Sandhouse Gang/TRF Presentation
Transportation Trends & Investment Implications

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**DISCLOSURE APPENDIX CONTAINS IMPORTANT DISCLOSURES, ANALYST CERTIFICATIONS, INFORMATION ON TRADE ALERTS, ANALYST MODEL PORTFOLIOS AND THE STATUS OF NON-U.S ANALYSTS. FOR OTHER IMPORTANT DISCLOSURES, visit www.credit-suisse.com/researchdisclosures or call +1 (877) 291-2683 US Disclosure: Credit Suisse does and seeks to do business with companies covered in its research reports. As a result, investors should be aware that the Firm may have a conflict of interest that could affect the objectivity of this report. Investors should consider this report as only a single factor in making their investment decision.**
Presentation Outline

- Current Transportation Trends across the Modes
- Macro Outlook for Near-Term Growth Trends
- Swing Factors that could Influence Transport Volumes
- Investment Implications
Current Freight Trends

- Truck, Rail, Air and Ocean
- Volume, Price, Productivity and Capital Expenditures
ATA Truck Tonnage Index

Source: ATA

Tonnage appears to have rolled over...
Cass Freight Shipment Index

Although Cass is rebounding…
More B to C?
Pricing Trends - Truck

Source: ACT, Credit Suisse
Key Productivity Trends - Truckload

More trucks and not enough freight would = declining productivity... exactly what we are seeing.

Source: ACT
Capital Expenditure Profile – Truckload Carriers

Time to scale back on the cap-ex

Source: Company filings, Credit Suisse
Capital Expenditure Profile – LTL Carriers

Source: Company filings, Credit Suisse
Rails: Total Industry Volumes

YTD rail volumes are up 0.5%

Source: AAR
Coal volumes are down an ugly 9.6% in 2012.
Rails: Total Industry Volumes, excluding Coal & Ag

Source: AAR

Excluding coal and ag, rail volumes are up 4.1% this year (a better proxy of industrial/consumer activity)

Source: AAR
Pricing has fallen sharply for the Eastern rails; holding up elsewhere.
Key Productivity Trends - Railroads

Still showing productivity, but leaking a bit

Source: Company filings, Credit Suisse
Capital Expenditure Profile – Railroads

Capex remains high for the foreseeable future

Source: Company filings, Credit Suisse
AIR FREIGHT
Air Freight Trends: HACTL

**Total Kilos**

**Export Kilos**

Exports have been negative

Source: Hong Kong Air Cargo Terminal Ltd.
Pricing Trends - Air

Pricing has been VERY weak

Source: Bloomberg
Key Productivity Trends - Logistics

EBIT / Employee

FDX Express

EXPD (LTM Basis)

EBIT per employee is ~40% below pre-recession levels

Productivity for both asset-based and non-asset based air freight/express companies has been deteriorating

Source: Company filings, Credit Suisse
Capital Expenditure Profile – Air Freight

Capital Expenditures % of Sales (LTM Basis)

Source: Company filings, Credit Suisse

Yet capex remains on an up trend; especially for FDX
SEA FREIGHT
Ocean Freight Volumes – W. Coast In & Out Bound

**Loaded Inbound Containers**

- In-Bound containers on a general up trend

**Loaded Outbound Containers**

- Out-Bound containers on a general down trend

Source: HAVER
Pricing Trends - Chinese Containerized Freight Index

Rates have been running up 20%

Source: CCFI, Credit Suisse
Near Term Macro Outlook

- *Not great, but not worse than 2012*
- *IP Rebound?*
- *Global Trade Rebound?*
Global Real GDP Growth (YoY%)

Source: Credit Suisse, Thomson Reuters, DataStream

Modest improvement in global GDP
China Real GDP Growth (YoY%)

Source: NBS, Credit Suisse

China growth re-accelerating?
The fiscal drag is ramping up in the US…
But Ramping down in Europe

Source: Credit Suisse, Thomson Reuters DataStream
Global Trade vs. Global GDP: Weak 2012 Performance...

Global trade was well below trend relative to global GDP

$y = 3.58x - 0.07$

$R^2 = 0.71$

Source: IMF, Credit Suisse
was driven by Europe…

Recession in Europe had outsized effect on global trade relative to global GDP

Source: Thomson Reuters, Credit Suisse
Global PMI and New Orders Component

Headline PMI

New Orders Component

Global PMI New Orders look to be picking up modestly (though still below 50)

Source: Thomson Reuters DataStream
China PMI and New Orders Component

Headline PMI

New Orders Component

This is encouraging...

Source: Thomson Reuters DataStream
Europe PMI and New Orders Component

Headline PMI

New Orders Component

Source: Thomson Reuters DataStream

...This is not.
Fiscal Cliff concerns showing up in US PMI New Orders?
Global Industrial Production Momentum

Source: Thomson Reuters DataStream, Credit Suisse

CS Strategists calling for rebound in global IP momentum
CSBMI vs. Global Industrial Production Momentum

- CSBMI, 3m ma, lhs
- Global IP Momentum, 3m/3m% ann., rhs

Source: Thomson Reuters DataStream, Credit Suisse

CS basic materials index is a good lead indicator
Freight Cycle – Where are we Headed?

Key variables in our model:
- Manufacturer orders of consumer goods;
- Manufacturing IP;
- Real exports of goods;
- Real interest rates

Our Freight Forecaster is calling for modest tonnage growth

Source: ATA, Credit Suisse
Credit Suisse Freight Forecast

ATA Absolute Tonnage Level

Y/Y change in Tonnage

...Although the YoY comparisons will look awful in 4Q12 and 1Q13

Source: ATA, Credit Suisse
ATA Tonnage vs. Rail Carloads

While technically the index forecasts truck tonnage, it is an equally good proxy for rail carloads.

Source: AAR, ATA
Swing Factors

- Housing
- Tight retail inventories
- Autos
- Coal
- Crude by Rail
Existing home sales have been growing ~10%/yr; abs level still 30% below peak.
New home sales have been growing ~30%/yr; abs level still >50% below peak
The inventory glut of both new and existing homes has largely been cleared up; this should allow for continued sales growth in 2013.

Source: National Association of Realtors
2012 was marked by modest retail sales growth around 2%

Source: FactSet
Retail: Inventory to Sales Ratios

And inventories remain very tight; this has meant very little growth for transport providers and another anemic ‘peak’ season.

Source: Census Bureau
Vehicle sales have rebounded steadily since the recession; but we think the growth rate will slow in 2013.
Autos: U.S. Light Vehicle Production

U.S. Light Vehicle Production (units)  Y/Y Change (RHS)

Source: Autodata

Ditto for North America vehicle production
Production has grown faster than sales, as inventories had to be re-stocked; but that effect should diminish in 2013.
Coal: Met and Steam Exports

Strong 2012 coal exports will create difficult comparisons in 2013

Source: EIA
Export Coal Volumes Face Tough comps in 2013

Export volume at NS has already rolled over; CSX will show a decline in Q4.

Source: Company filings
Coal: Met and Steam Price Trends

Met Prices

Steam Prices

Any hope for improved volume will have to come from better global prices.

Source: Platts, Bloomberg
Coal: Inventory Levels and Power Demand from Coal

Inventory Levels

Power Demand from Coal

... And the domestic coal situation is still a disaster, marked by overstocked inventories and plunging coal-fired power demand.

Source: EIA
Natural Gas Low by Historical Standards, but…..

That said, a rebound in nat gas prices should help PRB coal perform better in 2013 than it did in 2012.

Source: FactSet
….. Prices have rebounded since bottoming in early 2012

And this could benefit PRB coal in 2013 versus 2012.

…Although the latest move has been back to the $3.30-$3.40 range.

Source: FactSet
Crude by Rail

- North Dakota's oil production has grown in the last three years from a trickle to over 700,000 barrels a day.
- Continental Resources plans to triple output in the next 5 years to 300,000 barrels per day.
- Pipelines in the region already are operating at capacity, and major new lines are not expected to go into service until 2013.
- 40% of oil originating in the Bakken moves by rail.
- The North Dakota Pipeline Authority estimates a doubling in rail-terminal capacity in 2012 alone to more than 700,000 barrels a day.
- More than 70% of the oil in North Dakota is moved from well to rail terminal or pipeline by tractor trailers.
- Oil traders estimate that transporting crude by rail can cost on average $5 to $10 a barrel more than by pipeline.

Source: KSU presentation

Shale development and crude-by-rail is the hottest topic in the industry right now;

Our view is that this will be a positive source of growth for the rails for years to come.
Testimony to Crude by Rail

“Rail projects can go in quicker than pipeline projects, and right now there is a shortage of pipeline infrastructure out of (the shale plays)” – Mike Moeller, Director of Enbridge Pipelines

“We are working on several different opportunities that involve pipeline and rail...it is in conjunction with the sale plays explosion” – Bill Henderson, Vice President of Liquids Development for Kinder Morgan

“[Oneok Partners] said there wasn’t enough interest to move ahead with a planned 1,300 mile oil pipeline from the Bakken oil play...the project would have carried as much as 200,000 barrels of crude oil per day.” – United Press International, Inc.

Source: KSU presentation
Crude & Petroleum Product Deliveries by Rail Increasing

Crude and petroleum product carload growth has averaged ~30% y/y in 2012 vs. 2011

Source: AAR & U.S. Energy Information Agency
Intermodal – Growth Opportunities Everywhere

And, of course, domestic intermodal is still seen as a multi-year, secular growth trend for the rails.

Source: CSX
Investment Implications

- *Favorite names:* UNP, KSU
- *Names to consider:* EXPD, FDX
- *Structurally challenged:* CHRW, TL, FDX
Conclusions & Investment Implications

- Western railroad opportunity vis-à-vis crude oil and PRB coal exposure.
  - Our preferred plays here are UNP and KSU

- Air Freight and Global Forwarders could stand to benefit from an uptick in Global IP Momentum as called for by our Global Strategy team and a reversion to the mean in global trade vs. global GDP growth.
  - If the rebound is for real, beneficiaries would include FDX and EXPD
Conclusions & Investment Implications

- That said, we think the trade-down effect (air to ocean; priority to economy) is a secular problem creating significant margin pressure for companies like FDX.

- We also think that brokerage, in general, is subject from increasing competition and technology encroachment.

  - This seems to be particularly true for CHRW

- And the TL sector faces a host of challenges, including driver shortage, higher equipment costs and competition from rail intermodal.
### Coverage Universe

**Transportation**

<table>
<thead>
<tr>
<th>Railroads</th>
<th>SMID Cap Rails</th>
<th>Truckload</th>
<th>LTL</th>
<th>Airfreight</th>
<th>Logistics</th>
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<td>OVERWEIGHT</td>
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<table>
<thead>
<tr>
<th>Symbol</th>
<th>Rating</th>
<th>TP</th>
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<tbody>
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Source: Credit Suisse, FactSet
ATA Truck Tonnage Index

Source: ATA
Cass Freight Shipment Index

Source: Cass

CASS - Shipments

y/y change (RHS)
Air Freight Trends: HACTL

**Total Kilos**

- y/y change (RHS)

**Export Kilos**

- y/y change (RHS)

Source: Hong Kong Air Cargo Terminal Ltd.
Ocean Freight Volumes – W. Coast In & Out Bound

Loaded Inbound Containers

Source: HAVER

Loaded Outbound Containers
Disclosures
As of December 10, 2012, Analysts' stock rating are defined as follows:

**Companies Mentioned**

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<tr>
<th>Company Name</th>
<th>Price</th>
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<td>C.H. Robinson</td>
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<td>Canadian National</td>
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<td>Com-Way Inc.</td>
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<td>KARI Auction Services</td>
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<td>Knight Transportation</td>
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<td>YRC Worldwide, Inc.</td>
<td>$4.86</td>
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</tbody>
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**Disclosure Appendix**

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<table>
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<th>Rating</th>
<th>Versus universe (%)</th>
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<td>Outperform/Buy*</td>
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<tr>
<td>Neutral/Hold*</td>
<td>39%</td>
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<td>Underperform/Sell</td>
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*For purposes of the NYSE and NASDAQ ratings distribution disclosure requirements, our stock ratings of Outperform, Neutral, and Underperform most closely correspond to Buy, Hold, and Sell, respectively; however, the meanings are not the same, as our stock ratings are determined on a relative basis. Please refer to definitions above.*

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