Commercial Vehicle Review:
Pondering Demand in a Period of Spiraling Energy Costs

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Overview

• U.S. economy
• TL Carrier Database
• Population Metrics
• EPA’10
• Current CV Market Activity
  • Class 8
  • Classes 5-7
• Forecasts
Forecasting

As we know, there are known knowns. There are things we know we know.

We also know there are known unknowns. That is to say we know there are some things we do not know.

But there are also unknown unknowns, The ones we don't know we don't know.

» Donald Rumsfeld—Feb. 12, 2002,
The Goldi-lost Economy

• Oil price run-up compromises economic outlook/2nd half recovery

• While the situation is precarious, there are some positive signs
  • Demographic shift works in the favor of healthy real wage growth and continued business equipment investment
  • Strong productivity rebound holds back inflation
  • Dollar weakness boosts U.S. leverage as competitor in global export markets
The Key Determinant: $5/gal.

Gasoline, Diesel & Spot Crude Oil (WTIC) Prices
2002-2008 (Week 21)
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YIELD SPREAD
1-Year and 10-Year Treasuries
January 1970 - May 9, 2008

Rate Spread (PP)

May 9:
1YTB: 1.91%
10YTB: 3.77%

Source: Federal Reserve Board, ACT Research: Copyright 2008
Nonfarm Productivity: Output Per Hour

Q1 1996 - Q1 2008

Year Over Year % Change
Commercial and Industrial Loans
January 1996 - April 2008
Billions of Dollars-SAAR
Truckers & Freight

• Too many trucks chasing too little freight as economy softens just as truckers finish EPA’07 overbuy

• Capacity relief from export sales of late-model used equipment
  • Should allow trucker profits to recover sooner

• Carrier profits remain surprisingly buoyant
  • 2007 still 3rd best for profits
  • Fuel prices make for tough Q1-Q2’08

• Bankruptcy rise in line with fuel prices
  » Surcharges don’t recoup all of higher fuel costs
  » 42k trucks sidelined in 935 trucker business failures in Q1
Getting Better?

TL Carrier Database: Average Miles Per Tractor

Q1'95 - Q1 '08

Thousands

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TL Carrier Database: Empty Mile Factor
Q1 '03 - Q1 '08
Will there be Prebuy III?

• Multiple technology solutions
  • SCR: DAF, MB, Volvo
    » Higher new purchase price, lower operating costs
  • EGR: Cummins, MaxxForce
    » Lower new purchase price, higher operating costs

• Unknown costs make for difficult choices
  • Early adapters have no initial recourse to recover higher costs
  • To the extent there are any, early buyers get the bugs
  • Other unanswered questions
    » New price
    » Fuel economy
    » Maintenance requirements
When Truckers Don’t Make Money…

TL Carrier Database:
Carrier Net Income & New US Trailer Orders
Year over Year Percent Change
Q1'95 - Q1 '08

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CV Demand Modeling

• The economy generates the freight hauled by Class 8 tractors and trailers
  • Class 8: 1% GDP growth ~12,500 more U.S. Class 8 population,
  • On average, U.S. consumes about 80% of NA Class 8 build

• Scrappage accounts for ~75% of vehicles purchased
  • Class 8: U.S. replacement at ~160k units/yr.,
  • N.A. replacement at ~200k units/yr.

• While the economy ultimately determines how many trucks/trailers are needed, other factors play a large part in determining when equipment is purchased
U.S. Class 8 Population (Export Adjusted)
Year over Year Percent Change
1990 - 2010

Percent Growth

Freight Growth

Population Growth
Major Difference this Cycle

Fleet Spec Class 8 Truck
(4 years old, 500,000 miles, good condition)
Strong Globe, Weak $ 

Used Class 8 Exports 
1996 - Q1'08 Actual, 2008 Estimated 

Units (Thousands)
Demographics Suggest Fewer Trades

U.S. Cl. 8 - Potential First Trade Volumes
1990 - 2011F

Units (000s)
Overbuy/Underbuy

C8 Pop. Relative to Economic Activity: Export Adjusted

1997 - 2008

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A Happy Indicator

AVERAGE AGE:
U.S. Class 8 Active Population
1990 - 2008 Forecast

Avg. Age in Years

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Class 8 Market Direction

• Class 8 Market Indicators
  • Orders: Average 20k/mo. past 6 months
    » Mexico, Exports still major story in 2008
  • Backlog: Up ~20k since September
  • Build: Rising BL, lower IN set stage for rebound
  • Retail sales: Steady volumes (SA) through 2H’07
  • Inventory: 15k decline in 2007
## Class 8 Order Distribution
(Data through March 2008, annualized)

<table>
<thead>
<tr>
<th>Class 8 Orders</th>
<th>U.S. (000s)</th>
<th>Canada (000s)</th>
<th>Mexico (000s)</th>
<th>Exports (000s)</th>
<th>Total (000s)</th>
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<tr>
<td>2007</td>
<td>106.4</td>
<td>19.1</td>
<td>26.9</td>
<td>31.6</td>
<td>184.0</td>
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<tr>
<td>2H’07 (AR)</td>
<td>129.1</td>
<td>26.9</td>
<td>19.7</td>
<td>34.2</td>
<td>210.0</td>
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<tr>
<td>Q4’07 (AR)</td>
<td>156.1</td>
<td>38.1</td>
<td>15.2</td>
<td>42.1</td>
<td>251.7</td>
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<tr>
<td>Q1’08 (AR)</td>
<td>149.7</td>
<td>18.1</td>
<td>35.7</td>
<td>20.4</td>
<td>224.0</td>
</tr>
<tr>
<td>Mar. (AR)</td>
<td>153.4</td>
<td>22.4</td>
<td>22.2</td>
<td>3.1</td>
<td>201.1</td>
</tr>
</tbody>
</table>
TOTAL CLASS 8: N.A. NET ORDERS
January '00 - March '08 (Not Seasonally Adjusted)
TOTAL CLASS 8 NA:
NET ORDERS (Trailing 12 Months) & BUILD
January '00 - March '08 (Not Seasonally Adjusted)
TOTAL CLASS 8: N.A. INVENTORY/RETAIL SALES RATIO

January '00 - March '08 (Not Seasonally Adjusted)
Class 8 Summary

• Oil/gasoline prices will be the key determinants of U.S. economic activity in coming quarters
  • Economy will determine the speed of US C8 recovery timing
    » Freight determines profits, which in turn facilitate demand
  • If the economy remains weak, truckers have some room to extend trade cycles
    » Extended weakness in ‘08 has implications for 2009 build
  • Truckers already thinking about fleet age ahead of 2010
    » Trucks purchased 2004-2006 will be 3-5 years in 2009
    » Short cycle fleets have limited flexibility
Classes 5-7

• Market not as homogeneous as Class 8
  • 3 Configurations
    – Truck (68%), Bus (18%), RV (14%)

• Due to proximity to home, it is easy for Classes 5-7 customers to defer purchases
  • MD vehicles are not typically profit centers, but costs centers that facilitate core business
Medium Duty Truck Market Description

- Largest N.A. medium duty segment (68%)
- 16,001 to 33,000 lbs GVW (Classes 5-7)
- 150+ different applications
- Demand drivers
  - Consumer spending drives majority of demand
  - New and used home sales, durable goods orders
  - Business spending, government budget issues
TOTAL CLASSES 5-7: N.A. NET ORDERS (12 MMA) & BUILD (3MMA)
January '00 - April '08 (Not Seasonally Adjusted)
TOTAL CL. 5-7: N.A. BACKLOG & BL/BU RATIO
January '00 - April '08 (Not Seasonally Adjusted)
TOTAL CLASSES 5-7:
N.A. INVENTORY, RETAIL SALES & RATIO
January '00 - April '08 (Not Seasonally Adjusted)
Forecast Notes

• 2008: Forecasts should be close to final
  • Oil prices inject greatest variability

• 2009: Strong y/y growth as fleets right-age equipment ahead of 2010 EPA emissions mandate
  • 2009 in heart of trade cycle for 3 to 5 year-old equipment
  • Dealers expected to build inventories
  • Oil prices diverting $ from goods to gas since late 2007 have lowered 2009 forecasts

• 2010: Demand fall-off in early, with late order rebound on the way to a stronger 2011
  • Truckers limit purchases early
  • Dealers work-off inventory
  • Equipment exports and improved economy rebalance supply-demand equilibrium
Summary

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