make periodic rental payments. To account for this, we adjust debt, earnings, cash flows, and interest for comparability across accounting regimes. In certain cases, we may increase lease liabilities if we believe the reported lease disclosure does not adequately capture the lease leverage, for example if we view remaining lease terms to be artificially short relative to the expected use of the lease asset.

Postretirement employee benefits and deferred compensation

27. We include underfunded defined-benefit obligations for retirees, including pensions and health care coverage (collectively, postretirement benefits [PRB]) in our measure of adjusted debt. These obligations also include other forms of deferred compensation like retiree lump-sum payment schemes and long-service awards. We include these obligations in our measure of adjusted debt because they represent financial obligations that must be paid over time. We do not include defined-contribution obligations in our calculation of PRB.

28. We aggregate all retiree benefit plan assets and liabilities for pension, health, and other obligations, netting the positions of a company's plans in surplus against those that are in deficit, on an after-tax basis. Adjusted debt is not reduced if there are net surpluses.

Asset-retirement obligations

29. Asset-retirement obligations (AROs) or decommissioning liabilities are legal obligations associated with a company's retirement of tangible long-term assets. In line with our adjusted debt principle, we treat AROs as debt-like obligations. We add AROs to debt after deducting any dedicated retirement-fund assets or provisions, salvage value, and anticipated tax benefits.

Capitalized development costs

30. In financial reporting, research costs are almost universally treated as an expense. However, the treatment of development costs varies because of the differences between accounting regimes and the subjectivity in determining when development costs are capitalized. To enhance comparability, we generally treat all capitalized development costs as if they were expensed in the period incurred.

Securitization, sale, and factoring of receivables and other assets

31. We regard the securitization, sale, and factoring of trade receivables and other assets generated on an ongoing basis in the ordinary course of business as being akin to secured financing. We make this adjustment even when the transaction is non-recourse because in our view moral obligation payments may occur, and we do not presume the company will have permanent access to the securitization or factoring market and may need to incur conventional debt to replace this source of financing.

32. We include the securitized debt-like obligations in our debt measures. For trade receivables sales or other asset sales, we include the trade receivable asset or other asset, respectively, on the balance sheet and add the associated funding liability to debt.

Hybrid capital instruments

33. The treatment of hybrid capital instruments in our leverage and debt service ratio calculations depends on the equity content classification of the instrument as determined by using our hybrid criteria.

Capitalized interest

34. Under most accounting regimes, financial statements capitalize interest costs during the construction of fixed assets. This can obscure the total interest that has been incurred during the construction period, hindering comparisons of the interest burden between companies that capitalize and do not capitalize interest. We include interest costs that have been capitalized in adjusted interest in the period when they were incurred.

Financial guarantees

35. A financial guarantee is a promise by one party to assume a liability of another party if that party fails to meet its obligations under the liability. If a company has guaranteed liabilities of a third party or an unconsolidated affiliate, we typically add the guaranteed amount to the company's reported debt. However, we do not add the guaranteed amount to debt if, in our opinion, the guaranteed party is sufficiently creditworthy. We typically add a lower amount to debt if we believe that, if the guarantee were called, the net amount payable would be lower than the guaranteed amount. We do not add performance guarantees to debt unless the company has a history of significant payments under these types of guarantees, or it is expected to incur such payments in the future.

Earn outs and deferred consideration for business acquisitions

36. Companies acquiring other companies sometimes finance a portion of the purchase price by entering into contingent consideration arrangements (that is, "earn outs") and/or by paying a fixed sum on a delayed basis (deferred consideration). We typically view these transactions as a form of financing and therefore we add the liability to debt to reflect this view.

Situational Adjustments

37. In rare circumstances, when our analysts believe a quantitative adjustment, such as the inclusion of an unusual liability in adjusted debt, is the most effective way to capture the risk inherent in an entity's particular circumstances, we will make a situational adjustment, even if not contemplated above.

38. Notwithstanding, if there is significant uncertainty about when an exposure may crystallize, or it is difficult to accurately quantify the impact, we may use alternative methods (such as the use of appropriate modifiers to derive the issuer credit rating) to capture these risks.

39. We may make situational adjustments for obligations and contingencies, including:

- Litigation and other contingent claims/liabilities;
- Workers' compensation and self-insurance liabilities;
- Multi-employer pension plans;
- Debt at fair value; and
- Foreign currency hedges of debt principal.

Sector-Specific Adjustments

40. We use our sector-specific adjustments to reflect the impact of unique industry characteristics on the adjusted financial metrics for a company. These sector-specific adjustments are consistent with our four adjustment principles and are made where applicable and material.

RELATED CRITERIA AND RESEARCH

Related Criteria

- Methodology And Assumptions: Assigning Equity Content To Hybrid Capital Instruments Issued By Corporate Entities And Other Issuers Not Subject To Prudential Regulation, Jan. 16, 2018
- Methodology And Assumptions: Liquidity Descriptors For Global Corporate Issuers, Dec. 16, 2014
- Key Credit Factors For Financial Market Infrastructure Companies, Dec. 9, 2014
- Key Credit Factors For Financial Services Finance Companies, Dec. 9, 2014
- Key Credit Factors For Asset Managers, Dec. 9, 2014
- The Treatment Of Non-Common Equity Financing In Nonfinancial Corporate Entities, April 29,

2014

- Group Rating Methodology, Nov. 19, 2013
- Corporate Methodology, Nov. 19, 2013
- Criteria Clarification On Hybrid Capital Step-Ups, Call Options, And Replacement Provisions, Oct. 22, 2012
- Principles Of Credit Ratings, Feb. 16, 2011
- Methodology: Hybrid Capital Issue Features: Update On Dividend Stoppers, Look-Backs, And Pushers, Feb. 10, 2010
- Hybrid Capital Handbook: September 2008 Edition, Sept. 15, 2008

Criteria Superseded

- Corporate Methodology: Ratios And Adjustments, Nov. 19, 2013

Criteria Partly Superseded

- Key Credit Factors For The Real Estate Industry, Feb. 26, 2018
- Commodities Trading Industry Methodology, Jan. 19, 2017
- Key Credit Factors For The Operating Leasing Industry, Dec. 14, 2016
- Key Credit Factors For The Branded Nondurables Industry, May 7, 2015
- Key Credit Factors For Agricultural Cooperatives, March 17, 2015
- Key Credit Factors For The Agribusiness And Commodity Foods Industry, Jan. 29, 2015
- Methodology: The Impact Of Captive Finance Operations On Nonfinancial Corporate Issuers, Dec. 14, 2015
- Key Credit Factors For The Telecommunications And Cable Industry, June 22, 2014
- Key Credit Factors For The Oilfield Services And Equipment Industry, April 16, 2014
- Key Credit Factors For The Oil Refining And Marketing Industry, March 27, 2014
- Key Credit Factors For The Aerospace And Defense Industry, March 25, 2014
- Key Credit Factors For The Forest And Paper Products Industry, Feb. 12, 2014
- Key Credit Factors For The Transportation Cyclical Industry, Feb. 12, 2014
- Key Credit Factors For The Homebuilder And Real Estate Developer Industry, Feb. 3, 2014
- Key Credit Factors For The Media And Entertainment Industry, Dec. 24, 2013
- Key Credit Factors For The Metals And Mining Upstream Industry, Dec. 20, 2013
- Key Credit Factors For The Oil And Gas Exploration And Production Industry, Dec. 12, 2013
- Corporate Methodology, Nov. 19, 2013
- Key Credit Factors For The Regulated Utilities Industry, Nov. 19, 2013
- Key Credit Factors For The Retail And Restaurants Industry, Nov. 19, 2013

- Key Credit Factors For The Technology Software And Services Industry, Nov. 19, 2013
- Key Credit Factors For The Engineering And Construction Industry, Nov. 19, 2013
- Key Credit Factors For The Technology Hardware And Semiconductors Industry, Nov. 19, 2013
- Key Credit Factors For The Transportation Infrastructure Industry, Nov. 19, 2013

Related Research

- Guidance: Corporate Methodology: Ratios And Adjustments, April 1, 2019
- Criteria And Guidance: Understanding The Difference, Dec. 15, 2017

This report does not constitute a rating action.

These criteria represent the specific application of fundamental principles that define credit risk and ratings opinions. Their use is determined by issuer- or issue-specific attributes as well as S&P Global Ratings assessment of the credit and, if applicable, structural risks for a given issuer or issue rating. Methodology and assumptions may change from time to time as a result of market and economic conditions, issuer- or issue-specific factors, or new empirical evidence that would affect our credit judgment.

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SOAH DOCKET NO. 473-21-2606
PUC DOCKET NO. 52195

APPLICATION OF EL PASO ELECTRIC COMPANY TO CHANGE RATES	§ § §	BEFORE THE STATE OFFICE OF ADMINISTRATIVE HEARINGS

EL PASO ELECTRIC COMPANY'S RESPONSE TO
TEXAS INDUSTRIAL ENERGY CONSUMERS'
NINTH REQUEST FOR INFORMATION
QUESTION NOS. TIEC 9-1 THROUGH TIEC 9-10

TIEC 9-7:

Concerning Ms. Nelson's assessment of business risk and other considerations, please answer the following:

a. Does Ms. Nelson understand that EPE is provided service from its parent company under an affiliate service agreement? Please explain her answer.
b. To the extent the affiliate service agreement mitigates EPE's stand-alone risk for employees, engineering services, treasury functions, executive functions, and legal functions, does Ms. Nelson believe that customers' payment for these services from the affiliate service agreement should be considered in assessing EPE's risk? Please explain answer.

RESPONSE:

a. Based on information provided by the El Paso Electric Company ("EPE"), Ms. Nelson understands that EPE does not operate under an affiliate service agreement with its parent company.
b. Please see the response to part a. above.

Preparer: Jennifer E. Nelson — Title: Assistant Vice President – Concentric Energy Advisors

Sponsor: Jennifer E. Nelson — Title: Assistant Vice President – Concentric Energy Advisors

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QUESTION NOS. TIEC 9-1 THROUGH TIEC 9-10

TIEC 9-8:

Please identify and provide the recommended return on equity and the regulatory commission's approved return on equity in every electric utility rate case in which Ms. Nelson has testified since the beginning of 2016.

RESPONSE:

Please see TIEC 9-8, Attachment 1.

Preparer: Jennifer E. Nelson Title: Assistant Vice President – Concentric Energy Advisors

Sponsor: Jennifer E. Nelson Title: Assistant Vice President – Concentric Energy Advisors

Sponsor	Date	Case/Applicant	Docket	Subject	Final Recommended ROE (%)	Recommended ROE Range (%)	Ordered ROE (%)	Settled Vs. Fully Litigated
Arkansas Public Service Commission								
Entergy Arkansas, Inc.	11/20	Entergy Arkansas, Inc.	16-036-FR	Return on Equity	Evaluated the 9.75% ROE included in Rider FRP	NA	Pursuant to Act 894, 9.75% ROE for initial FRP term 2016-2020; 9.65% for the FRP extension term beginning in 2021.	Settled 4.08.2021
New Hampshire Public Utilties Commission								
Unitil Energy Systems, Inc.	04/21	Unitil Energy Systems, Inc.	DE 21-030	Return on Equity	10.20	9.90 - 10.50	Ongoing	Ongoing
New Mexico Public Regulation Commission								
El Paso Electric Company	07/20	El Paso Electric Company	20-00104-UT	Return on Equity	10.30	9.75 - 10.75	9.00	Fully Litigated 6.23.2021
North Carolina Utilities Commission								
Public Service Company of North Carolina d/b/a Dominion Energy North Carolina	04/21	Public Service Company of North Carolina d/b/a Dominion Energy North Carolina	G-5, Sub 632	Return on Equity	10.25	9.60 - 10.75	Ongoing	Ongoing
Public Utility Commission of Texas								
Sharyland Utilities, LLC	12/20	Sharyland Utilities, LLC	51611	Return on Equity, Capital Structure & Cost of Debt	10.35	10.00 - 11.00	9.38	Settled 7.15.2021
El Paso Electric Company	06/21	El Paso Electric Company	52195	Return on Equity	10.30	9.75 - 10.75	Ongoing	Ongoing
Public Service Commission of West Virginia								
Hope Gas, Inc. d/b/a Dominion Energy West Virginia	11/20	Hope Gas, Inc. d/b/a Dominion Energy West Virginia	20-0746-G-42T	Return on Equity and Capital Structure	10.25	9.75 - 11.00	9.54	Fully Litigated 7.27.2021

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APPLICATION OF EL PASO ELECTRIC COMPANY TO CHANGE RATES	§ § §	BEFORE THE STATE OFFICE OF ADMINISTRATIVE HEARINGS

EL PASO ELECTRIC COMPANY'S RESPONSE TO
TEXAS INDUSTRIAL ENERGY CONSUMERS'
NINTH REQUEST FOR INFORMATION
QUESTION NOS. TIEC 9-1 THROUGH TIEC 9-10

TIEC 9-9:

Please provide all published materials that Ms. Nelson has authored and presentations that Ms. Nelson has given within the past ten years on utility cost of capital and return on equity issues.

RESPONSE:

Ms. Nelson has not authored any publications or presentations on utility cost of capital issues.

Preparer: Jennifer E. Nelson Title: Assistant Vice President – Concentric Energy Advisors

Sponsor: Jennifer E. Nelson Title: Assistant Vice President – Concentric Energy Advisors

SOAH DOCKET NO. 473-21-2606
PUC DOCKET NO. 52195

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TIEC 9-10:

Referring to Mr. Novela's cross-rebuttal testimony at page 5-6:

a. Has System Planning always used a forecasted CP rather than a historical CP for planning? If not, please explain when the change was made and why.
b. Please provide EPE's monthly CP for each month in 2021.

RESPONSE:

a. Yes.
b. Below is EPE's actual native system peak:
   January 26, 2021 @ 19:00 MST – 1,100 MW
   February 14, 2021 @ 20:00 MST – 1,130 MW
   March 1, 2021 @ 20:00 MST – 976 MW
   April 12, 2021 @ 17:00 MST – 1,228 MW
   May 28, 2021 @ 17:00 MST – 1,615 MW
   June 14, 2021 @ 16:00 MST – 2,051 MW
   July 15, 2021 @ 16:00 MST – 1,865 MW
   August 9, 2021 @ 17:00 MST – 1,962 MW
   September 16, 2021 @ 16:00 MST – 1,839 MW
   October 8, 2021 @ 16:00 MST – 1,497 MW
   November 9, 2021 @ 18:00 MST – 1,046 MW

Preparer: Enedina Soto — Title: Manager – Load Research & Data Analytics

Sponsor: George Novela — Title: Director – Economic and Rate Research
David Hawkins — Vice President – Strategy & Sustainability Management

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DOCKET NO. 52195

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CONFIDENTIALITY STATEMENT UNDER SECTION 4 OF THE PROTECTIVE ORDER

The undersigned attorney for El Paso Electric Company (EPE) submits this statement under the section 4 of the Protective Order entered in this case. Materials provided in Attachment 1 to question TIEC 9-2 in the Texas Industrial Energy Consumer's ninth set of discovery contain proprietary material owned by a third party, only available through a subscription, and is therefore exempt from public disclosure pursuant to sections 552.110 the Public Information Act (PIA). Counsel for EPE has reviewed the material and can state in good faith that the response contains documents that are subject to confidentiality provisions that require EPE to prevent the public release of the information contained therein, exempting it from public release under the PIA.

Respectfully submitted,

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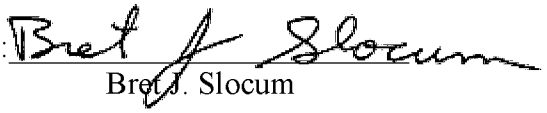
By: 
Bret J. Slocum

ATTORNEYS FOR EL PASO ELECTRIC COMPANY

CERTIFICATE OF SERVICE

I certify that a true and correct copy of this document was served by email on all parties of record on December 22, 2021.

Bret J. Slocum