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K RATIO



TRUCKING FREIGHT FUTURES

Launching March 29, 2019

In partnership with:

> nodal

DAT

 FREIGHTWAVES



WHO

FreightWaves is building a world-class community in freight that uses data and technology to understand, react, project changes, and de-risk the market.

WHY

To empower a freight community that's struggling to deal with the risks and volatility of being exposed to the freight markets with data, insights and actionable tools.



Market Size and Opportunity



Recent Futures Contract Markets



WTI Crude Oil Futures
\$421 billion underlying industry



Henry Hub Natural Gas Futures
\$138 billion underlying industry



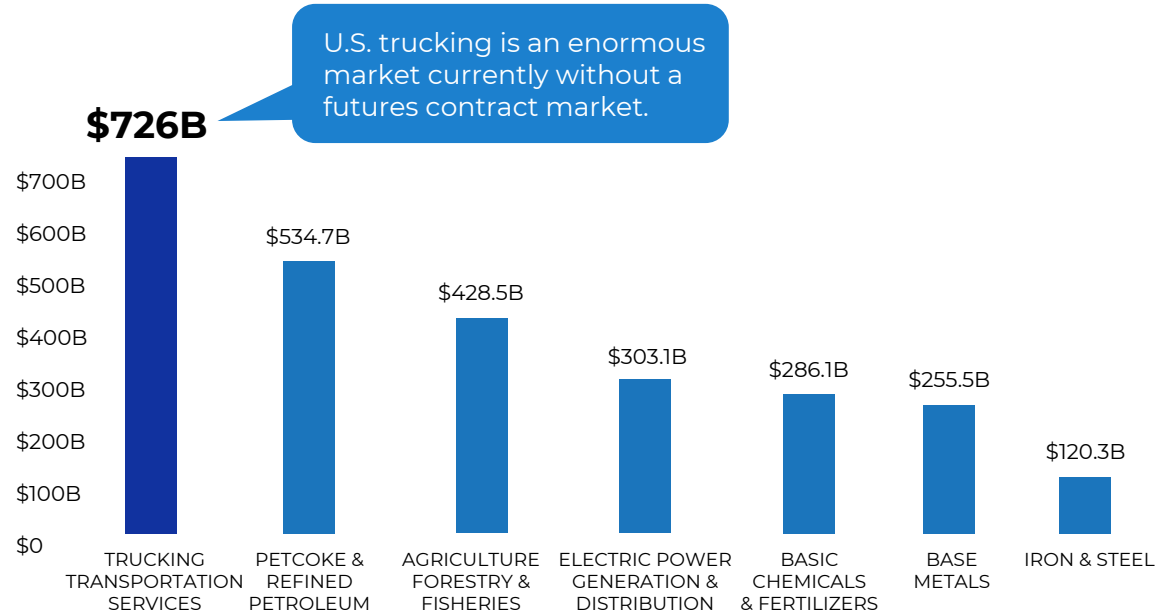
Electricity Futures
\$390 billion underlying industry

Market Opportunity

The trucking market is valued at over \$726B.

Futures markets operate in multiples by nature.

Making the theoretical size of the futures market for trucking upwards of \$2.8T.

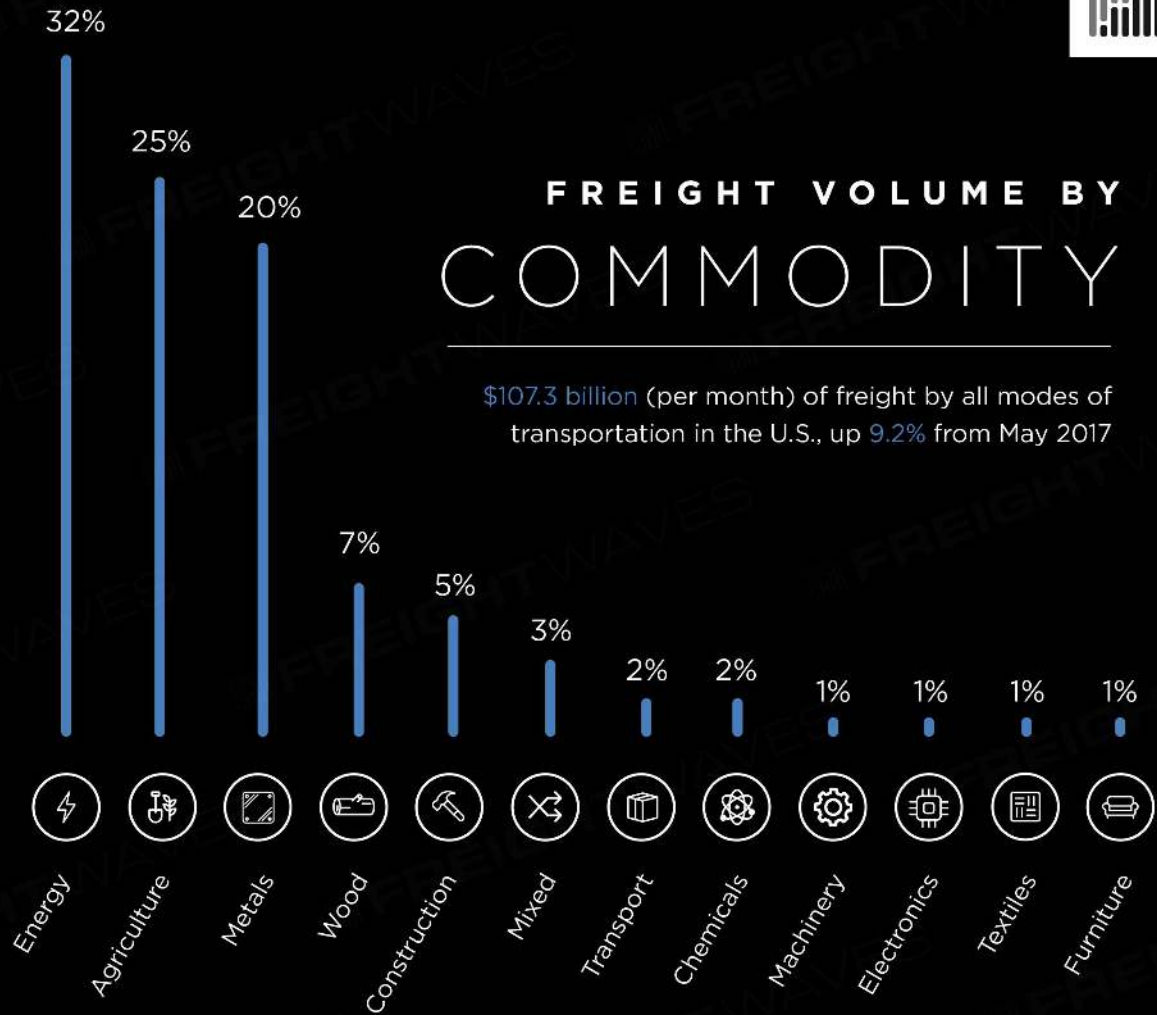


Data source: Oxford Economics. Information based on forecasted 2017 revenue estimates for each industry sector.



Physical commodities make up the majority of goods being moved by surface transportation.

Approximately 84%, including Energy, Ag, Industrial Metals, Chemicals and Wood have futures traded against them.

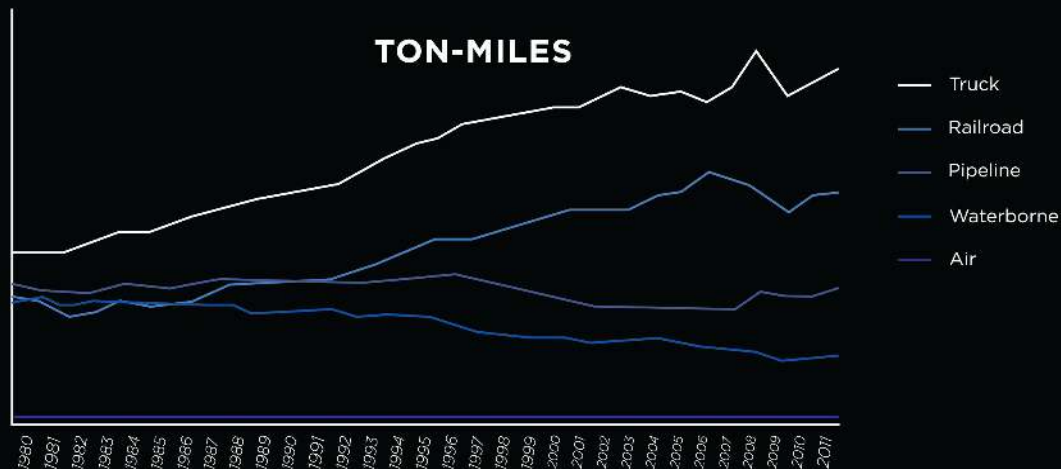


Trucking is the largest mode of transport in the U.S. and grows slightly faster than U.S. GDP

FREIGHT TRENDS BY MODE



Ton Miles (bill.)



AVERAGE ANNUAL GROWTH RATE

	1990-2000	2000-2010	2010-2015	FORECASTED 2015-2040
TRUCK :	+3.2%	+1.0%	+3.0%	+1.6%
RAILROAD:	+3.8%	+1.1%	+1.4%	+0.6%
PIPELINE:	-0.8%	+0.5%	+1.5%	-0.3%
WATERBORNE:	-2.8%	-2.0%	-1.8%	+0.6%
AIR:	+1.1%	+1.0%	+0.9%	+0.8%
TOTAL TON MILES: (TRILLIONS)	+1.6%	+0.6%	+1.9%	+1.0%



Freight Industry Sizing

- Transportation costs represent 8% of U.S. GDP
- Freight is a larger COGS than energy in many sectors of the economy
- 40% of S&P 500 companies have stated that freight and transportation costs are the most substantial risk to their earnings.



Massive Volatility in the Trucking Spot Market

DAT Van Freight Rate Index (Los Angeles to Dallas) ¹ 0 (2.71%)

+ Compare...

FREIGHTWAVES
SONAR

PRICE: 1.250
VOL: No H





Freight Market Volatility Drivers



GOVERNMENT
REGULATIONS



TRADE POLICY &
BALANCE



WEATHER



SEASONALITY



DRIVER
AVAILABILITY



COMMODITY
SUPPLY



CONSTRUCTION
ACTIVITY



MANUFACTURING
ACTIVITY



CONSUMER
SPENDING



MARKET
TRENDS



Why Now?

Technology Evolution

- Ubiquity of Telematics
- Cloud vs. On-Premise
- Interconnected Systems
- Mobile Devices

Market Forces

- ELD Mandate & Regulatory
- Labor Shortage
- Amazon Impact
- Capacity Crunch



**Who is naturally exposed to
freight market volatility?**



What About the Trucks?

Financially settled futures contracts.

No truck will show up. EVER.



Trucking Companies

4500+ companies with +\$20M in revenue per year



Shippers

20,000 that spend more than \$10M on trucking freight per year



Freight Brokers

1,600 with \$10M revenue per Year





What you need to build a liquid futures market



Large & Volatile Market



Benchmark Index



Exchange & Clearing



Market Data, News & Insights



Contract Market Size Potential

**40 billion miles =
40 million futures contracts**



The Exchange & Clearing



Nodal Exchange

Derivatives exchange providing price, credit and liquidity risk management to participants in the North American commodities markets.

Nodal Clear

Clearing house using portfolio margining that provides participants risk management and capital efficiency advantages.



Nodal Exchange FCMs

12 approved FCM clearing members for Nodal Exchange:

- ADM Investor Services Inc.
- BNP Paribas Securities Corp.
- Citigroup Global Markets, Inc.
- E D & F Man Capital Markets Inc.
- Goldman Sachs & Co. LLC
- Macquarie Futures USA LLC
- Merrill Lynch, Pierce, Fenner & Smith
- Mizuho Securities USA LLC
- Morgan Stanley & Co. LLC
- RBC Capital Markets LLC
- SG Americas Securities LLC
- Wells Fargo Securities LLC



Tucking Freight Futures: Trade Execution

Nodal T7 Matching Engine

Deutsche Börse ultra-low latency trade matching system used by Eurex, EEX and now Nodal Exchange (launched November 2018)

Nodal T7 Trading Platform

Nodal Exchange's web-based trading screen, powered by **CQG**, provides access to Nodal's markets and is connected to the Nodal T7 trading architecture

Nodal BlockTrade

Block trade submission of Nodal Exchange's futures and options contracts

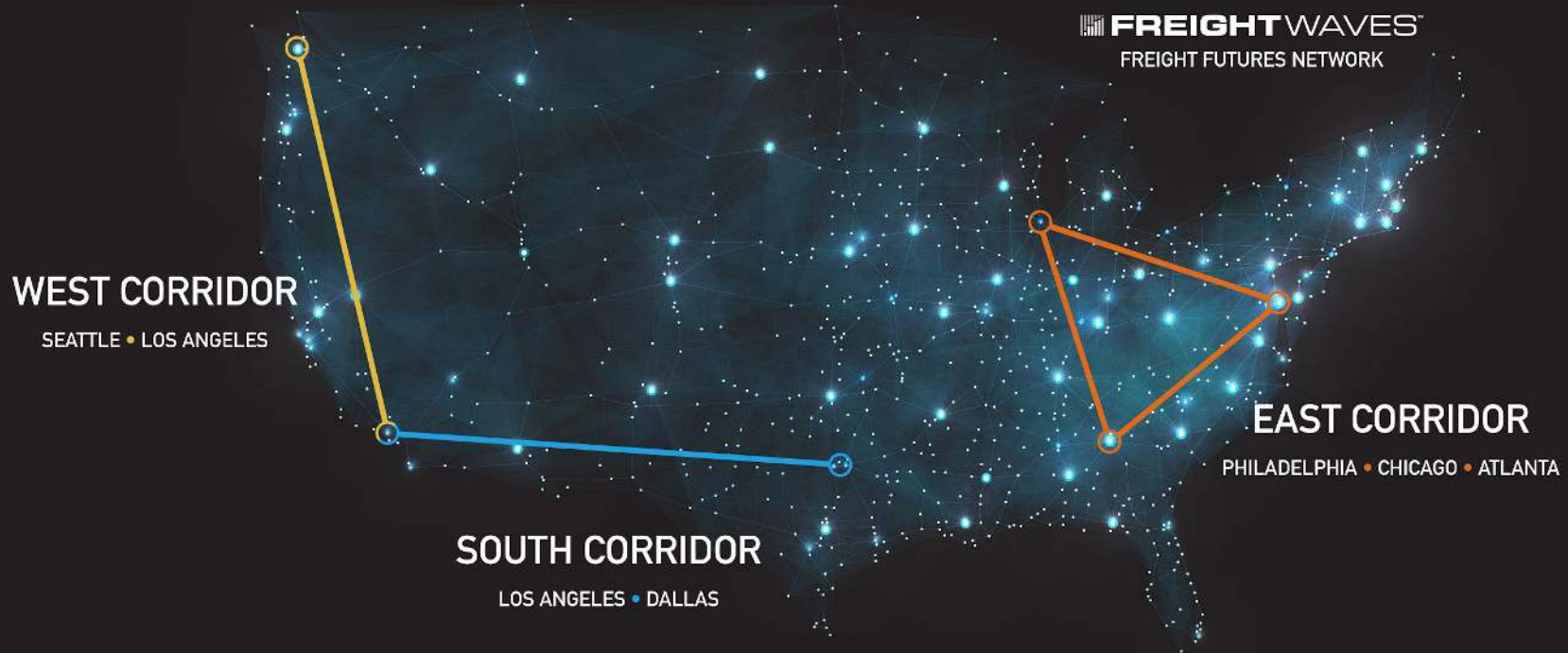
FreightWaves SONAR

Direct link to launch Nodal's CQG Platform



Trucking Freight Futures Contract Highlights

Trucking Freight Futures Contract Lanes



Through a partnership between FreightWaves, Nodal Exchange as the DCM, and DAT for the spot rate index to settle all freight futures contracts, Trucking Freight Futures contracts will allow market participants to hedge exposure to rate volatility within the three largest U.S. freight corridors, as well as nationally.



Futures Contract Highlights

- **Eleven Contracts:**
 - Seven (7) directional lanes: (Seattle-LA, LA-Dallas, Philadelphia-Chicago-Atlanta)
 - Three (3) regional indices (West, South, East)
 - One (1) national average indices
- **Contract Type:** Monthly, cash settled (no physical delivery of trucks or goods)
- **Market Indices:** Based on trucking spot rates only (excludes contracted business)
- **Settlement:** Daily
- **Position:** Open and marked-to-market
- **Type:** Dry van line haul rate only (excludes diesel fuel price)
- **Lot Size:** 1,000 mile
- **Currency:** USD
- **Contract Series:** 16 Months



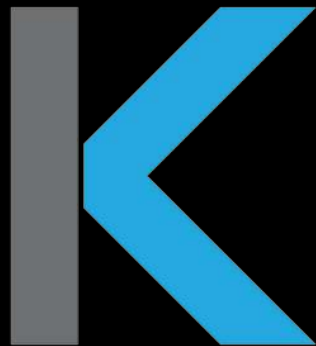
Market Index Partner



Operates the largest truckload freight marketplace in North America. Derived market trends and data insights from 256 million freight matches in 2018, and a database of \$60 billion of market transactions.



Trucking Freight Futures Trade Simulator Demo



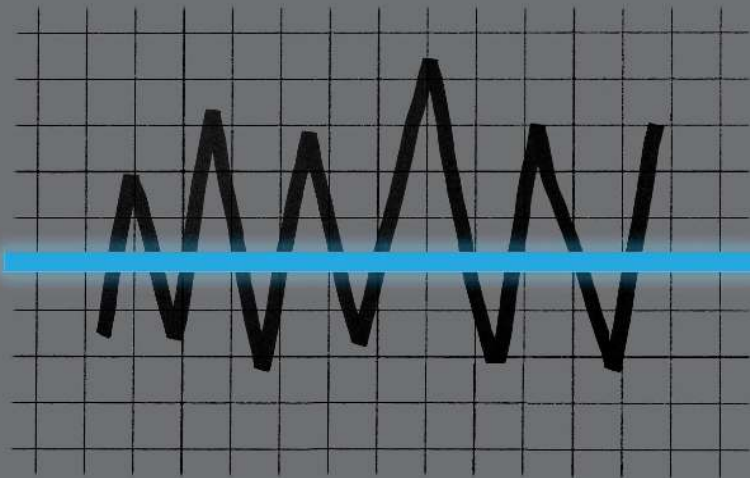
R A T I O

FREIGHT FUTURES | USE CASES



MISSED EARNINGS

- In 2018, companies cited increased shipping costs as a key driver for missed earnings.
- The unpredictability of the freight markets year-to-year and season-to-season creates a challenging environment to accurately forecast input costs and subsequent earnings.
- Hedging in the Freight Futures Market is an exercise in enterprise value protection.
- Losses are not limited to the increased freight expense for the quarter and year; the subsequent decrease in EBITDA x Industry Multiple can result in billions of dollars of market losses.

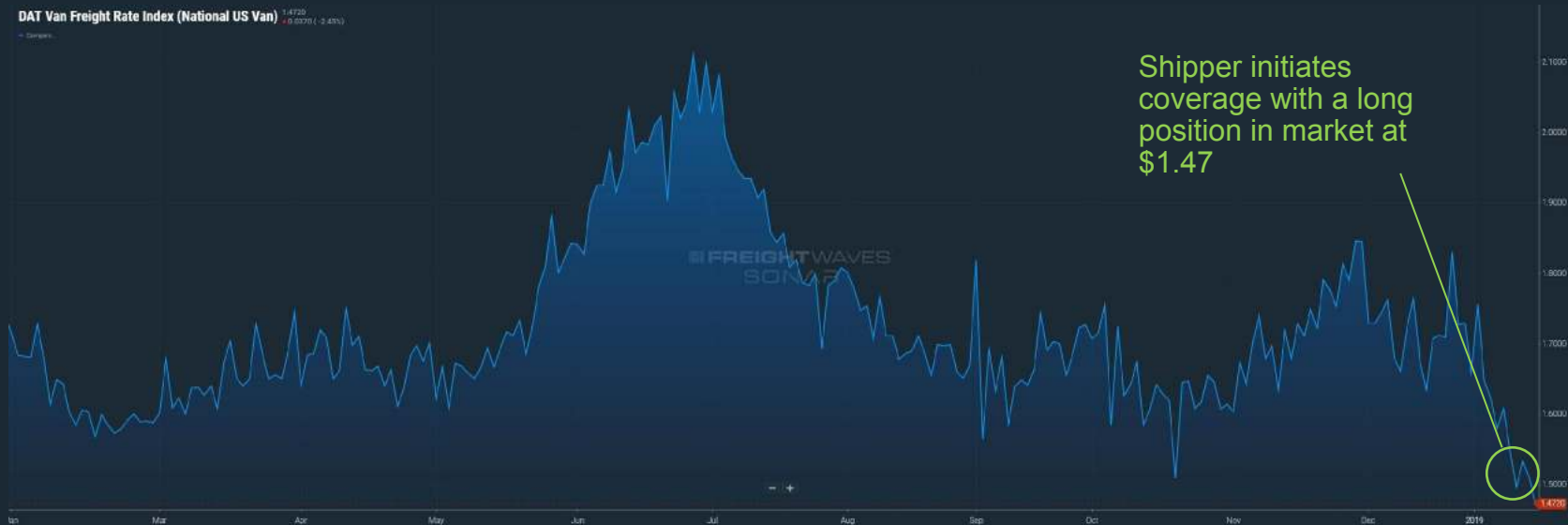


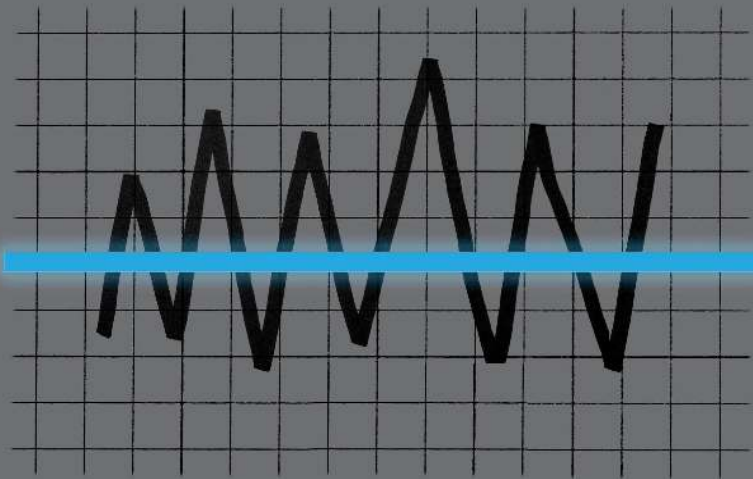
Smoothing Volatility

VARIABLE COST TO FIXED COST

- Q1 2018 Coca-Cola freight costs were up as much as 20%
- As a result Coca-Cola increased prices, passing along the cost pressures from freight and metals to consumers.
- But what happens when the pass-throughs can no longer be supported?

SHIPPER HEDGE





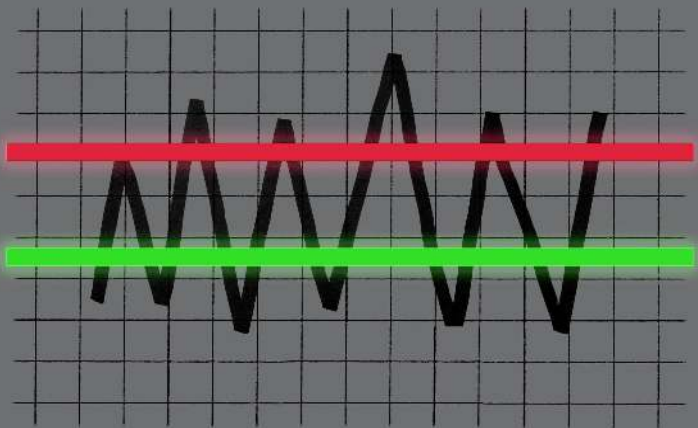
Reducing Uncertainty in RPM's

VARIABLE REVENUE TO FIXED REVENUE

During times of inflated RPM's carriers will be able to hedge inevitable market corrections.

CARRIER HEDGE



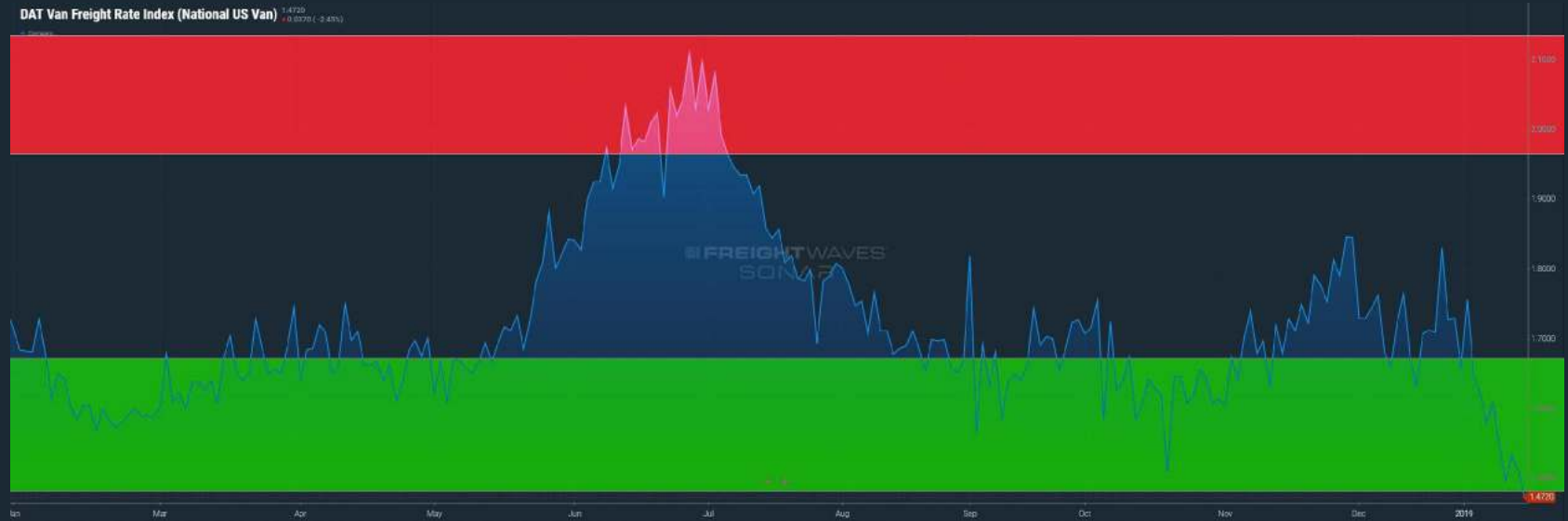


Multiple Positions Creating 3PL Hedge

FIXED OPERATIONAL REVENUE & FIXED CARRIER EXPENSES

For a 3PL to remain competitive, they will need to install strategies for operational downside as well as protecting their contracted rates with shipper customers.

3PL PROTECTION



3PL REVENUE HEDGE



3PL EXPENSE HEDGE





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Need More Information?

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