The Big Squeeze in Freight Transportation
Freight spot rates have experienced their biggest drop in the past 15 years due to slowing demand.

Supply chain shortages pushed rates to an all-time high before overcapacity and slowing demand led to major spot rate declines.

Overcapacity and a high US dollar exchange rate created a freight-rate “recession.”

A slowing economy aggravated by the pandemic hurt spot rates.

Sources: DAT Freight & Analytics; BCG analysis.
Freight volumes have declined from their post-pandemic peak

Source: BCG analysis.

TRUCK TONNAGE VOLUME INDEXED TO JANUARY 1, 2015

Truck tonnage rebounded during the COVID-19 recovery…

…but retreated to 2018 levels as economic activity softened
Meanwhile, freight costs are rising, as wage hikes for long-haul truck drivers have accelerated since the beginning of the pandemic.

Sources: Bureau of Labor Statistics; BCG analysis.

Note: National average wages for heavy truck drivers in the truck transportation industry.
An aging workforce and high turnover contribute to higher labor costs

The number of drivers 55 and older more than doubled from 1994 to 2021...

<table>
<thead>
<tr>
<th>Age Group</th>
<th>1994</th>
<th>2003</th>
<th>2021</th>
</tr>
</thead>
<tbody>
<tr>
<td>20 to 24</td>
<td>9</td>
<td>6</td>
<td>8</td>
</tr>
<tr>
<td>25 to 34</td>
<td>31</td>
<td>23</td>
<td>19</td>
</tr>
<tr>
<td>35 to 44</td>
<td>29</td>
<td>29</td>
<td>23</td>
</tr>
<tr>
<td>45 to 54</td>
<td>20</td>
<td>26</td>
<td>21</td>
</tr>
<tr>
<td>55 to 64</td>
<td>9</td>
<td>14</td>
<td>8</td>
</tr>
<tr>
<td>65 and older</td>
<td>3</td>
<td>13</td>
<td>8</td>
</tr>
</tbody>
</table>

...while annual turnover in truckload fleets is consistently high

<table>
<thead>
<tr>
<th>Year</th>
<th>Small truckload fleets</th>
<th>Large truckload fleets</th>
</tr>
</thead>
<tbody>
<tr>
<td>2016</td>
<td>81</td>
<td>78</td>
</tr>
<tr>
<td>2018</td>
<td>87</td>
<td>79</td>
</tr>
<tr>
<td>2020</td>
<td>89</td>
<td>73</td>
</tr>
<tr>
<td>2022</td>
<td>89</td>
<td>73</td>
</tr>
</tbody>
</table>

Sources: American Transportation Research Institute; American Trucking Association; BCG analysis.

Note: ATRI 2021 data for the “20 to 24” age group includes drivers ages 16 to 19. Because of rounding, the bar segment totals do not add up to 100%.

“Truckload fleet turnover” refers to departure of drivers from their beginning-of-the-year employer, whether to work as a driver for another company or to work elsewhere in some other capacity.
Price hikes for new and used Class 8 trucks contribute to higher overall costs

Sources: American Truck Dealers division of the National Automobile Dealers Association; BCG analysis.
Insurance costs have risen, due in part to financing of third-party litigation that targets the freight industry.

**Sources:** American Transportation Research Institute; Insurance Information Institute; BCG analysis.

According to the Insurance Information Institute:
- Returns on third-party litigation financing are as high as 52% on some investments
- If litigation financing continues to outperform equities and several risky asset classes, “it’s unlikely that investor demand for opportunities will subside soon”
- The impact of this so-called “social inflation” is a $20 billion increase in commercial auto liability payouts from 2010 to 2019.
Companies are increasing their IT spending to keep up with venture-backed digital disruptors

**NUMBER OF ASSET-LIGHT DIGITAL LOGISTICS COMPANIES**

<table>
<thead>
<tr>
<th>Year</th>
<th>Companies</th>
</tr>
</thead>
<tbody>
<tr>
<td>2015</td>
<td>1,100</td>
</tr>
<tr>
<td>2021</td>
<td>1,800</td>
</tr>
</tbody>
</table>

**TOTAL FUNDS RAISED BY DISRUPTORS ($BILLIONS)**

<table>
<thead>
<tr>
<th>Year</th>
<th>Private investment</th>
<th>Mergers and acquisitions</th>
<th>Minority stake</th>
<th>Public offering</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>2017</td>
<td>11</td>
<td>11</td>
<td>12</td>
<td>16</td>
<td>28</td>
</tr>
<tr>
<td>2018</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>2019</td>
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<td>2020</td>
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<tr>
<td>2021</td>
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</tbody>
</table>

**Examples of emerging companies:**
- Freight forwarding software
- Data analytics and AI solutions
- Computer vision
- Blockchain

**Sources:** Quid; BCG analysis.

**Note:** Analysis of 1,900 digital logistics and supply chain management companies that have experienced a funding event since 2017, including private investment, merger or acquisition, or initial stock offering.
Many freight and logistics companies are already taking near-term steps to address the challenging industry dynamics.

### Boost revenue
- Optimize contracts
  - Monitor volumes against contract terms
  - Use technology to track volumes shipped and customer billings to prevent revenue leakage
- Bolster sales by looking beyond price
  - Build more strategic relationships with customers by selling on more than price alone
  - Create digital sales channels

### Reduce costs
- Offer more to deskless workers
  - Boost the employee value proposition beyond pay
  - For example, offer more predictable schedules, and provide training
- Use AI and machine learning to improve safety
  - Identify factors that contribute to safety risk
  - Take preventive measures

Source: BCG analysis.
Companies must consider broad structural changes to successfully reposition for the future

**Redesign the organization and operating model**
- Map out an organization blueprint that removes duplicate roles and optimizes spans of control
- Redefine the operating and governance model

**Optimize the freight network**
- Assess the physical network to identify and eliminate nodes that could be streamlined on the basis of freight demand and network flows
- Redesign routes to lower costs and strengthen service quality

**Review pricing and services**
- De-average pricing, and focus on specific subsegments of the market
- Revisit customer service levels to prevent overservicing

**Go all in on digital**
- Upgrade digital capabilities throughout the business to streamline front-end customer touchpoints and back-end processes
- Explore new digital business models

*Source: BCG analysis.*