China Engineering & Construction 2024 Industry Outlook:
Rated E&C Companies Should Ride Through The Speed Bump

S&P Global Ratings

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Key Takeaways

• The credit profiles of most rated E&C companies will be stable in 2024. EBITDA expansion will tend to keep their interest coverage ratios (our usual rating trigger) steady.

• We expect revenue growth of most rated E&C companies to slow to 4%-7% in 2024, from an anticipated 7%-10% in 2023. We attribute this to their high revenue base and moderated growth in new orders.

• We expect profitability of the companies we rate to improve slightly in 2024. Profitability at the property development businesses may remain lackluster. Stricter control over selling and administrative expenses and a potentially lower receivables impairment ratio should help mitigate this.

• Free operating cash outflow will likely narrow in 2024. We base this on a better cash collection cycle and controllable expenditure amid moderating exposure to public-private partnership projects.

• Rating pressure on some entities (such as Beijing Construction Engineering Group Co. Ltd. and Power Construction Corporation of China) could increase if the property segment continues to drag on profits, or if cash collection cycle is longer than we expect because of deteriorating financial conditions of project owners, especially from local governments in lower-tier cities or their financing vehicles.
Growth Of Fixed Asset Investment Is Slowing

- Growth of fixed asset investment (FAI) slowed to 3.0% year-on-year in 2023, from 5.1% year-on-year in 2022.
- We attribute the slowing growth to the weakness in investment of the real estate sector.
- That said, growth of infrastructure and manufacturing investment mitigated the sluggish real estate investment.
- We believe the Chinese government will continue to leverage on stimulus measures to support new infrastructure investment in the next six to 12 months at least, e.g. additional issuance of Chinese renminbi (RMB) 1 trillion special purpose bonds in the fourth quarter of 2023 for post disaster reconstruction, potential frontloading 2024 bond quota to fund project executions, etc.

Infra. investment should remain the key for FAI growth in 2024

Frontloading of special purpose bonds to support investment

<table>
<thead>
<tr>
<th>Budget year</th>
<th>Frontloading time</th>
<th>Frontloading Scale (in trillion RMB)</th>
<th>Annual quota (in trillion RMB)</th>
<th>Frontloading as percentage of annual quota</th>
</tr>
</thead>
<tbody>
<tr>
<td>2019</td>
<td>Dec-18</td>
<td>0.81</td>
<td>2.15</td>
<td>37.7%</td>
</tr>
<tr>
<td>2020</td>
<td>Nov-19</td>
<td>1.00</td>
<td>3.75</td>
<td>26.7%</td>
</tr>
<tr>
<td>2021</td>
<td>Mar-21</td>
<td>1.77</td>
<td>3.65</td>
<td>48.5%</td>
</tr>
<tr>
<td>2022</td>
<td>Dec-21</td>
<td>1.46</td>
<td>3.65</td>
<td>40.0%</td>
</tr>
<tr>
<td>2023</td>
<td>Nov-22</td>
<td>2.19</td>
<td>3.80</td>
<td>57.6%</td>
</tr>
<tr>
<td>2024</td>
<td>Up to Jan, 24,2024</td>
<td>Frontloading amount of special purpose bonds in the first quarter of 2024 has not been yet confirmed.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Sources: Ministry of Finance. S&P Global Ratings.
Growth Momentum Of China’s E&C Market Will Likely Slow In 2024

- We expect growth in the E&C sector’s output will only be in the low single digits in 2024, albeit off a high base, and the slowdown in new contracts will imply lower revenue growth.
- In 2023, growth of E&C sector output slowed to 5.8%, compared with 6.5% in 2022.
- Growth in infrastructure investment will likely moderate on more disciplined spending of local Chinese governments amid their elevated debt leverage in 2024. Real estate investment is also unlikely to meaningfully improve during the year. This should constrain the E&C sector growth.
- That said, we believe the level of industry order backlog remains healthy. It reached RMB72.4 trillion and 2.3 times of industry output in 2023, largely similar to the level in 2022.

Industry output and new contract growth are slowing

Industry order backlog remains healthy

PPP Projects: Stricter Supervision, Greater Viability

- China’s State Council is reforming the public-private-partnership (PPP) model. It suspended all PPP projects that the National Audit Office had identified as containing issues as well as PPP projects that were still under tendering processes by February 2023.
- The National Development and Reform Commission will review all future PPP projects. Only user-paid projects with investment returns will be approved.
- As such, growth of PPP projects will likely further decelerate in the next one to two years, given the limited scope of PPP project models.
- On the other hand, more companies from the private sector could participate in PPP projects in the next one to two years as encouraged by the State Council.

Growth of PPP project implementation has been declining

Government encouraging more private sector investment in PPP

<table>
<thead>
<tr>
<th>Type of PPP projects</th>
<th>Requirement on project ownership from private sector</th>
</tr>
</thead>
<tbody>
<tr>
<td>Market-oriented projects with low public features (e.g. waste treatment, logistics park projects, tourism service projects etc.)</td>
<td>Wholly owned or controlled by private enterprises</td>
</tr>
<tr>
<td>Projects related to people’s livelihood and with strong public features (e.g. sewage treatment, toll road projects, intercity railway projects etc.)</td>
<td>Minimum 35% of private ownership</td>
</tr>
</tbody>
</table>

SOEs Should Continue To Take Charge Of The E&C Market

- E&C state-owned enterprise (SOE) market share rose to 59% in 2023, measured by total order backlog. It was 57% in 2022.
- The share should remain at similar level in 2024, despite the government encouraging more private sector investment into PPP. This is mainly because:
  - user-paid PPP projects only represent about 10% of total existing PPP projects. This could meaningfully constrain the expansion of private sector’s share;
  - SOEs have financial stability and good access to funding for project implementation; and
  - they have solid project execution track records with more advanced construction technology for complex infrastructure projects.

SOEs have been taking market share from POEs

Shares of most of our rated SOEs should grow steadily

Sources: Wind. S&P Global Ratings.

High revenue base and stringent control on PPP projects will likely constrain the pace of revenue expansion of rated E&C companies in 2024. We expect their revenue growth will slow to 4%-7% in 2024, after an estimated 7%-10% growth in 2023. Some of our rated E&C companies have 4%-14% of revenue exposed to property development businesses. We anticipate a moderate decline of property sales amid weak market sentiment will likely constrain their segment performance. That said, sustained E&C business expansion, which has benefited from infrastructure investment growth, should mitigate the pressure and support their topline growth. Their average backlog of 3.7 times 2022 revenue also indicates sufficient backlog for business growth in 2023 and 2024.

Growth in new orders is slowing despite a healthy backlog

Rated entity revenue to grow 4%-7% annually in 2024-2025

Aggregated new orders includes CSCEC, CRCC, PCCC (listco), MCC, SCG, BCEG. Aggregated order backlog and revenue includes all the preceding entities except data before 2021 of CSCEC due to lack of data for some years. See page 11 for full names. Sources: Company disclosures, S&P Global Ratings.
Profitability Should Improve Slightly

- We expect the EBITDA margins of most rated E&C companies to trend up modestly in 2024, after an anticipated dip in 2023. Positive factors include:
  - Improving SG&A efficiency and declining impairment provisions. Rated E&C companies have tightened exposure to private property developers. Most receivables at risk from property customers should have been impaired in past three years;
  - Stabilizing performance of property development segment; and
  - Cautious project selection and favorable business mix change push for better revenue mix.

- That said, impairment provision ratios will likely stay high because of downside risk to cash collection from local government financing vehicles in 2024. We expect the impairment ratio to stay at an average of about 0.6% of total revenue in 2024. That compares with our estimate of 0.63%-0.68% in 2023.

Margins of rated entities may trend up mildly after 2023

Impairment provisions of rated entities to stay elevated
Free Cash Flow Should Also Improve But Remain Negative

- E&C SOEs will continue to focus on operating cash flow improvement under new one-profit and five-ratios targets set by the State-owned Assets Supervision and Administration Commission of the State Council. Since early 2023, the Chinese government has optimized its requirements on SOEs by incorporating operating cash flow and return on assets measures as their business performance indicators.

- On the other hand, stricter PPP guideline should lead to fewer and slower PPP projects intake for our rated E&C companies in the next two years.

- Rated E&C companies’ free operating cash outflow should narrow in the next one to two years. We base this on a better cash collection cycle and controllable expenditure amid moderating exposure to PPP projects.

- We estimate our rated E&C companies have about 10%-20% of revenue exposure to PPP projects in 2022. Their exposure will likely decline in the next two years on the rollout of new PPP guideline.

Estimated asset exposure to PPP projects in 2022

FOCF outflow of rated entities will narrow

Above data are based on disclosed information from companies’ annual reports. Company disclosure may not be exhaustive. See page 11 of this report for full names. Sources: Companies disclosure, S&P Global Ratings.

OCF—Operating cash flow. FOCF—Free operating cash flow. Both OCF and FOCF include the adjustment for factoring and reverse factoring. Aggregated numbers include CSCEC, CRCC, PCCC, CMGC, SCG and BCEG. See page 11 of this report for full names. Sources: Company disclosures. S&P Global Ratings.
Earnings Growth And Steady Margins Support Rating Buffer

- We expect rated entities’ leverage to remain at a relatively high level on a continuous free cash outflow. In addition to earnings growth, companies have adopted different measures to control leverage, such as equity raising, asset disposal, debt-to-equity swap, etc.

- Rating headroom of most rated E&C entities should be sufficient on anticipated stable EBITDA interest coverage ratio in the next two years, supported by low financing costs in China. This ratio is the rating trigger for most E&C entities. We view it as reflective of SOE E&C companies’ underlying financial risk. This factors in SOE issuers’ refinancing track record and wide funding sources.

- Some rated E&C companies (such as BCEG and PCCC) may face meaningful rating pressure if their EBITDA margins underperform our base case by 0.5-1.0 percentage points in 2023-2024 (see page 13). A worse-than-expected margin performance or a higher impairment provision ratio may cause this.

Adjusted debt of rated entities will continue to grow

Rating headroom should remain sufficient with stable EBITDA interest coverage ratio

Aggregated adjusted debt include CSCEC, CRCC, PCCC, CMGC, SCG, and BCEG. See page 11 of this report for full names. Sources: Company disclosures. S&P Global Ratings.

Rating downgrade triggers for CMGC and MCC are based on their ultimate parent--Minmetals's EBITDA interest coverage, while SCG’s is based on its debt-to-EBITDA ratio. See page 11 of this report for details. Sources: Company disclosures. S&P Global Ratings.
<table>
<thead>
<tr>
<th>Company</th>
<th>Rating</th>
<th>Rating Downgrade Triggers</th>
<th>Latest performance</th>
<th>Key Rating Drivers</th>
</tr>
</thead>
</table>
| China State Construction Engineering Corp. Ltd. (CSCEC) | A/Stable       | 2023: 10.8% 2022: 10.6%  | 9M 2023: 8.8% 9M 2022: 14.8% 9M 2023: 6.2% 9M 2022: 6.6% 9  | • Revenue and margin expansion of E&C businesses to moderate pressure from property segment;  
  • Leverage control amid business growth. |
|                                          |                |                           | Est. EBITDA margin  |                                                                                                                                                    |
|                                          |                |                           | Est. Leverage       |                                                                                                                                                    |
|                                          |                |                           | Est. EBITDA Int. Cov (x) |                                                                                                                                                    |
|                                          |                |                           |                    |                                                                                                                                                    |
| CSCEC International Construction Co. Ltd. (CSCEC International) | A-/Stable   | 9M 2023: 11.7% 9M 2022: 18.7% | 1H 2023: 14.3% 1H 2022: 12.8% | • Leverage and profitability trend of its parent, CSCEC.                                                                                     |
|                                          |                |                           |                     |                                                                                                                                                    |
| China State Construction International Holdings Limited (CSCI) | BBB/Stable   | 9M 2023: 8.3% 9M 2022: 38.9% | 9M 2023: 6.2% 9M 2022: 6.8% | • Ability to improve profitability amid business mix changes;  
  • Operating cash flow and leverage improvement.                                                        |
|                                          |                |                           |                    |                                                                                                                                                    |
| China Railway Construction Corp. Ltd. (CRCC) | A-/Stable | -3.0x 2023: 15.7% | 9M 2023: 6.2% 9M 2022: 6.8% | • Investment appetite toward PPP projects;  
  • Ability to improve profitability.                                                                                                                      |
|                                          |                |                           |                     |                                                                                                                                                    |
| China Metallurgical Group Corp. (CMGC) and Metallurgical Corp. of China Ltd. (MCC) | BBB+/Stable | 9M 2023: 7.9% 9M 2022: 11.7% | 9M 2023: 3.7% 9M 2022: 3.8% | • Cost control for margin improvement;  
  • Cautiousness on participation in PPP projects;  
  • Working capital management.                                                                                                                              |
|                                          |                |                           |                     |                                                                                                                                                    |
| Power Construction Corp. of China (PCCC)  | BBB+/Stable    | PCCC (list co): 2023: 12.2% 2022: 29.3% | 2022: 7.5% 2021: 7.4% 2022: 7.5% 2021: 7.4% 2022: 7.5% 2021: 7.4% 2022: 7.5% 2021: 7.4% | • Working capital and capex control on investment-linked projects;  
  • Margin pressure from project mix change.                                                                                                               |
|                                          |                |                           |                     |                                                                                                                                                    |
| Shanghai Construction Group Co. Ltd. (SCC) | BBB/Stable | Debt/EBITDA: Sept. 2023: 8.0x Sept. 2022: 8.1x  | 9M 2023: 3.3% 9M 2022: 2.7% 9M 2023: 3.3% 9M 2022: 2.7% 9M 2023: 3.3% 9M 2022: 2.7% | • Margin improvement during business recovery;  
  • Appetite on investment-linked projects and land acquisitions.                                                                                          |
|                                          |                |                           |                     |                                                                                                                                                    |
| Beijing Construction Engineering Group Co. Ltd. (BCEG) | BBB/Stable | 9M 2023: 0.2% 9M 2022: 14.0% | 9M 2023: 4.5% 9M 2022: 4.9% | • Profitability and leverage trend amid project mix changes;  
  • Capex and other investment control.                                                                                                                     |

Rating Buffers Vary

CSCEC (A/Stable/--) & CSCEC International (A-/Stable/--)

Ppt—Percentage points. Trigger and financial data for both companies are CSCEC’s numbers.


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Rating Buffers Vary (continued)

PCCC (BBB+/Stable/--)  

- EBITDA int coverage - Base case
- Downgrade trigger - EBITDA int coverage
- EBITDA int coverage (EBITDA margin - 0.5 ppt)
- EBITDA int coverage (EBITDA margin - 1.0 ppt)
- Debt/EBITDA - Base case

SCG (BBB/Stable/--)  

- EBITDA int coverage - Base case
- Downgrade trigger - Debt/EBITDA
- Debt/EBITDA - Base case
- Debt/EBITDA (EBITDA margin - 0.5 ppt)
- Debt/EBITDA (EBITDA margin - 1.0 ppt)

Rated Entities Should See Healthy Business Growth

**CSCEC (A/Stable/--)**

- Revenue: Housing E&C
- Revenue: Property development
- E&C New contract YoY (right scale)

**CSCI (BBB/Stable/--)**

- Revenue: Hong Kong & Macao
- Revenue: façade contracting
- E&C New contract YoY (right scale)

**CRCC (A-/Stable/--)**

- Revenue: Railway & E&C
- Revenue: Road & E&C
- Revenue: Urban mass transit E&C

**MCC (BBB+/Stable/--)**

- Revenue: Metallurgical E&C
- Revenue: Transport infrastructure E&C
- Revenue: Others

Rated Entities Should See Healthy Business Growth (continued)

PCCC (BBB+/Stable/--)  
- Revenue: Total E&C  
- Revenue: Property development  
- New contract YoY (right scale)

SCG (BBB/ Stable/--)  
- Revenue: E&C  
- Revenue: Property Development  
- Revenue: Investment For Urban Development  
- Revenue: Others  
- New contract YoY (right scale)

BCEG (BBB/ Stable/--)  
- Revenue: E&C  
- Revenue: Property Development  
- Revenue: Others  
- Order Backlog YoY (right scale)

Majority Of Them Should Also See Free Cash flow Improvement

CSCEC (A/Stable/--)

CSCI (BBB/Stable/--)

CRCC (A-/Stable/--)

MCC (BBB+/Stable/--)

Majority Of Them Should Also See Free Cash flow Improvement (continued)

PCCC (BBB+/Stable/--)

SCG (BBB/ Stable/--)
Related Research

- Economic Outlook Asia-Pacific Q1 2024: Emerging Markets Lead The Way, Nov. 27, 2023
- China Growth Could Fall Below 3% If The Property Crisis Worsens, Oct. 24, 2023
- Tear Sheet: China State Construction Engineering Corp. Ltd, Sept. 01, 2023
- E&C Growth, Recovering Property Business To Support CSCEC’s Credit Strength, April 19, 2023
- Shanghai Construction To Restore Its Credit Strength, April 19, 2023
- Infrastructure Push To Bolster China Railway Construction’s Operating Cash Flow, April 04, 2023
- China Railway’s Rising Profit To Ease Leverage Strain, March 31, 2023
- China-Based CSCI’s Project Mix Shift To Drive Deleveraging, March 22, 2023
- China Industrials Poised For Bumpy Post-Pandemic Recovery, Feb. 15, 2023
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