

October 9, 2017

North America Freight Transportation

Freight Pulse 47 Shipper Survey: TL Pricing Expectations Jump to 2014 Levels

In our latest survey, Shippers' view of the economy continued to improve for the fourth consecutive survey and is now tracking at the sixth highest reading since our survey's inception in 2002 and the highest since September 2006. Across Rail, Truck, and Parcel modes, pricing growth expectations accelerated from FP46, while volume growth expectations broadly decelerated. Specifically, TL price growth expectations increased to the highest level since 2014. Respondents also expect tighter capacity across all transportation modes in six months. Notably, fewer Shippers noted plans to reduce inventory levels relative to our prior survey. Below we provide our key takeaways for general Freight, Rail, Truck, and Parcel.

Freight/Macro Highlights: (1) Shippers' Economic Outlook Continues to Improve Though Still Shy of 2004-07 Levels; (2) Shippers' View of Auto Falls Post Peak; Retail Sees Biggest Improvement; (3) Fewer Shippers Plan to Reduce Inventory Levels Compared to FP46; (4) Respondents Expect Tighter Capacity Across All Modes; (5) Shippers See Deteriorating Service Levels Across Most Modes; Rail and Intermodal See Sharpest Declines; (6) Shippers Willingness to Use "Uber for Freight" Apps Increases to ~35%

Rail Highlights: (1) +1-3% YoY Expected Change in Rail Volume; Volume Index Continues to Decline; (2) ~40% of Shippers Expect a 3-5% YoY Increase in Rail Rates, Up From Our Previous Survey but Pricing Index Remains <2.0; (3) More Shippers Expect to Decrease Rail Spend; Difficulty of Rail Rate Negotiations Increases But Remains Low Relative to Prior Years; (4) Intermodal Discount to TL (Ex. Fuel) Increases, Though Still Below Historical Average; (5) Rail Service Reliability and Value For Dollar Decrease to Lowest Levels Since 2015

Truck Highlights: (1) TL Volume Growth Expectations Decline from FP46, Though Remains Well Above Other Truck Modes; National LTL Sees Biggest Increase; (2) TL Base Rate Expectations Jump to 2014 Levels; (3) Expectations for Tighter Capacity Across All Truck Modes; TL Tightest Reading Since December 2014; (4) Fuel Efficiency Continues to be the Most Important Driver to Intermodal Growth; TL Rate Increases Fast Approaching; (5) TL Price Discounts vs. Intermodal Continue to Slip Slightly from Elevated Levels

Parcel Highlights: (1) Ground and Int'l Volume Growth Outlook Decline; Slight Increase in Air; (2) Shippers Anticipate ~2% Average Parcel Base Rate Increase Over Next 6 Months for Air, Ground and Int'l; (3) Shippers' Expectations for B2C as % of Total Parcel Shipment Increase from Prior Survey; (4) Shippers View Price as More Important Driver Than Service for Switching Ground and Air Parcel Carriers, Spread Between Price and Service for Ground Widens; (5) According to Shippers, Discounts Have Increased for FDX Air and Decreased for FDX Ground and UPS Air and Ground from Prior Survey

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Freight Pulse: General Freight and Macro Highlights

General Freight and Macro Highlights

Freight Pulse: General Freight and Macro Key Takeaways

1. Economic Outlook

- Shippers' Economic Outlook Continues to Improve Though Still Shy of 2004-07 Levels

2. Economic Outlook by Industry

- Shippers' View of Auto Falls Post Peak; Retail Sees Biggest Improvement

3. Inventory & Restocking

- Fewer Shippers Plan to Reduce Inventory Levels Compared to FP46

4. Capacity Expectations

- Respondents Expect Tighter Capacity Across All Modes

5. Service Trends

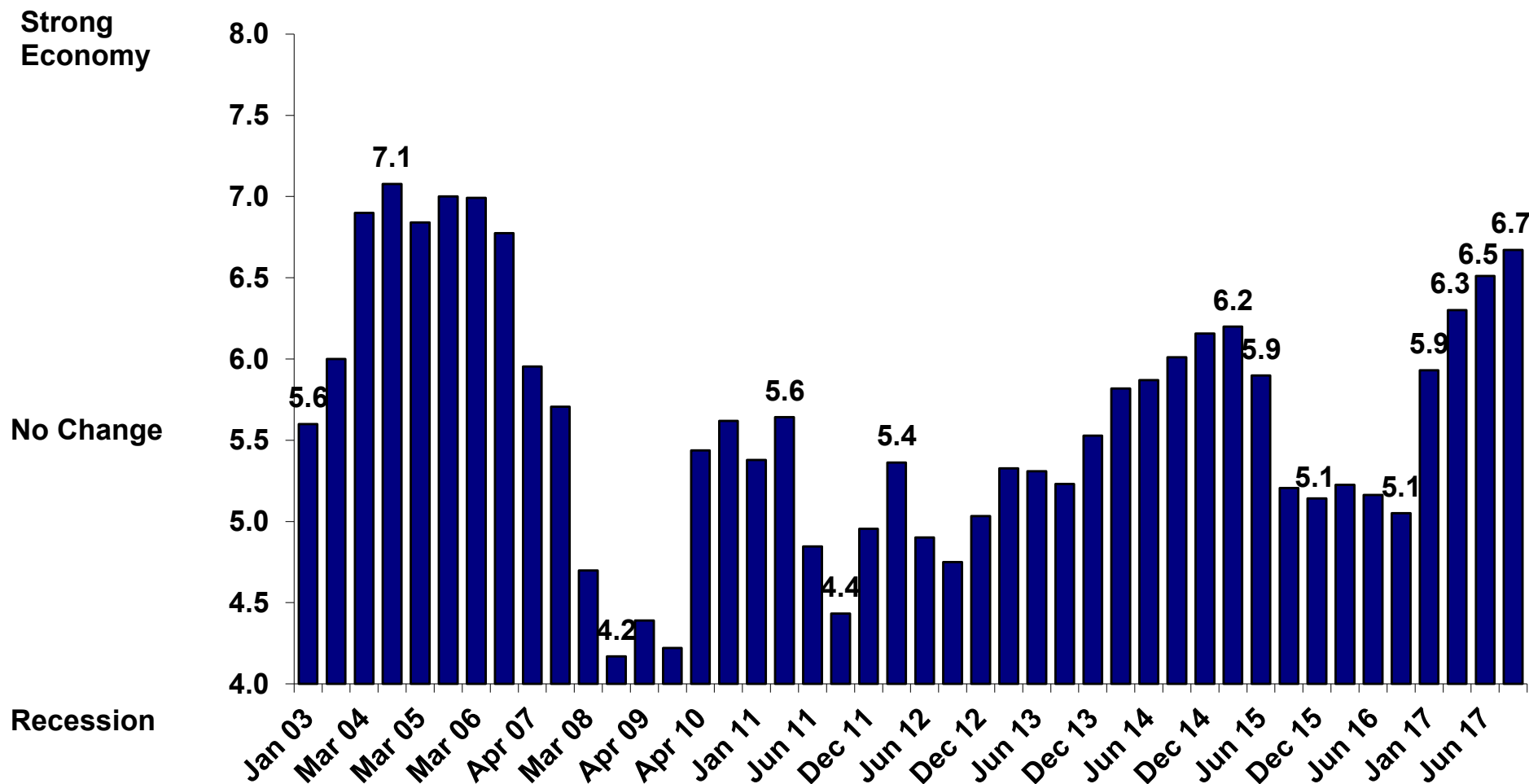
- Shippers See Deteriorating Service Levels Across Most Modes; Rail and Intermodal See Sharpest Declines

6. Uber for Freight

- Shippers Willingness to Use "Uber for Freight" Apps Increases to ~35%

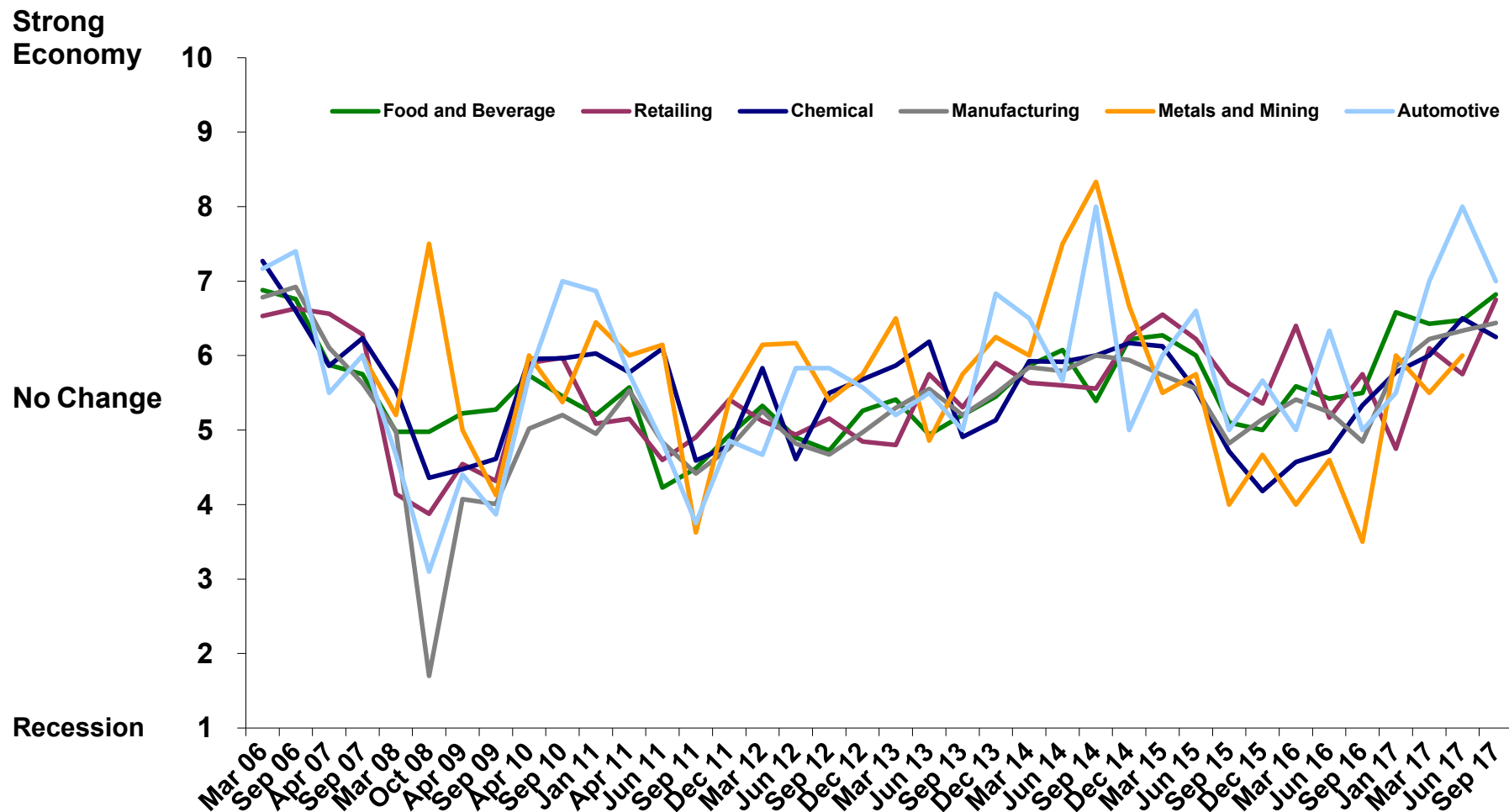
1. Shippers' Economic Outlook Continues to Improve Though Still Shy of 2004-07 Levels

State of the Economy from Shippers' Perspective



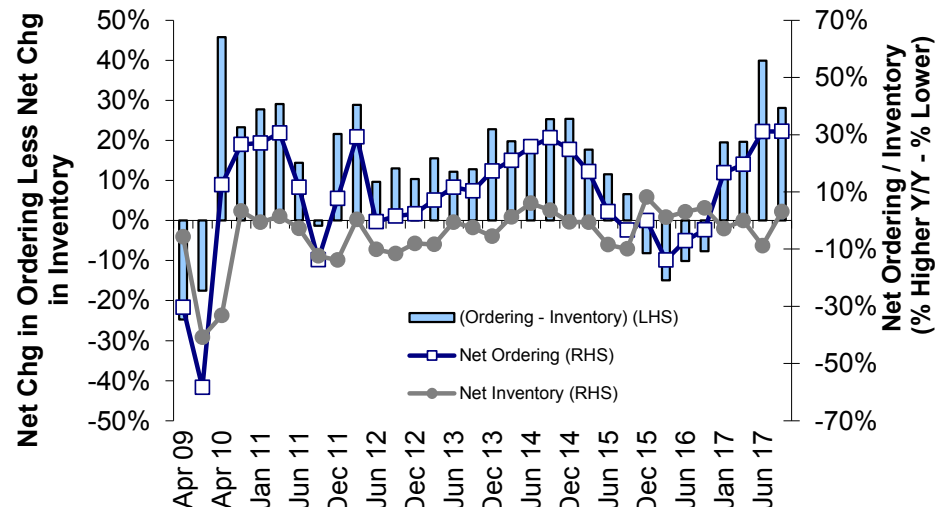
2. Shippers' View of Auto Falls Post Peak; Retail Sees Biggest Improvement

Shippers' View of the Economy by Industry

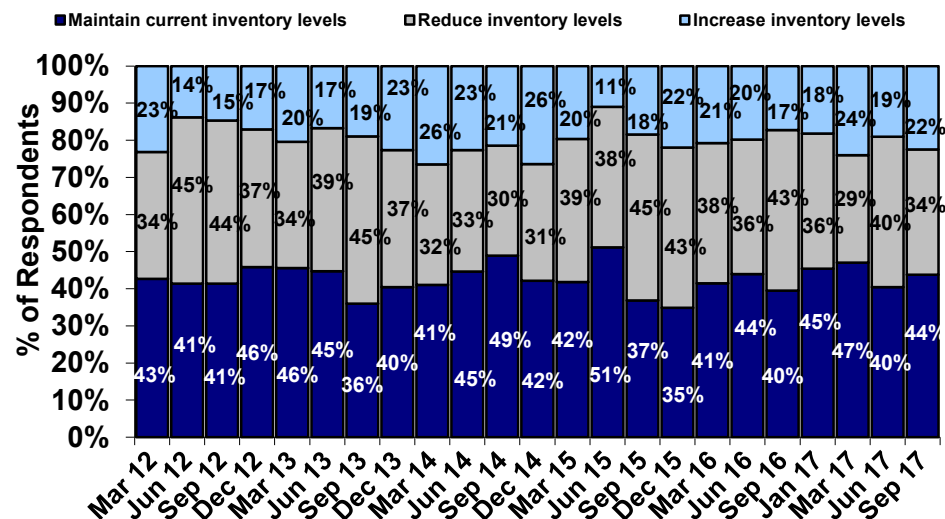


3. Fewer Shippers Plan to Reduce Inventory Levels Compared to FP46

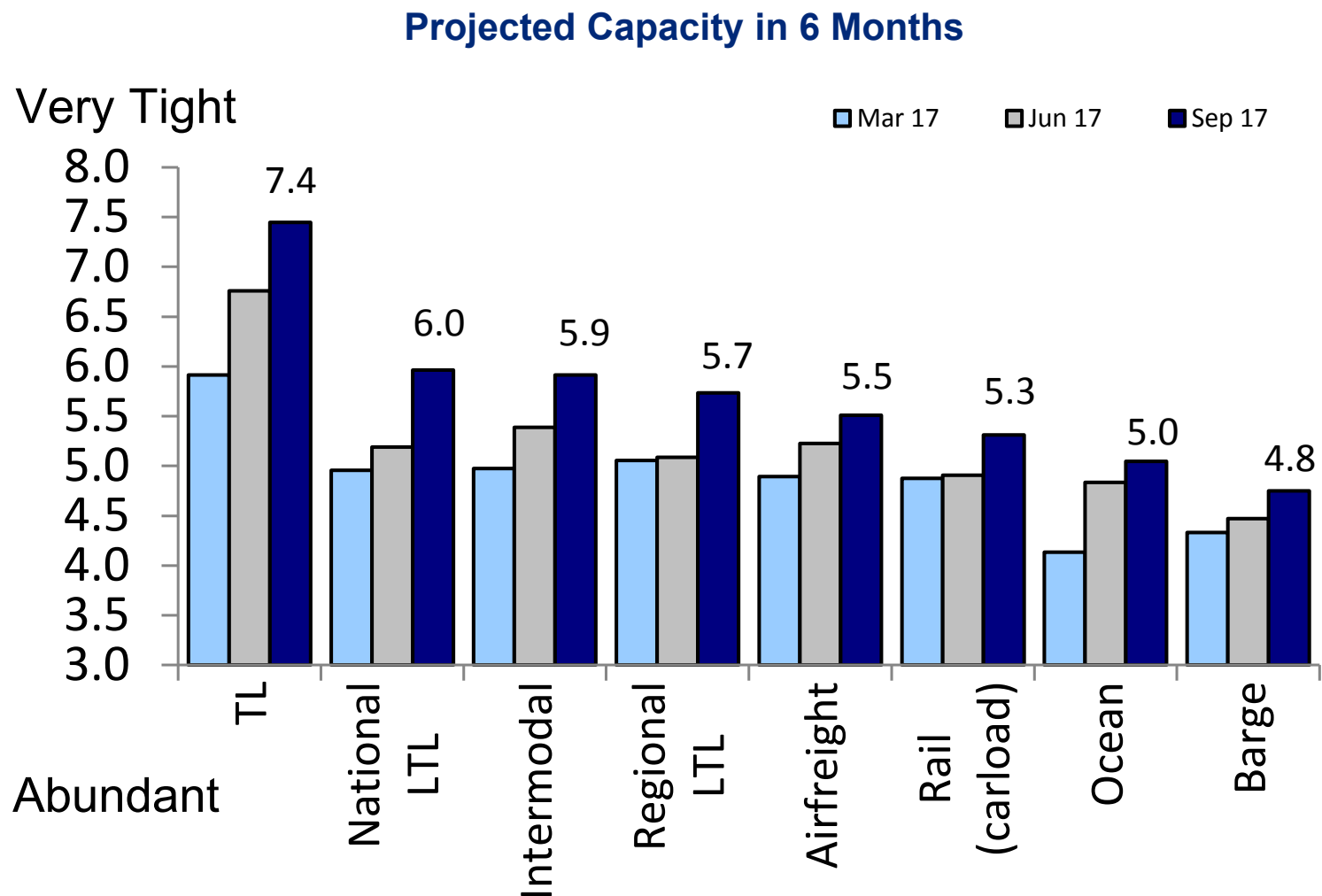
Shippers' Net Y/Y Orders vs. Net Y/Y Inventory



Shippers' Inventory Plans

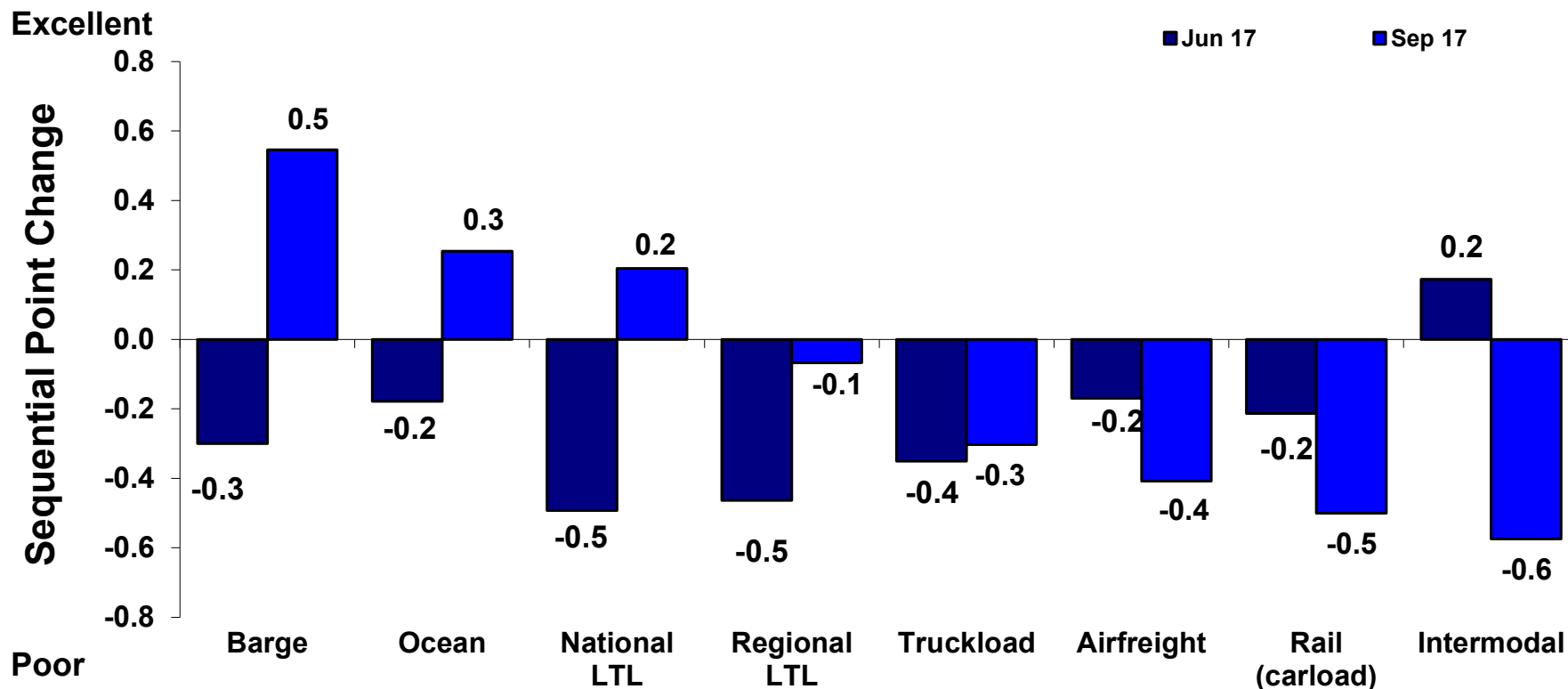


4. Respondents Expect Tighter Capacity Across All Modes



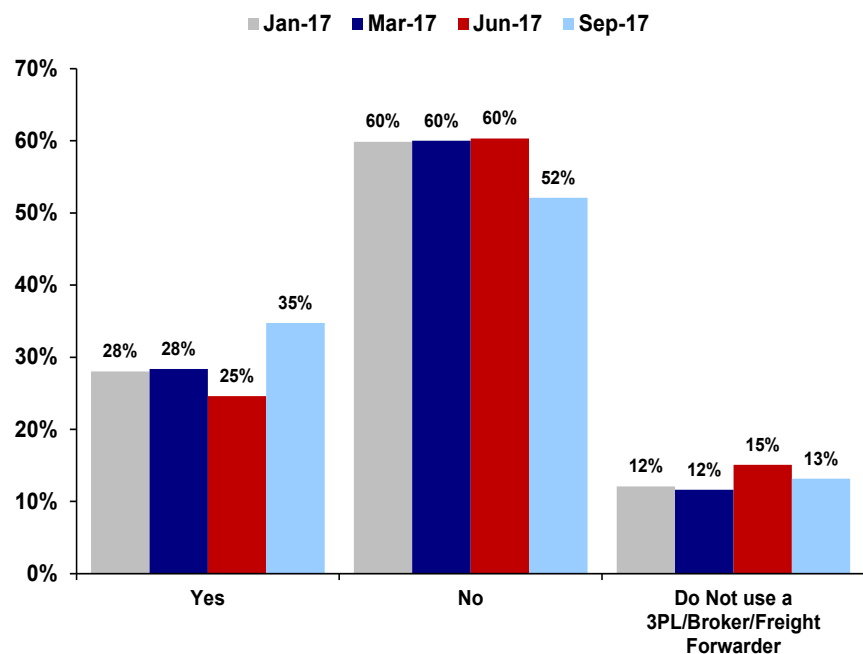
5. Shippers See Deteriorating Service Levels Across Most Modes; Rail and Intermodal See Sharpest Declines

How would you rate service levels among different modes of transportation for the past 6 months?

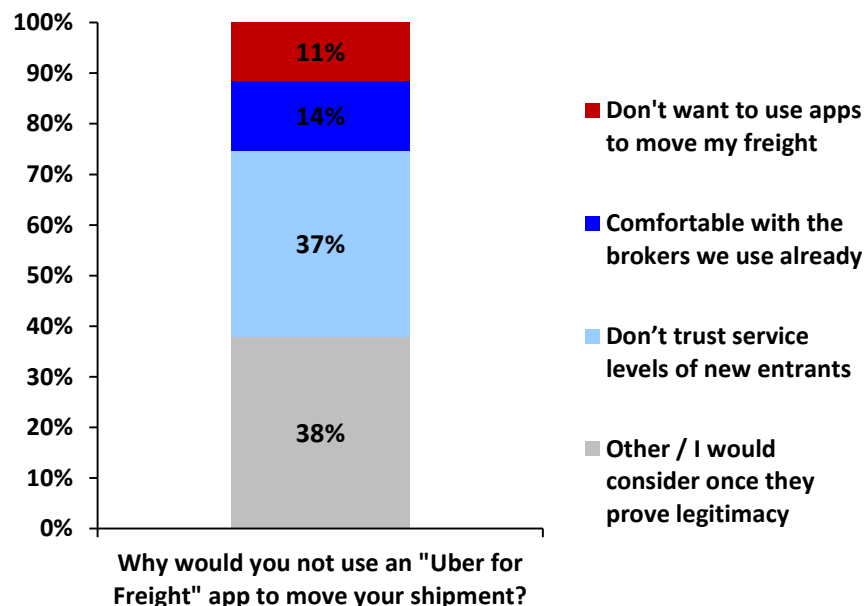


6. Shippers Willingness to Use “Uber for Freight” Apps Increases to ~35%

If an “Uber for Freight” app offers a commission of about 5%, would you use it instead of a traditional third-party broker?



Respondents who said No: Why would you not use an “Uber for Freight” app to move your shipment?



Freight Pulse: Railroad Highlights

Railroad Highlights

Freight Pulse: Rail Key Takeaways

1. Rail Volume

- +1-3% YoY Expected Change in Rail Volume; Volume Index Continues to Decline

2. Pricing

- ~40% of Shippers Expect a 3-5% YoY Increase in Rail Rates, Up From Our Previous Survey but Pricing Index Remains <2.0

3. Spending

- More Shippers Expect to Decrease Rail Spend; Difficulty of Rail Rate Negotiations Increases But Remains Low Relative to Prior Years

4. Intermodal

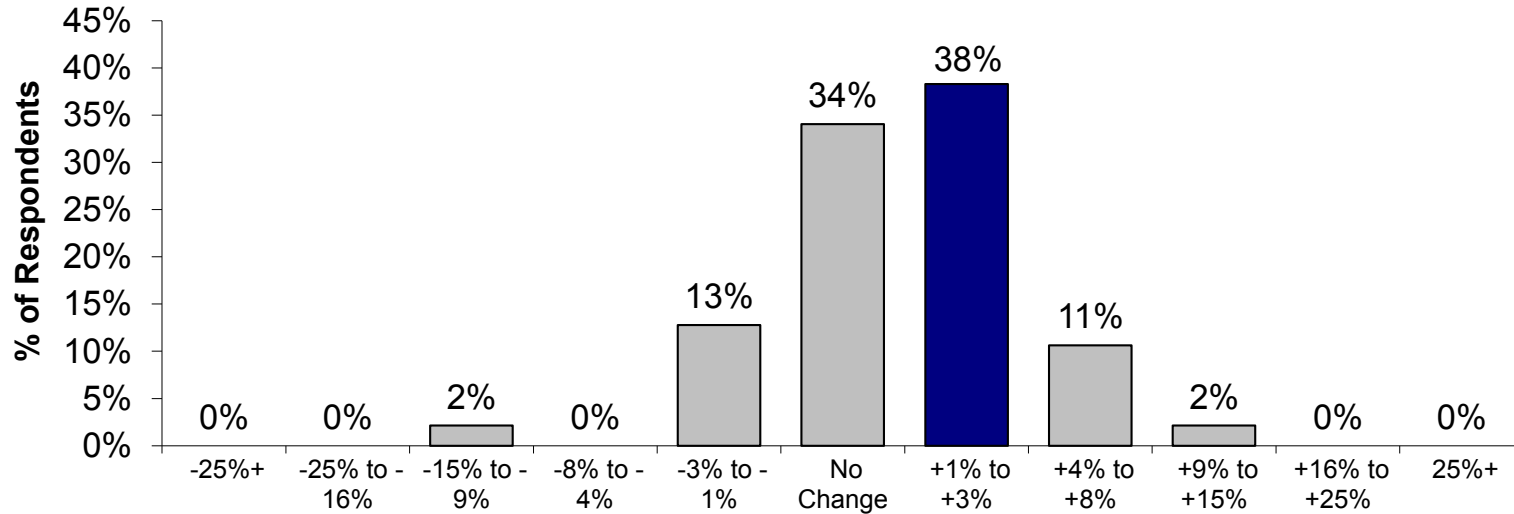
- Intermodal Discount to TL (Ex. Fuel) Increases, Though Still Below Historical Average

5. Service Trends

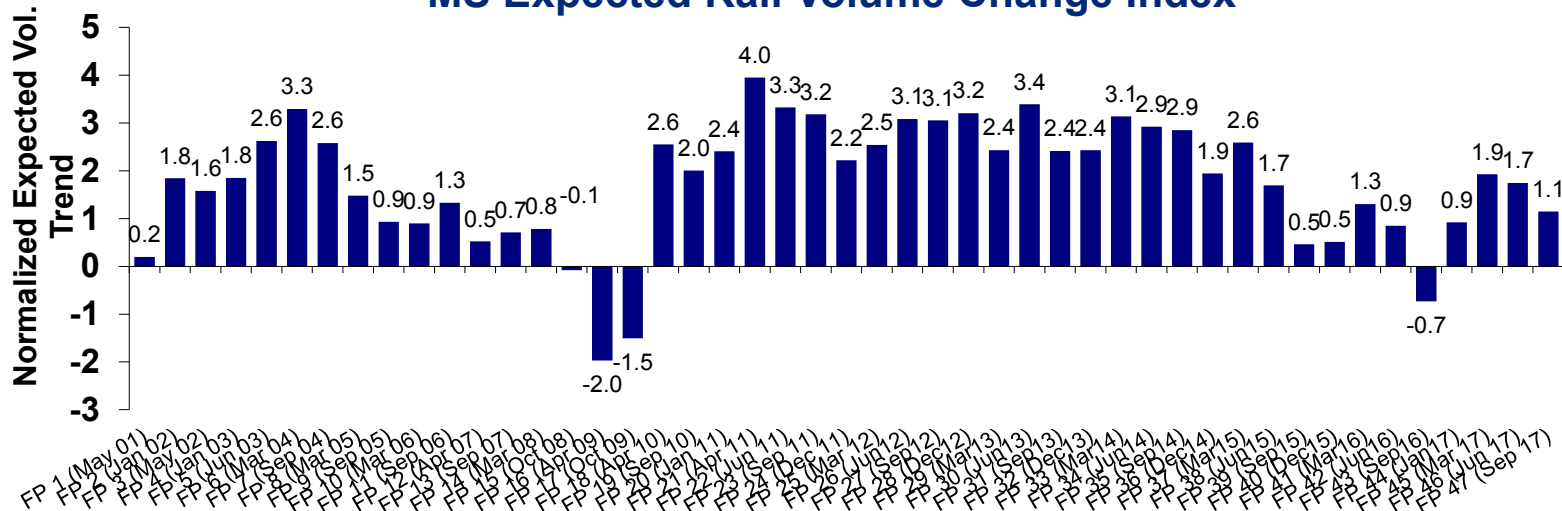
- Rail Service Reliability and Value For Dollar Decrease to Lowest Levels Since 2015

1. +1-3% YoY Expected Change in Rail Volume; Volume Index Continues to Decline

YoY Volume Growth Expectations for Next 6 Mo. by Range

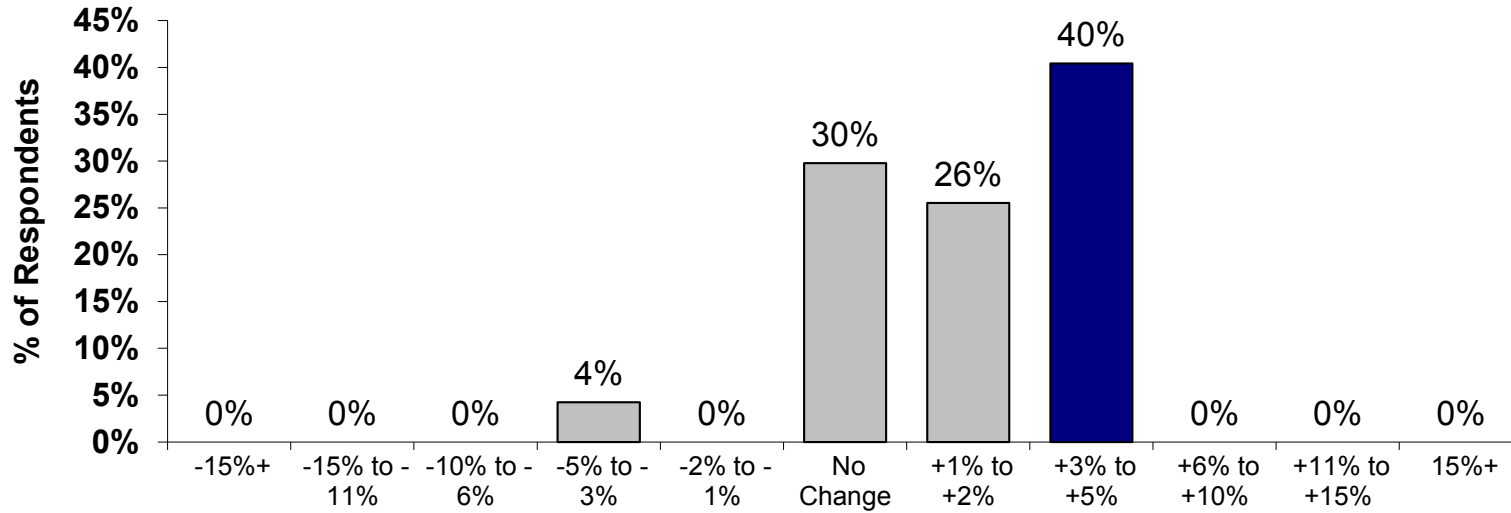


MS Expected Rail Volume Change Index

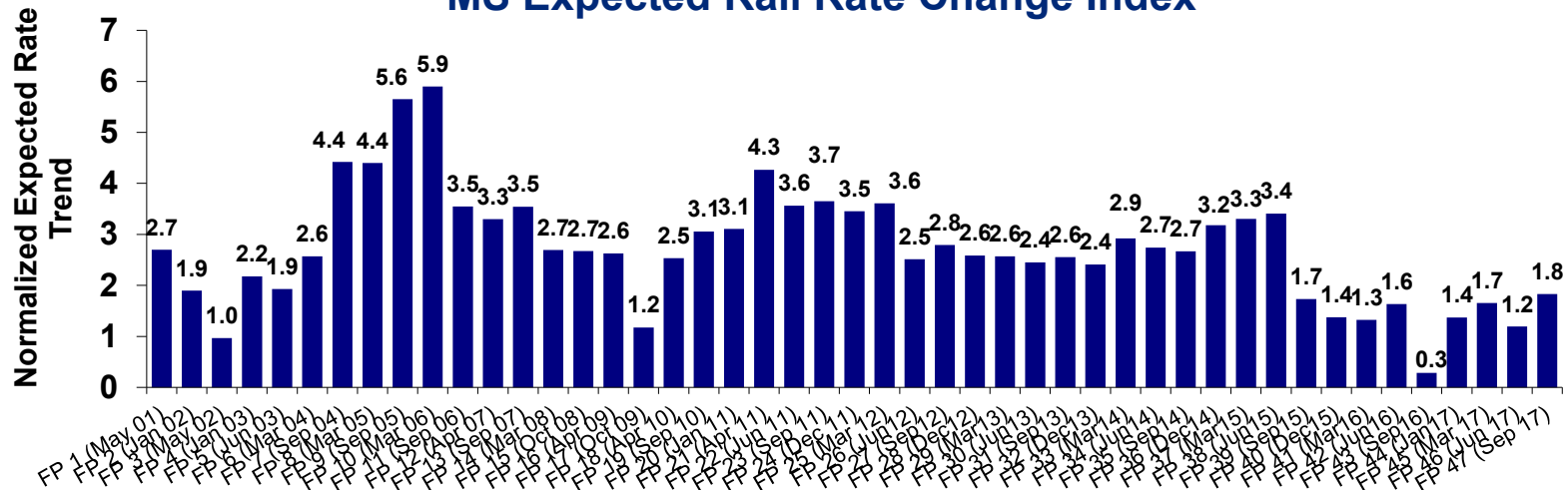


2. ~40% of Shippers Expect a 3-5% YoY Increase in Rail Rates, Up From Our Previous Survey but Pricing Index Remains <2.0

YoY Rate Growth Expectations for Next 6 Mo. by Range

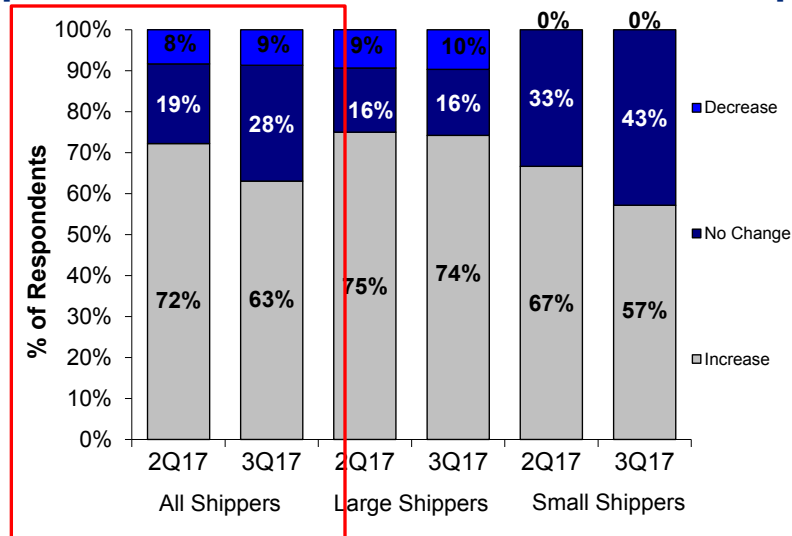


MS Expected Rail Rate Change Index

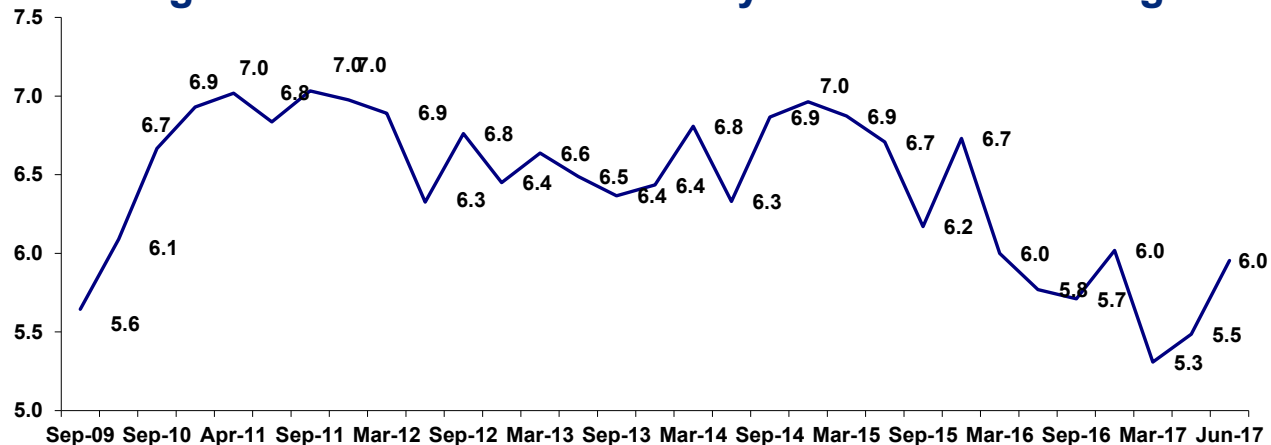


3. More Shippers Expect to Decrease Rail Spend; Difficulty of Rail Rate Negotiations Increases But Remains Low Relative to Prior Years

Rail Spend Forward 6 Month YoY Growth Expectations

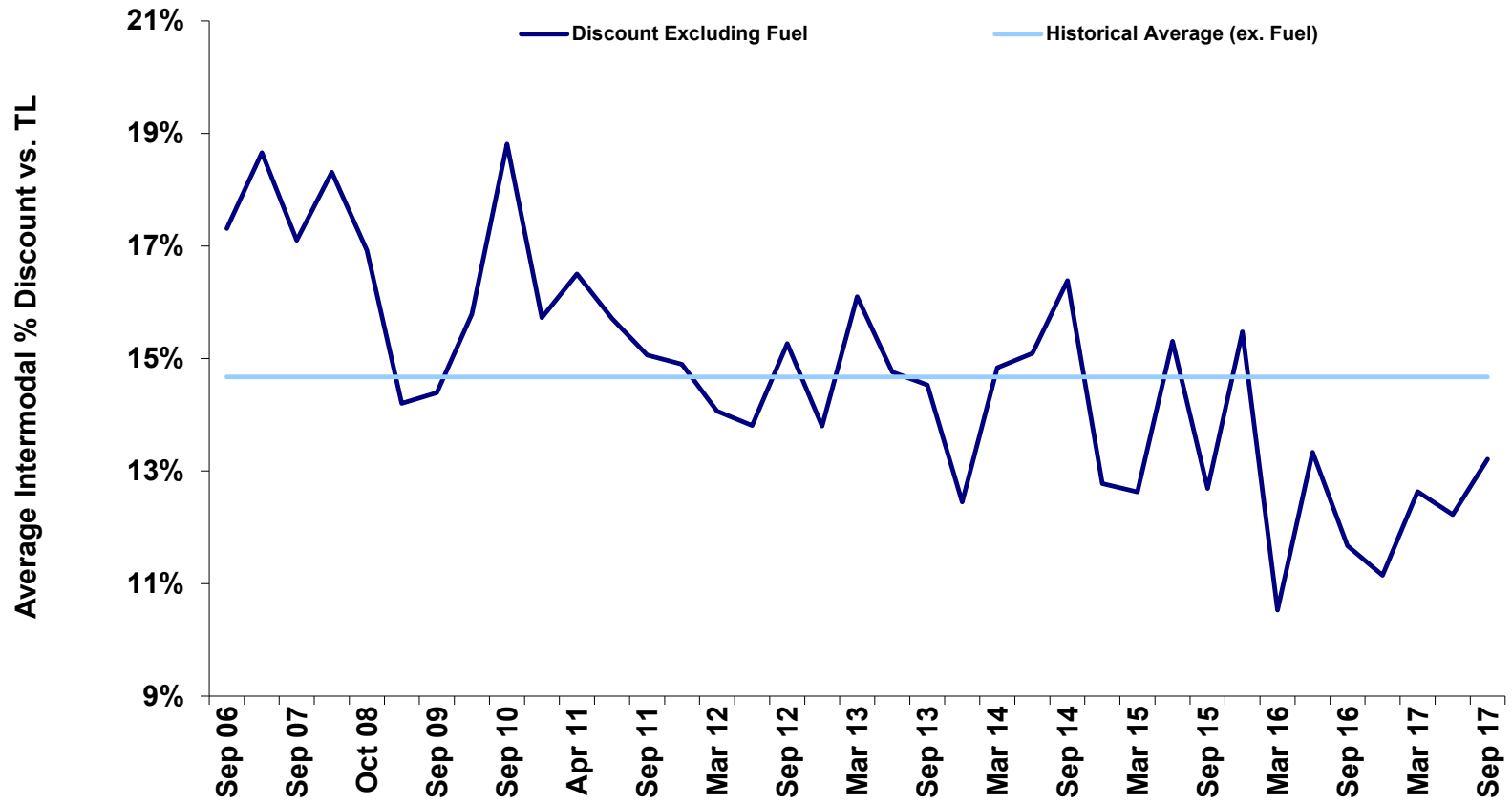


Rail Rate Negotiations: Rate the Difficulty of Recent Rate Negotiations



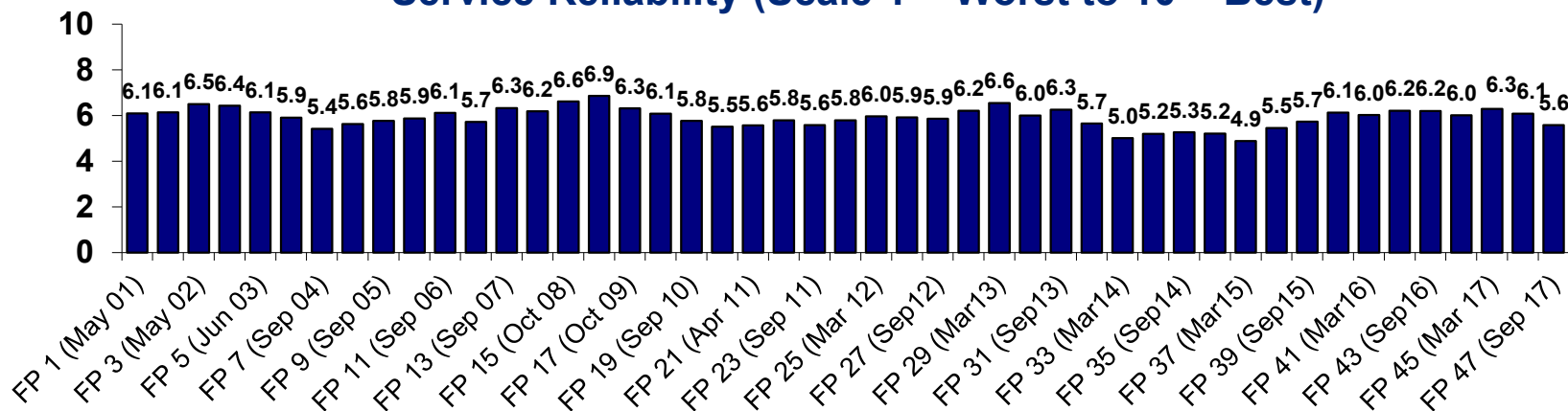
4. Intermodal Discount to TL (Ex. Fuel) Increases, Though Still Below Historical Average

What discount is being offered in the marketplace for intermodal services when compared to TL services in a similar lane?

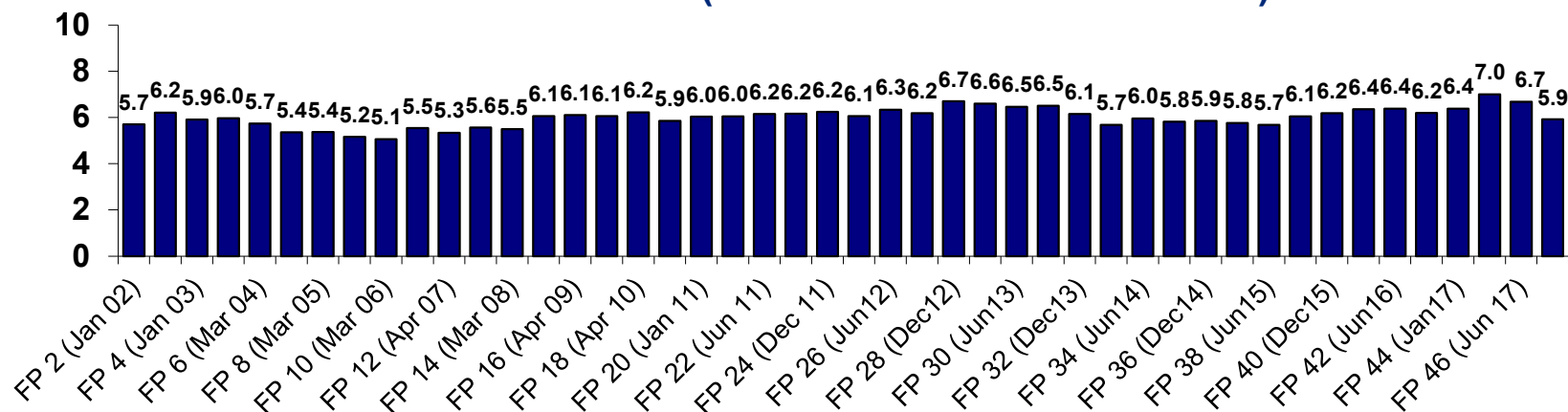


5. Rail Service Reliability and Value For Dollar Decrease to Lowest Level Since 2015

Service Reliability (Scale 1 = Worst to 10 = Best)



Value for Dollar (Scale 1 = Worst to 10 = Best)



Freight Pulse: Trucking Highlights

Trucking Highlights

Freight Pulse: Trucking Key Takeaways

1. Truck Volume

- TL Volume Growth Expectations Decline from FP46, Though Remains Well Above Other Truck Modes; National LTL Sees Biggest Increase

2. Pricing

- TL Base Rate Expectations Jump to 2014 Levels

3. Capacity

- Expectations for Tighter Capacity Across All Truck Modes; TL Tightest Reading Since December 2014

4. Intermodal Use

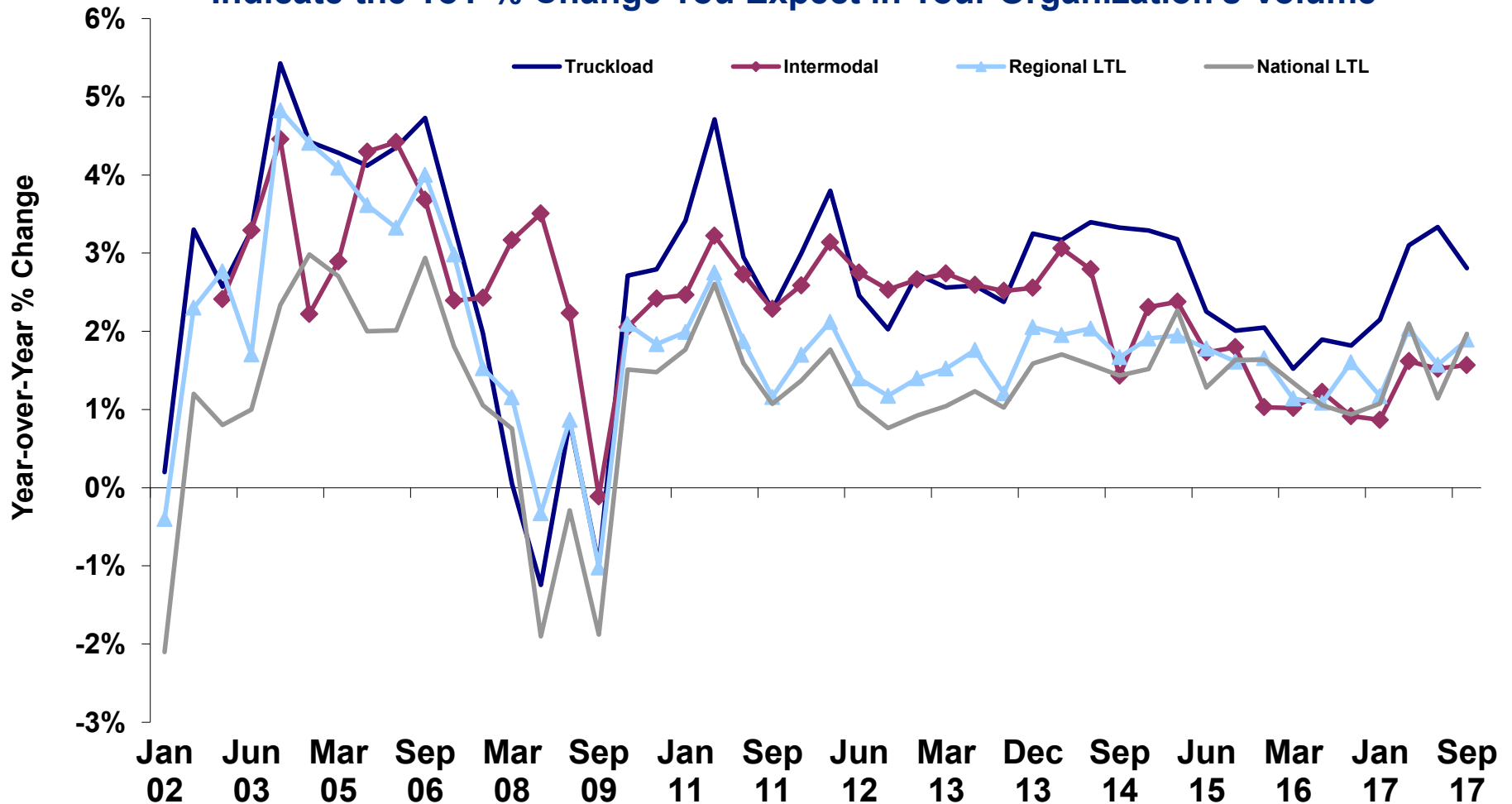
- Fuel Efficiency Continues to be the Most Important Driver to Intermodal Growth; TL Rate Increases Fast Approaching

5. Intermodal Cost

- TL Price Discounts vs. Intermodal Continue to Slip Slightly from Elevated Levels

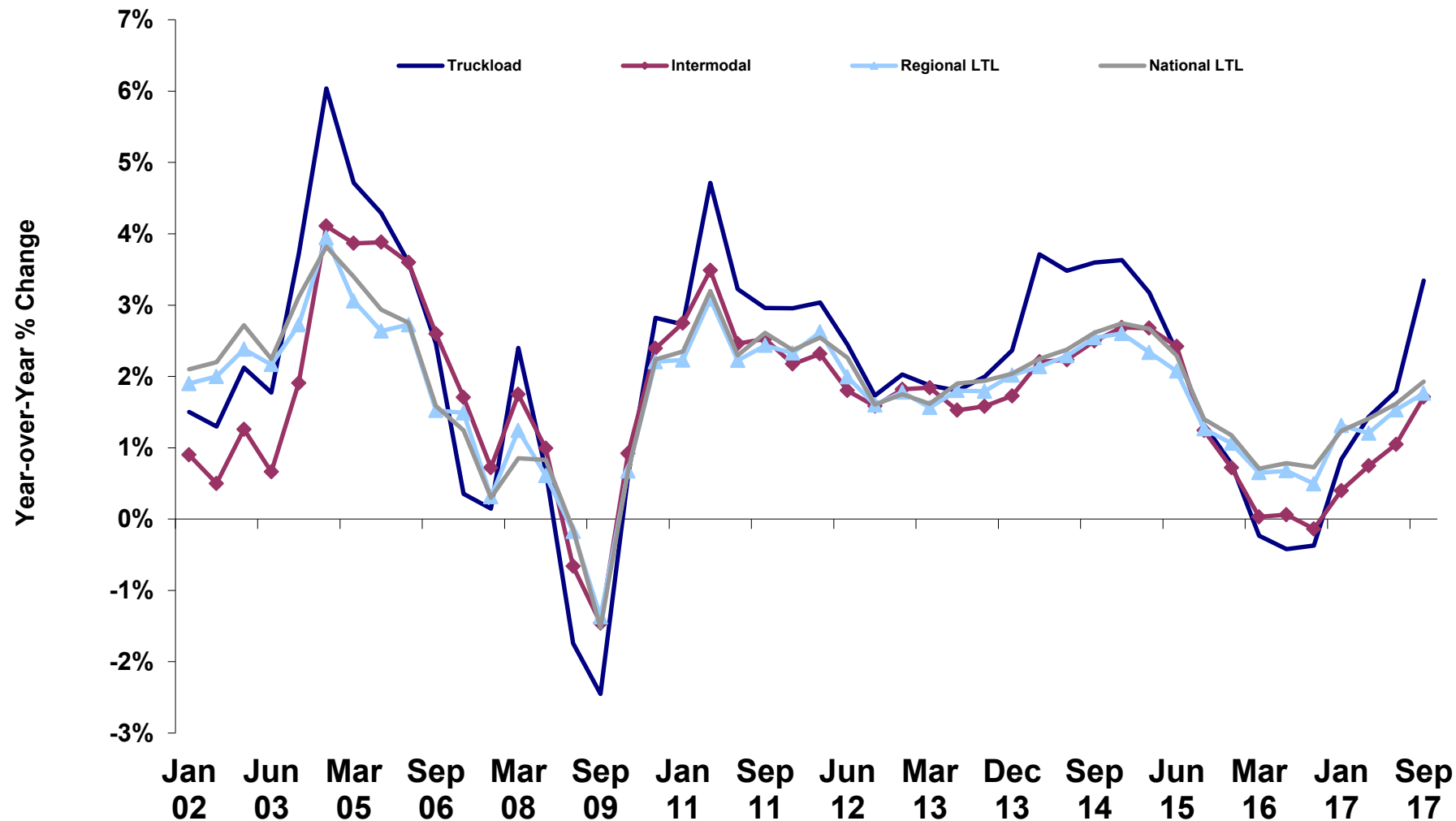
1. TL Volume Growth Expectations Decline from FP46, Though Remains Well Above Other Truck Modes; National LTL Sees Biggest Increase

Indicate the YoY % Change You Expect in Your Organization's Volume



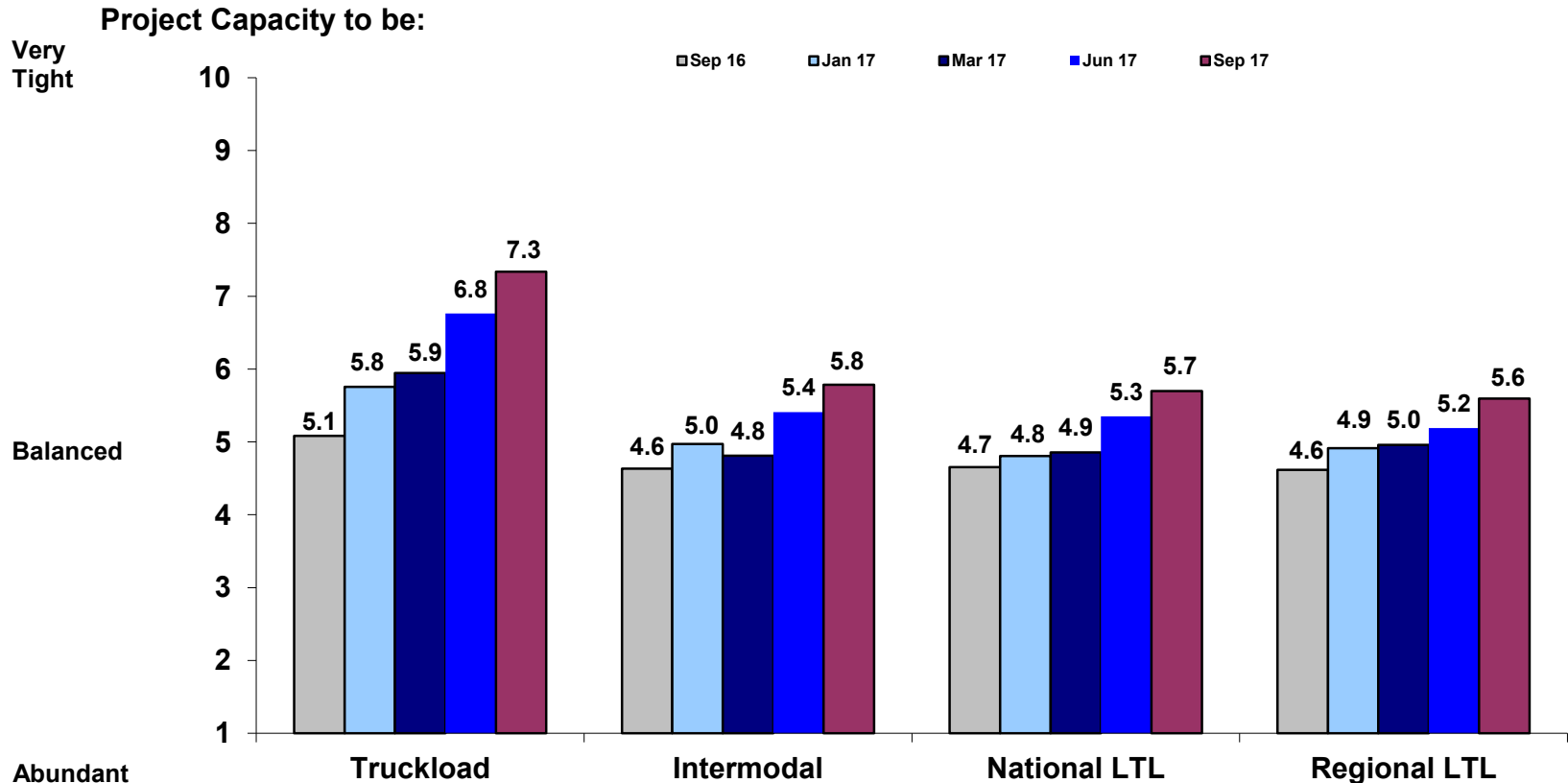
2. TL Base Rate Expectations Jump to 2014 Levels

Indicate the YoY % Change You Expect in Your Organization's Base Rates



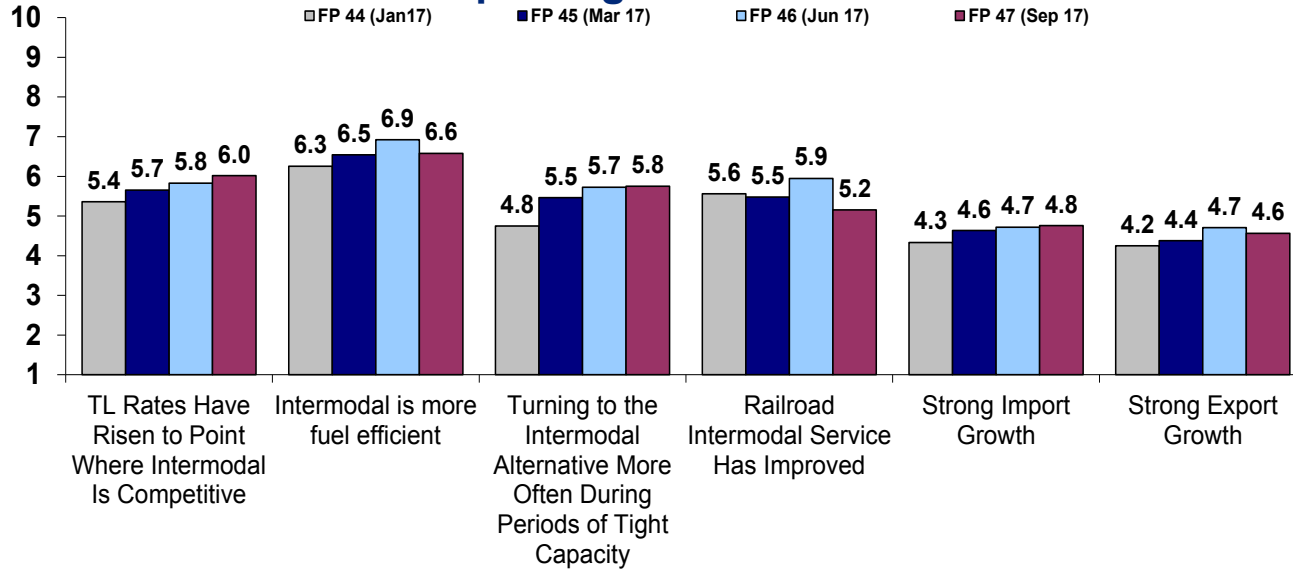
3. Expectations for Tighter Capacity Across All Truck Modes; TL Tightest Reading Since December 2014

What are your Expectations for Capacity in 6 Months?

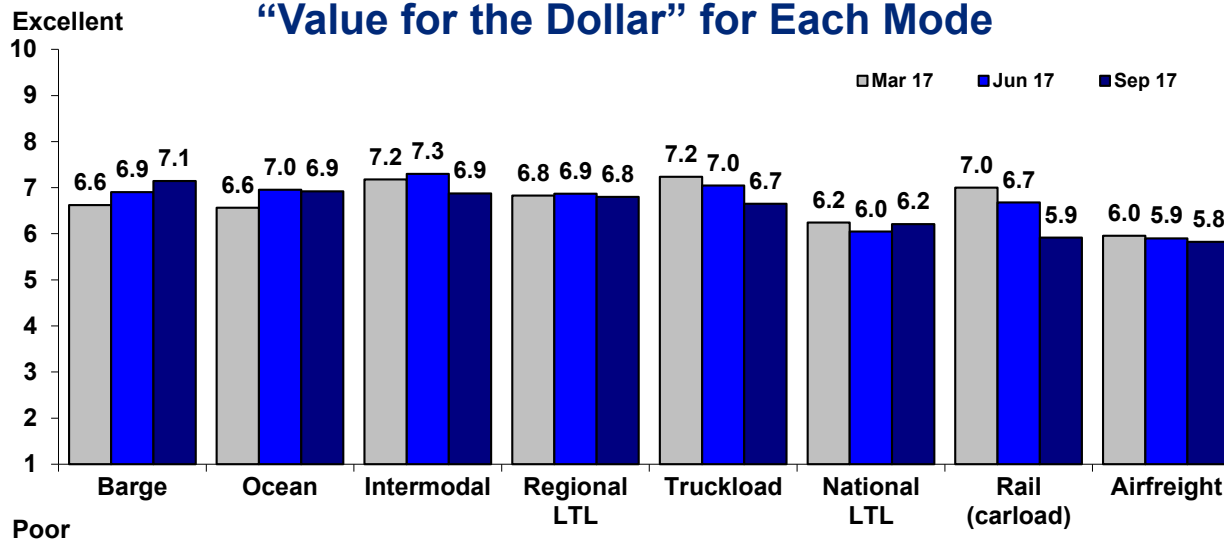


4. Fuel Efficiency Continues to be the Most Important Driver to Intermodal Growth; TL Rate Increases Fast Approaching

What Factors are Impacting Your Use of Intermodal Most?

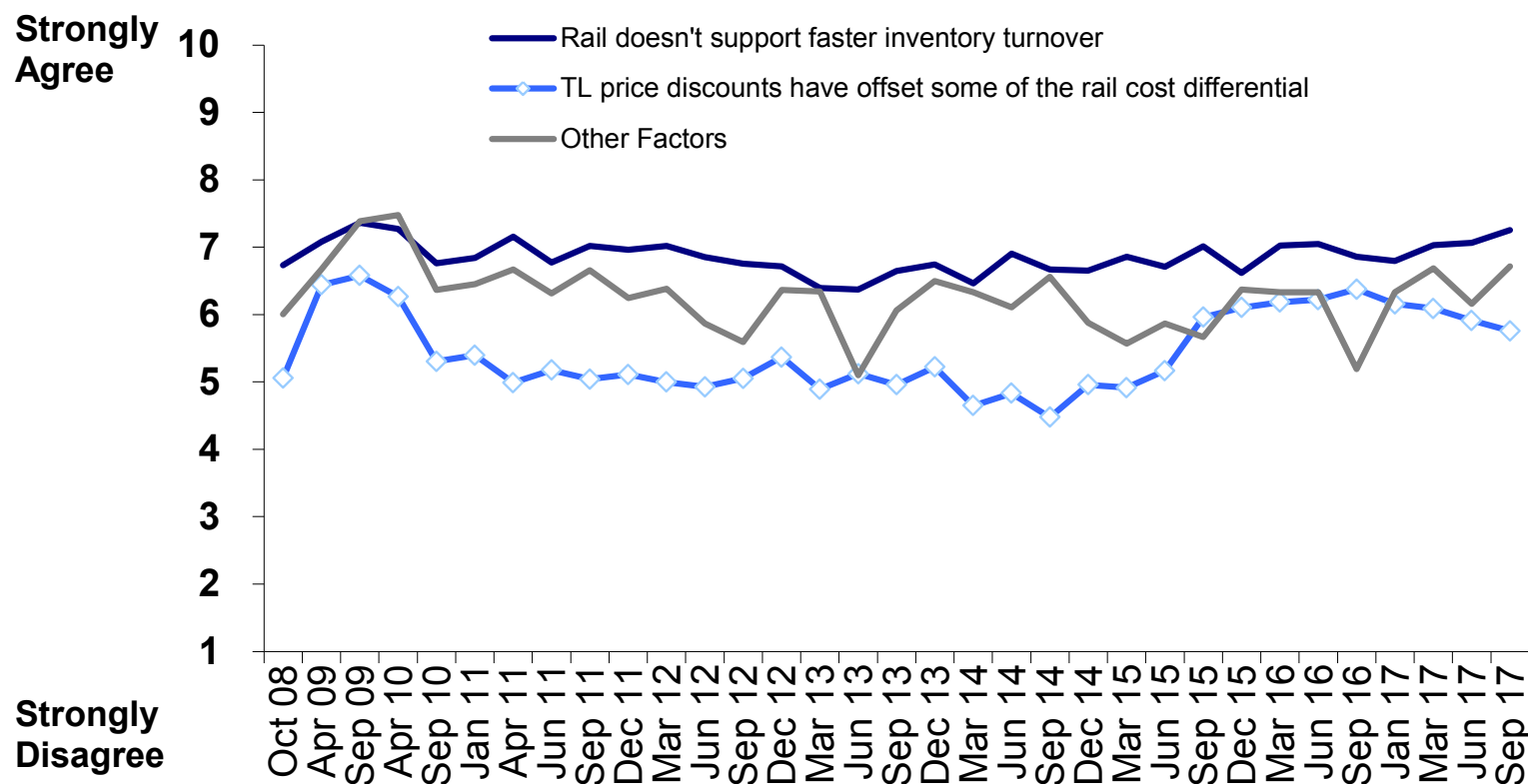


“Value for the Dollar” for Each Mode



5. TL Price Discounts vs. Intermodal Continue to Slip Slightly from Elevated Levels

What Factors are Limiting your Organization from Shipping More Volume on the Railroads?



Freight Pulse: Parcel Highlights

Parcel Highlights

Freight Pulse: Parcel Key Takeaways

1. Parcel Volumes

- Ground and Int'l Volume Growth Outlook Decline; Slight Increase in Air

2. Pricing

- Shippers Anticipate ~2% Average Parcel Base Rate Increase Over Next 6 Months for Air, Ground and Int'l

3. B2C

- Shippers' Expectations for B2C as % of Total Parcel Shipment Increase from Prior Survey

4. Switching

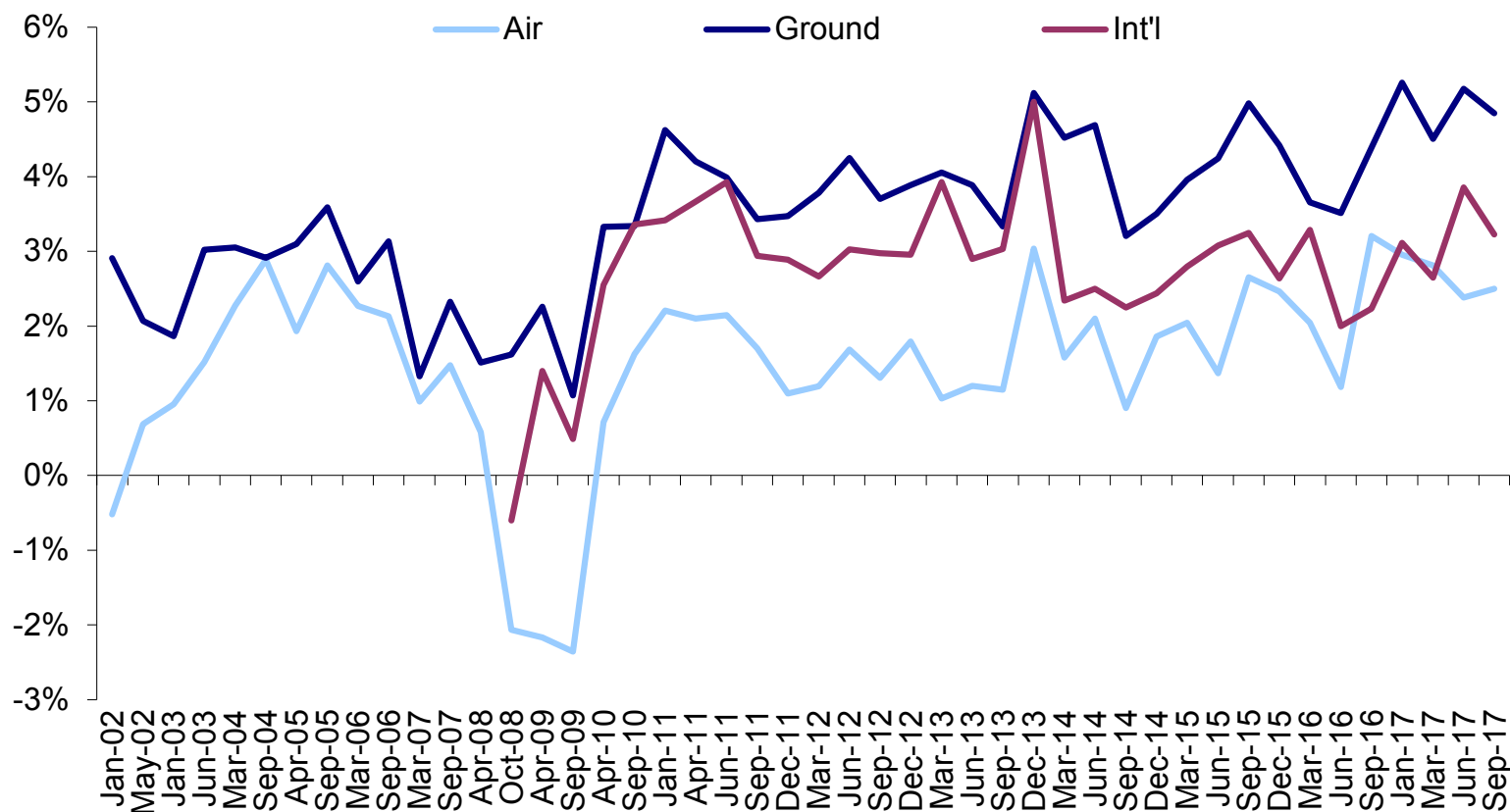
- Shippers View Price as More Important Driver Than Service for Switching Ground and Air Parcel Carriers, Spread Between Price and Service for Ground Widens

5. Rate Discounts

- According to Shippers, Discounts Have Increased for FDX Air and Decreased for FDX Ground and UPS Air and Ground from Prior Survey

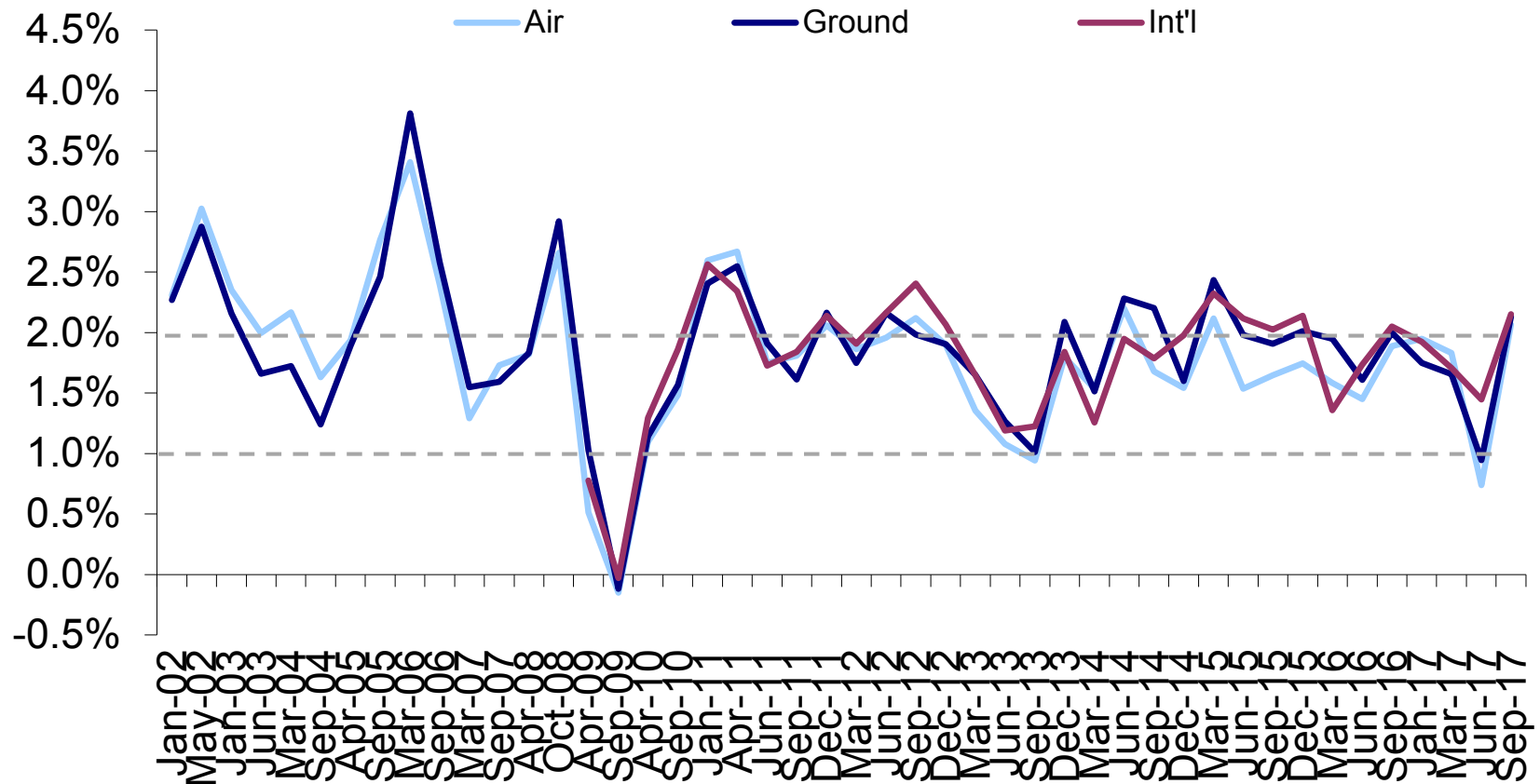
1. Ground and Int'l Volume Growth Outlook Decline; Slight Increase in Air

Volume Growth Expectations “Over the Next 6 Months” vs. Last Year



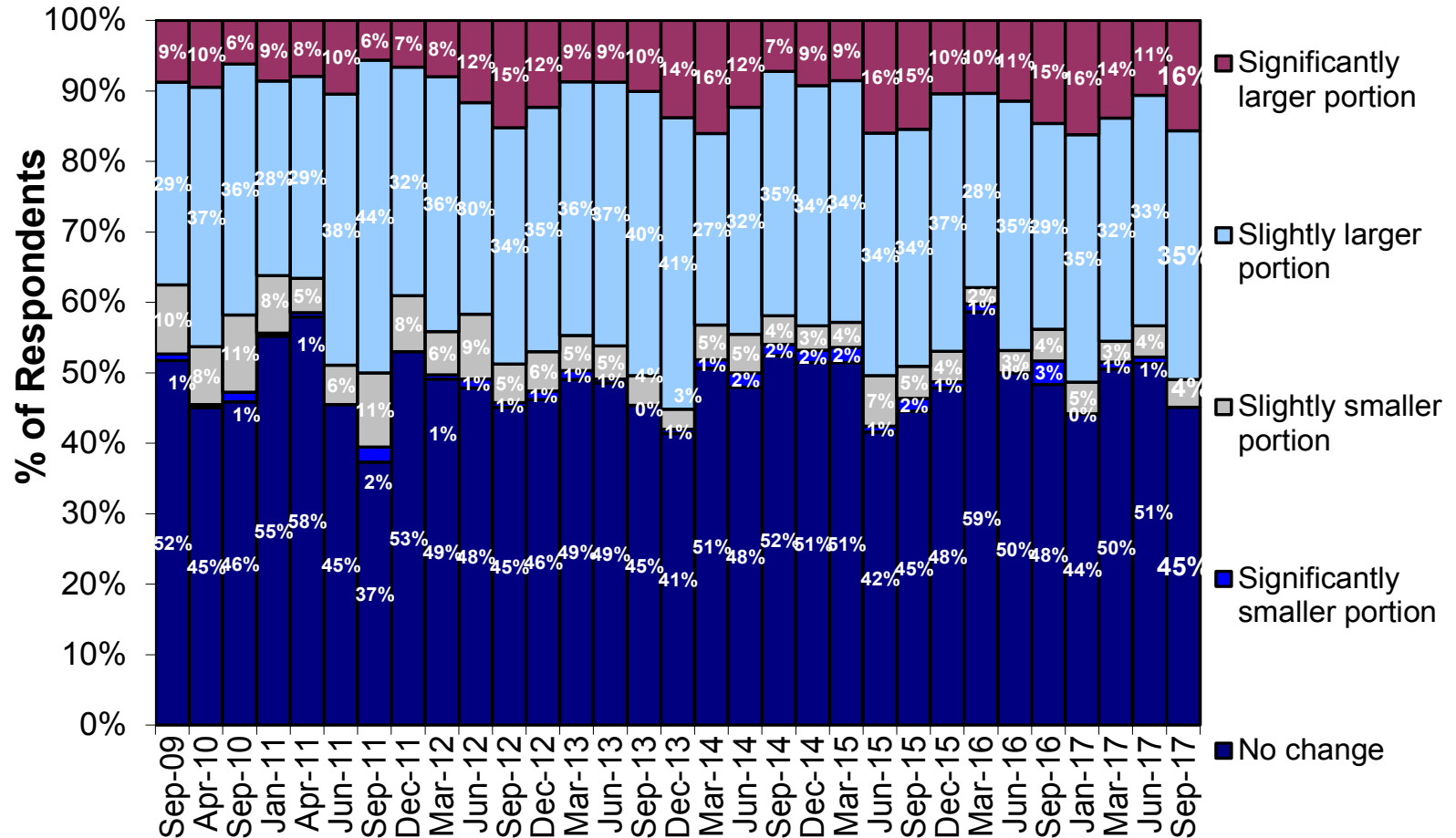
2. Shippers Anticipate ~2% Average Parcel Base Rate Increase Over Next 6 Months for Air, Ground and Int'l

Average Base Rate Expectations “Over the Next 6 Months” vs. Last Year



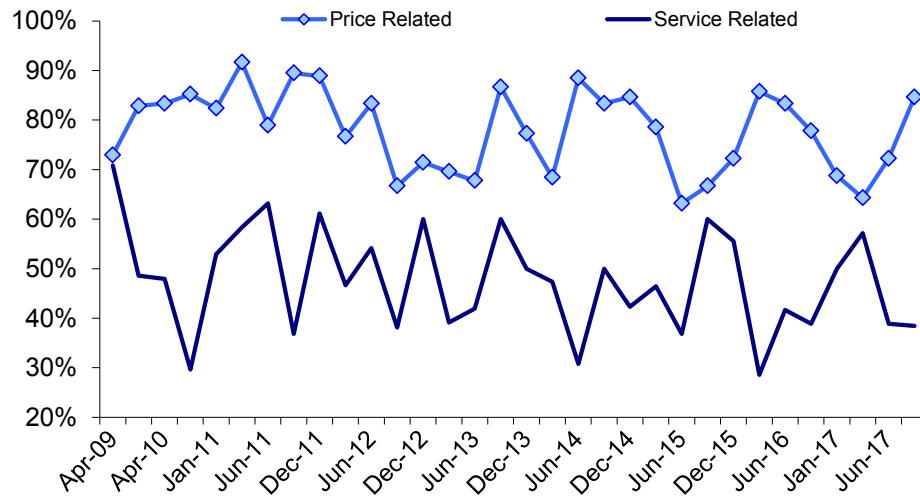
3. Shippers' Expectations for B2C as % of Total Parcel Shipment Increase from Prior Survey

YoY Change in B2C as % of Total

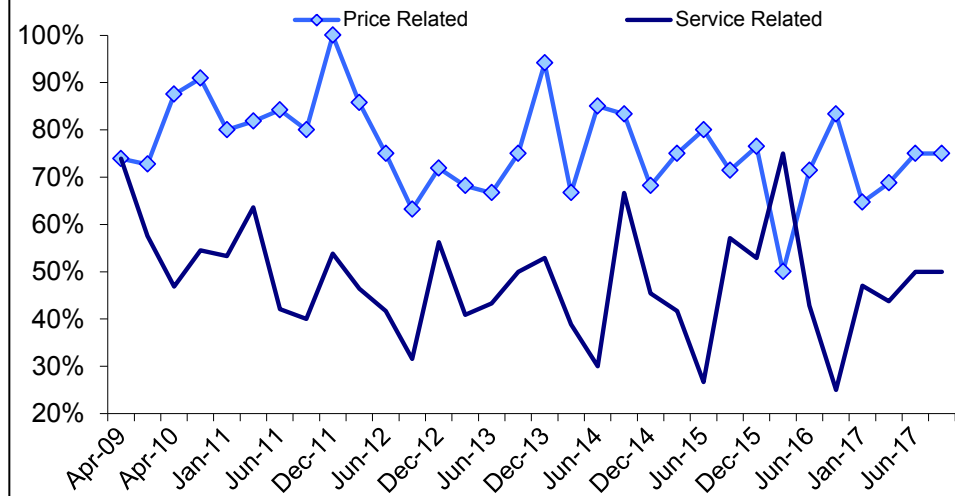


4. Shippers View Price as More Important Driver Than Service for Switching Ground and Air Parcel Carriers, Spread Between Price and Service for Ground Widens

Ground: Reason for Switching Primary Carriers



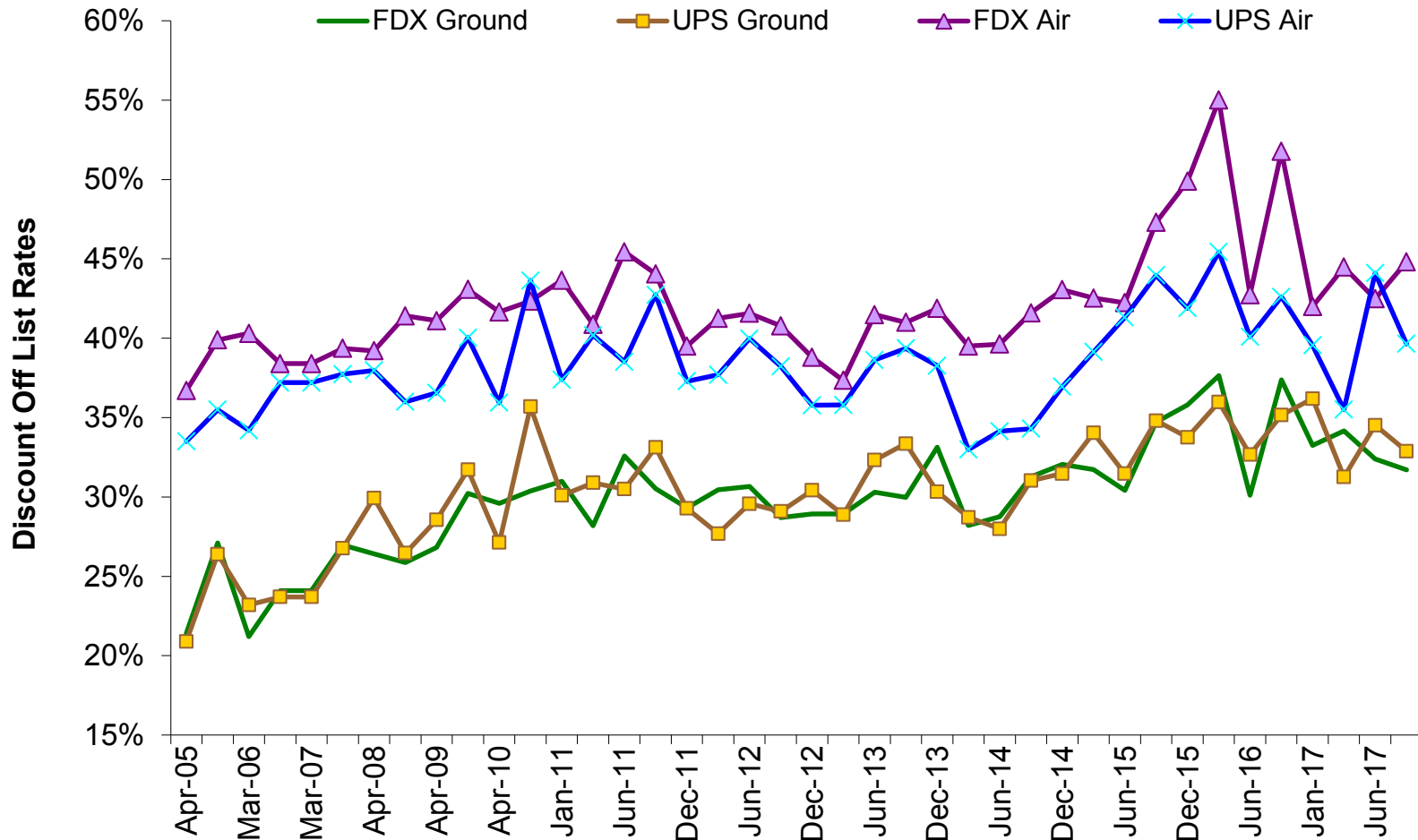
Air: Reason for Switching Primary Carriers



Source: Morgan Stanley Parcel Survey

5. According to Shippers, Discounts Have Increased for FDX Air and Decreased for FDX Ground and UPS Air and Ground from Prior Survey

Average List Rate Discount



Appendix

Appendix

Summary of Contents

About the Surveys

General Freight Trends

Rail Trends

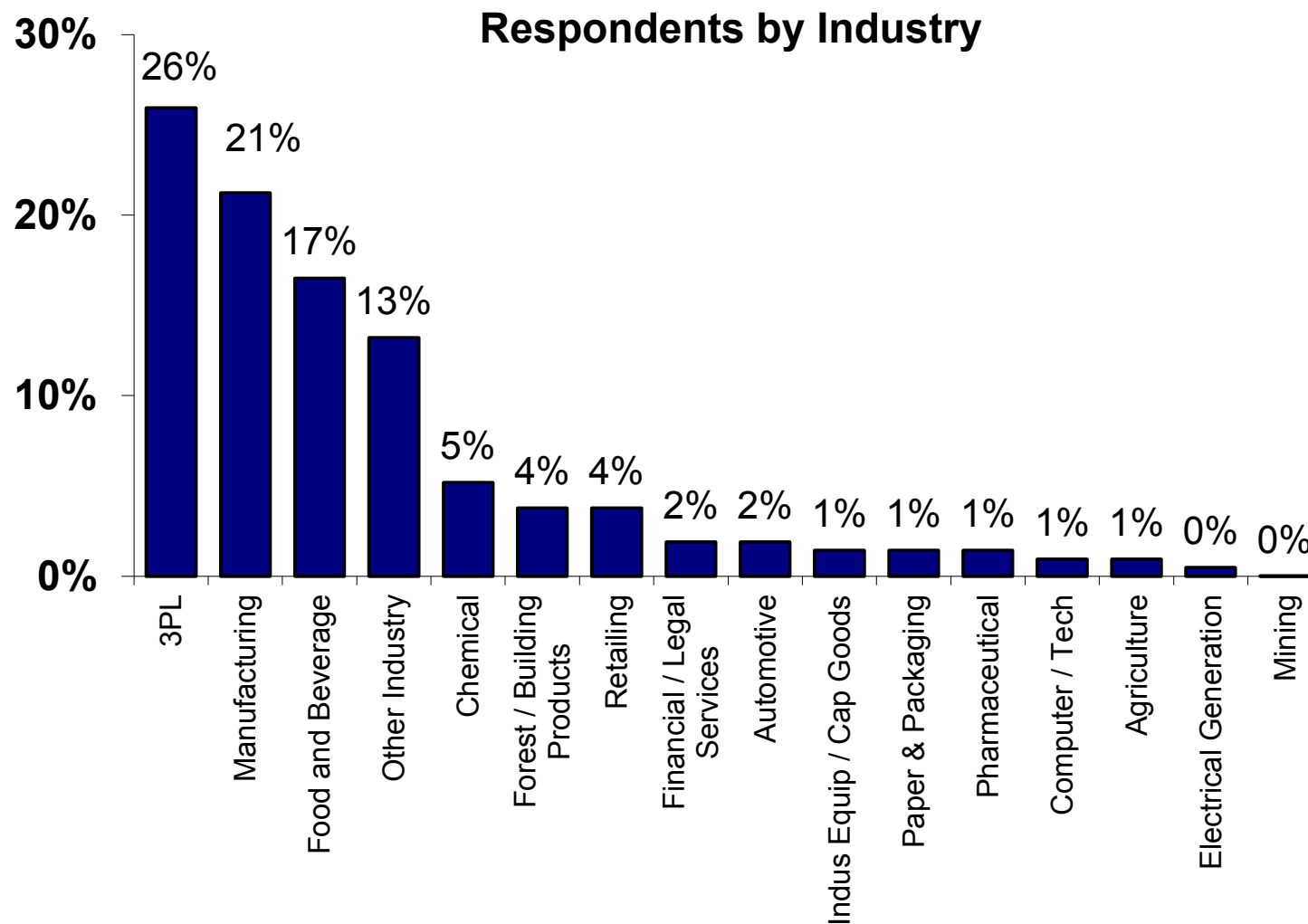
Truck Trends

Parcel Trends

Part 1: About the Surveys

1. General Freight
2. Rail Industry
3. Truck Industry
4. Parcel Industry

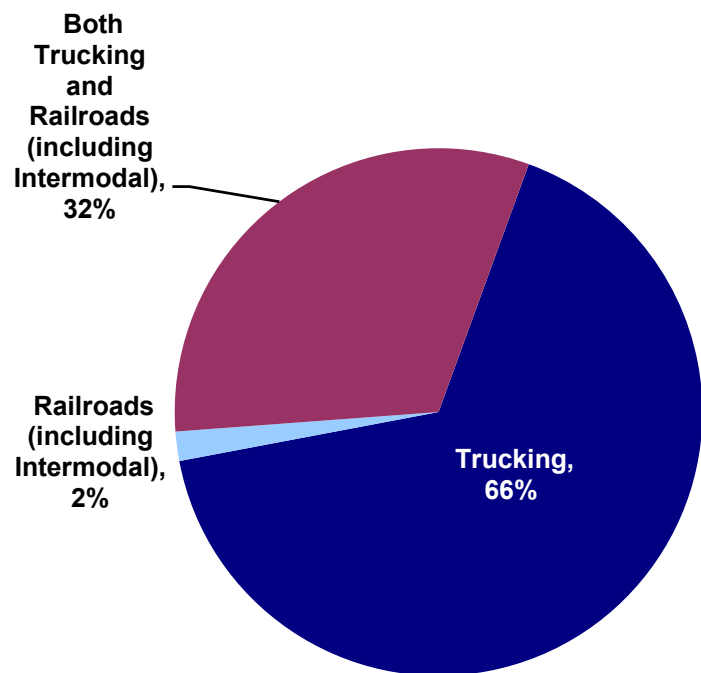
General Freight: About the Freight Pulse Survey



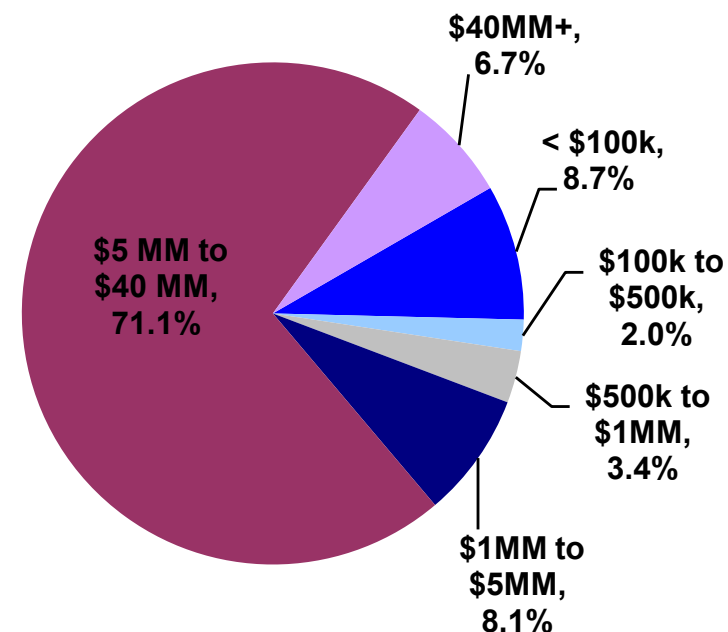
Note: just those shippers providing an industry classification and spend. Source: MS Freight Pulse Surveys

General Freight: Segmented by Shipper Profile

Modes Used



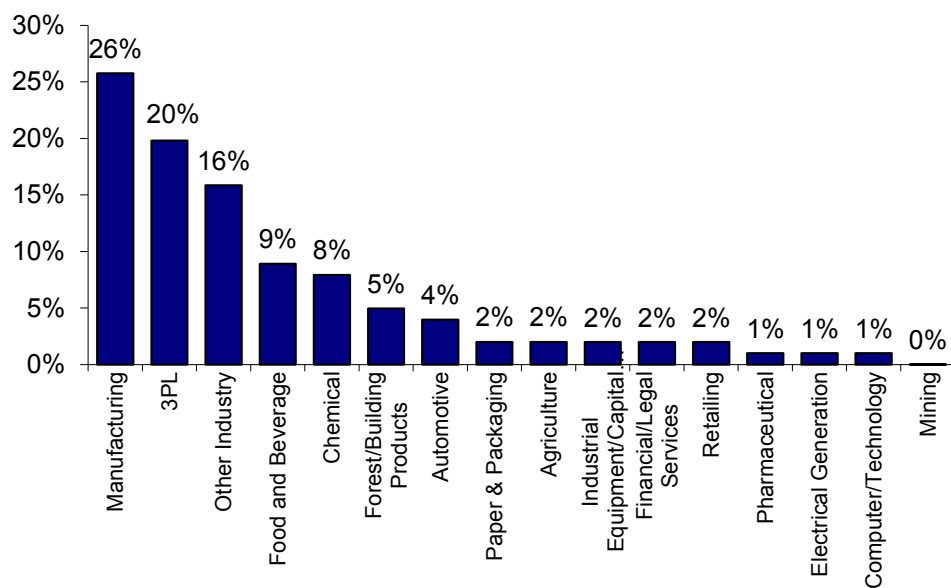
Respondents' Total Spend



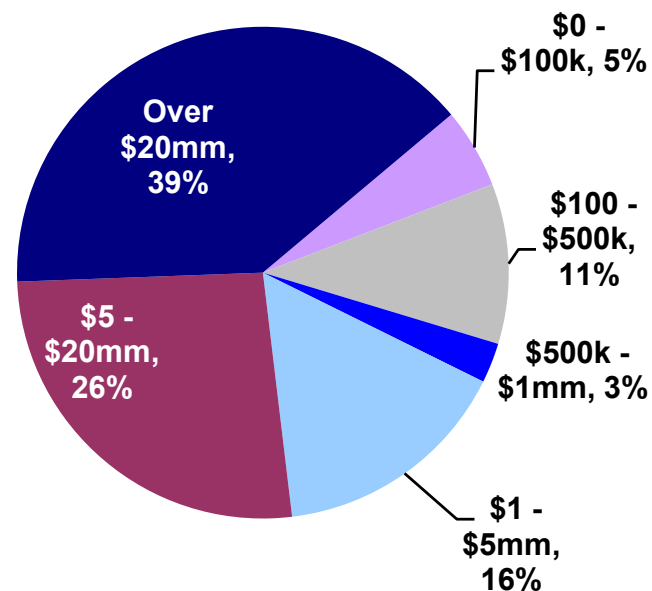
Note: just those shippers providing an industry classification and spend. Source: MS Freight Pulse Surveys

Rails: Segmented by Industry and Shipper Profile

Rail Respondents by Industry

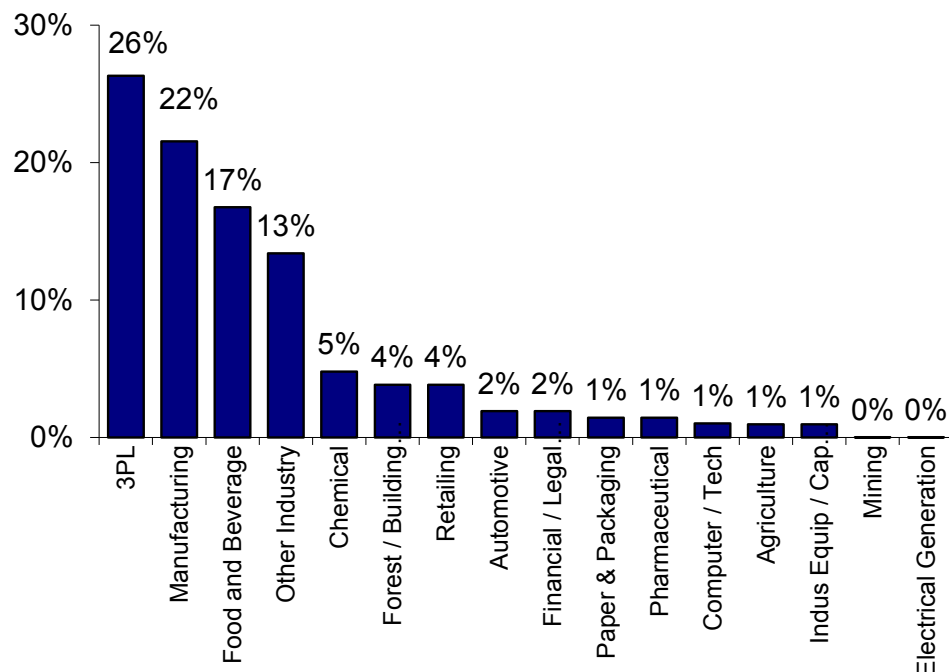


Respondents' Rail Spend

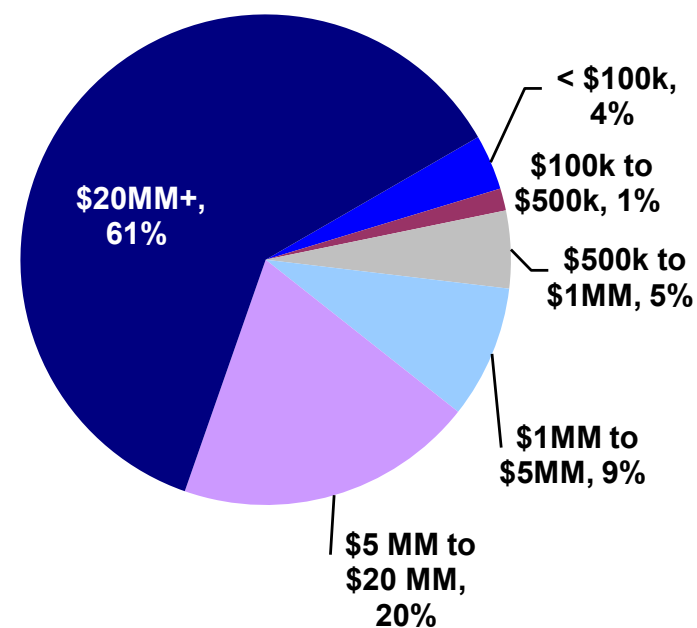


Trucks: Segmented by Industry and Shipper Profile

Truck Respondents by Industry

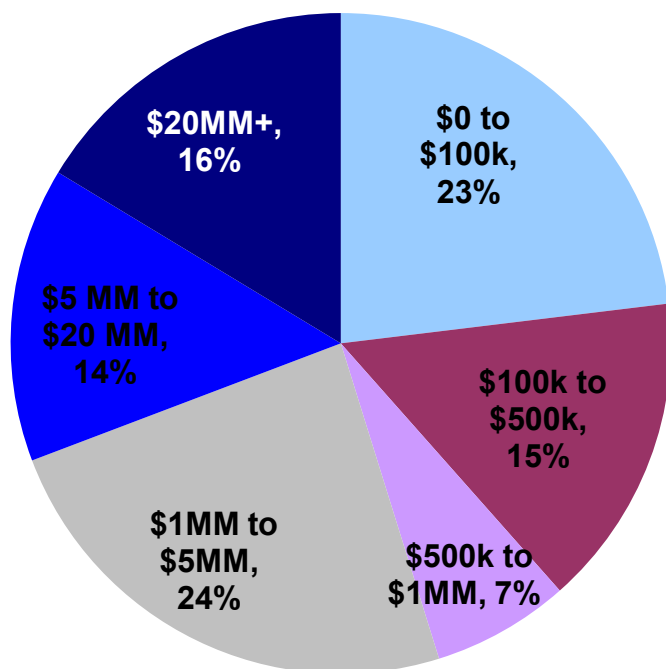


Respondents' Truck Spend

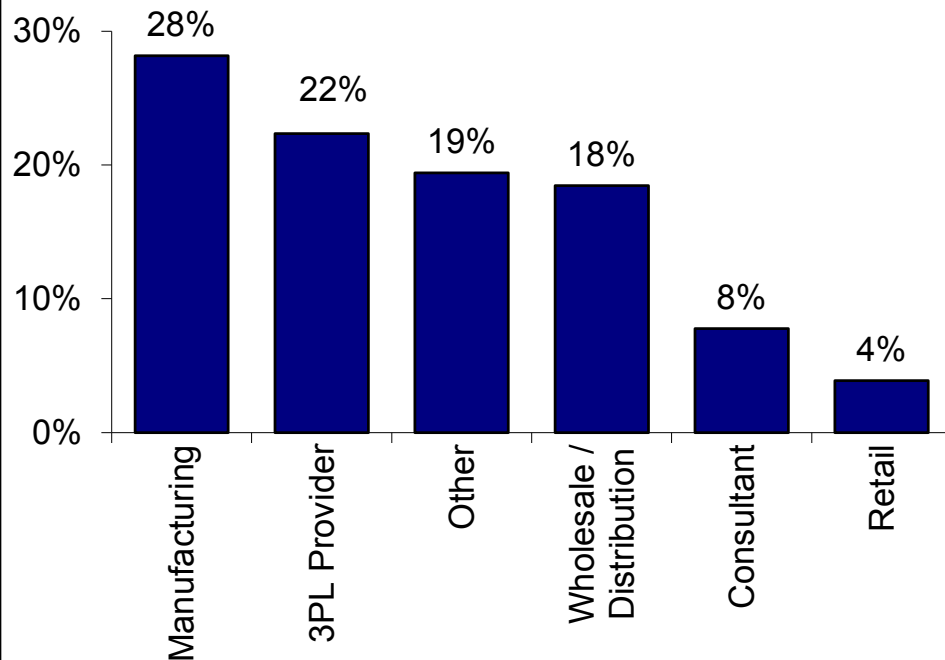


Parcel: About Our Parcel Survey

Respondents' Parcel Spend



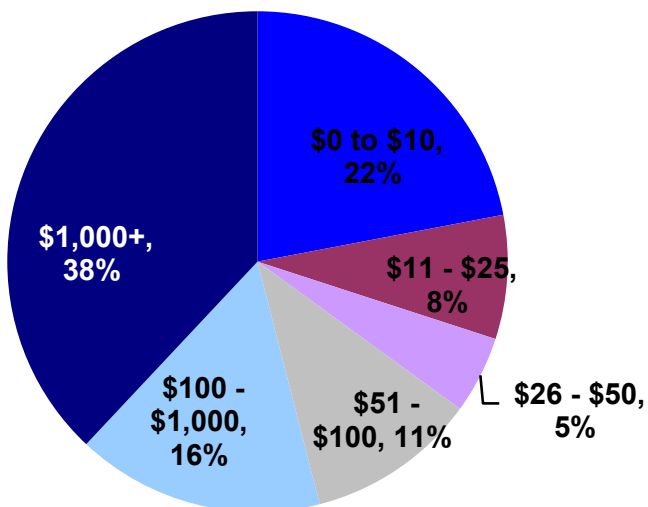
Respondents' Primary Business



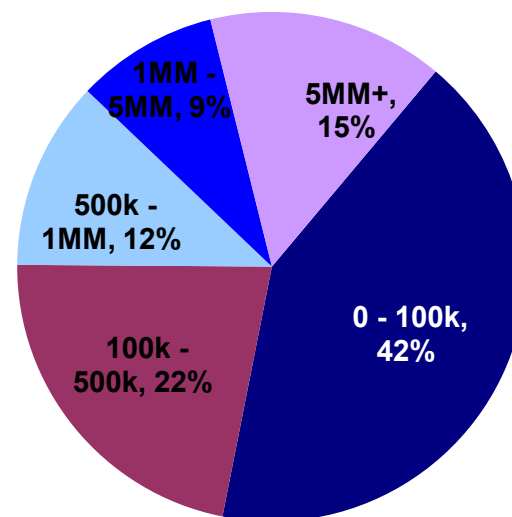
Source: Morgan Stanley Parcel Survey

Parcel: Respondent Profile

Company Sales (\$MM)

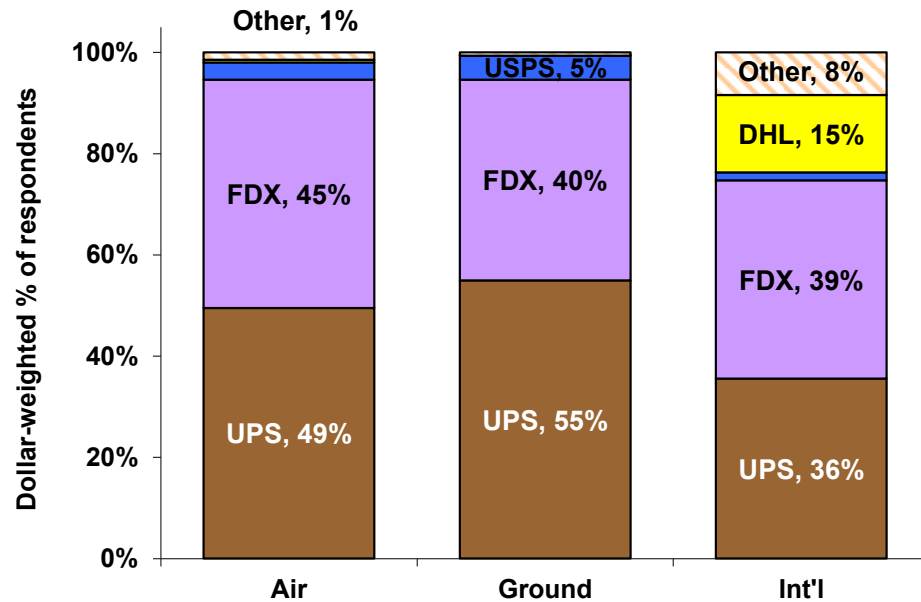


Parcels Shipped

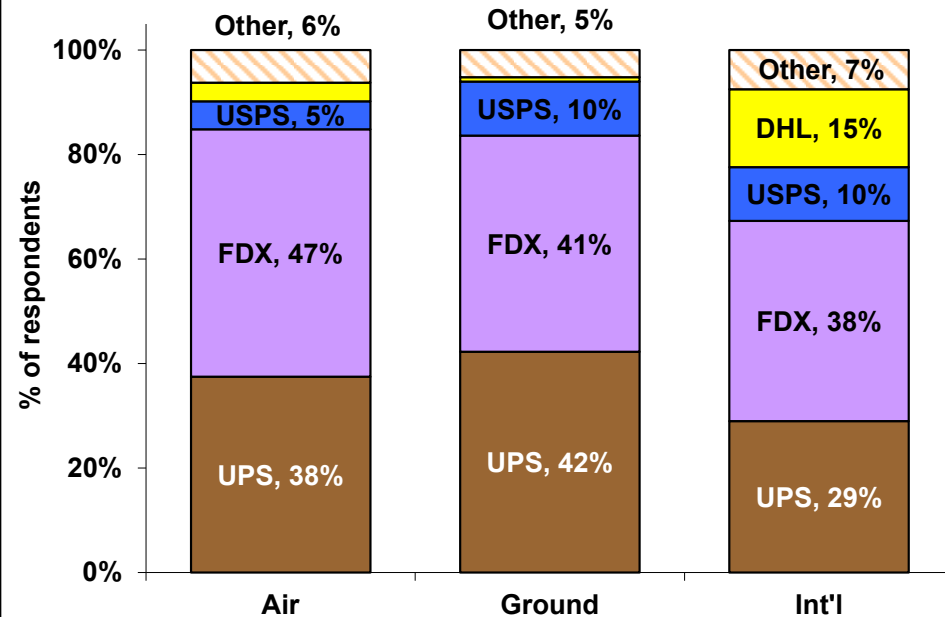


Parcel: Market Share of Respondents Roughly Consistent with Market

Primary Parcel Carrier – Weighted by Spend



Parcel Carrier – Average of All Responses



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General Freight Trends

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Truck Trends

Parcel Trends

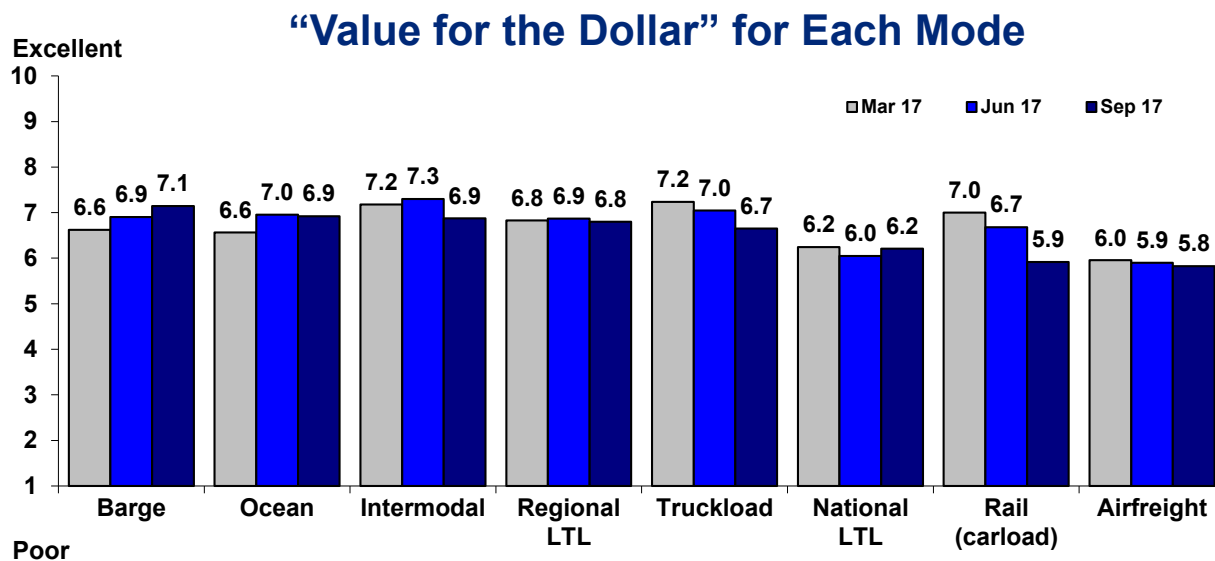
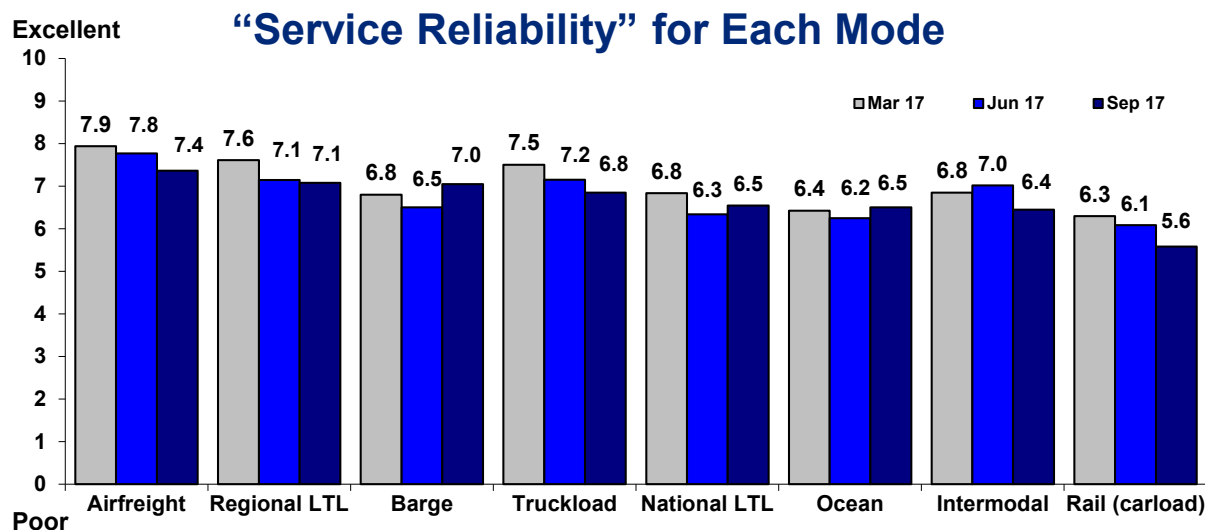
Part 1: General Freight Industry Trends

1. Uber-for-Freight
2. Service Trends
3. Capacity Trends
4. Modal Shift
5. Intermodal vs. Truck

Part 2: Macro Trends

1. Inventories and Orders
2. Economic Outlook

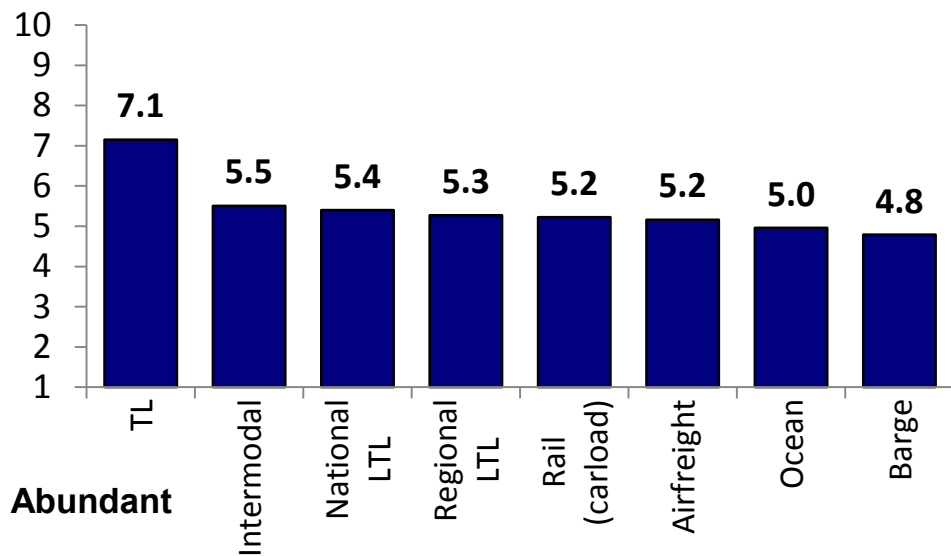
Service Reliability & Value by Mode: Average Across All Shippers



Capacity by Mode

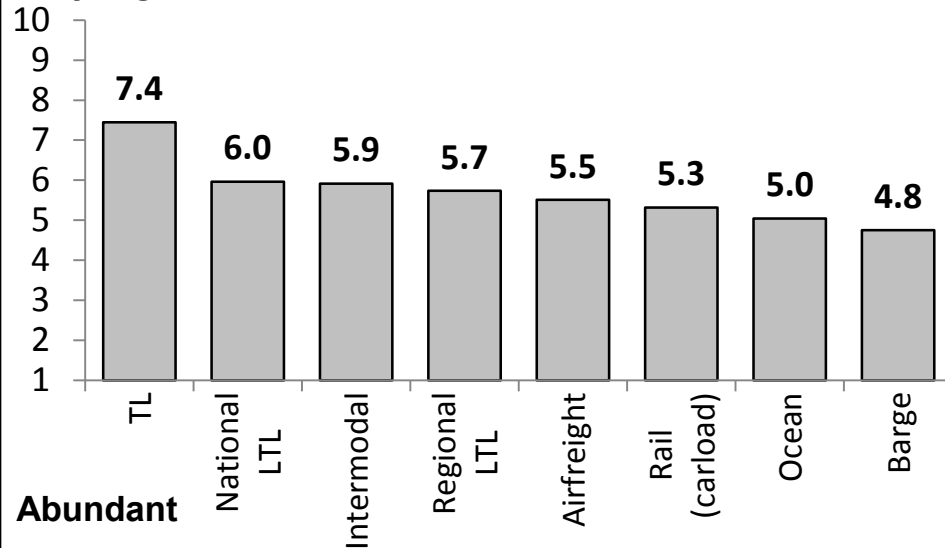
Current Capacity

Very Tight



Projected Capacity in 6 Months

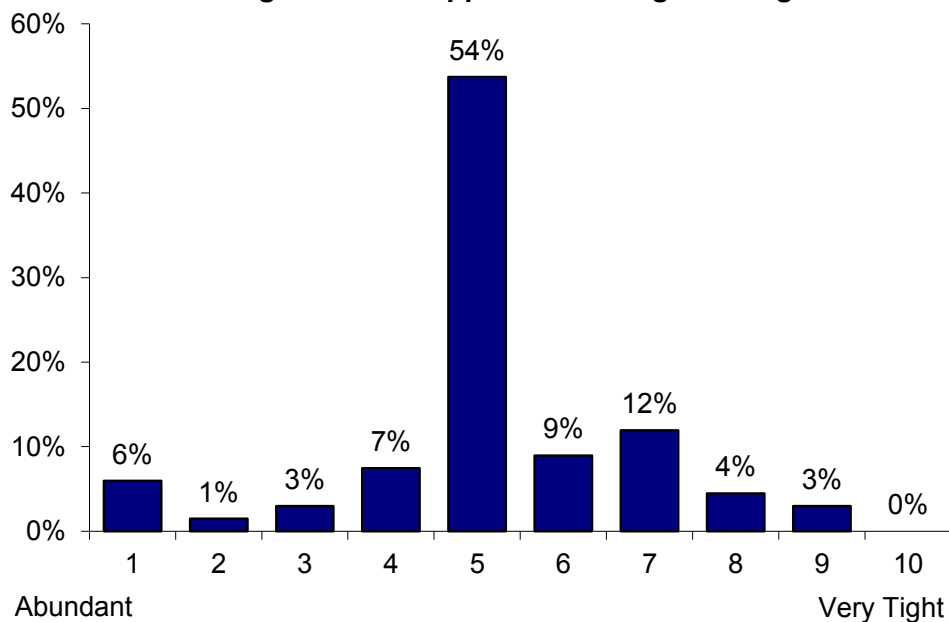
Very Tight



Capacity Ranking Skew: Airfreight

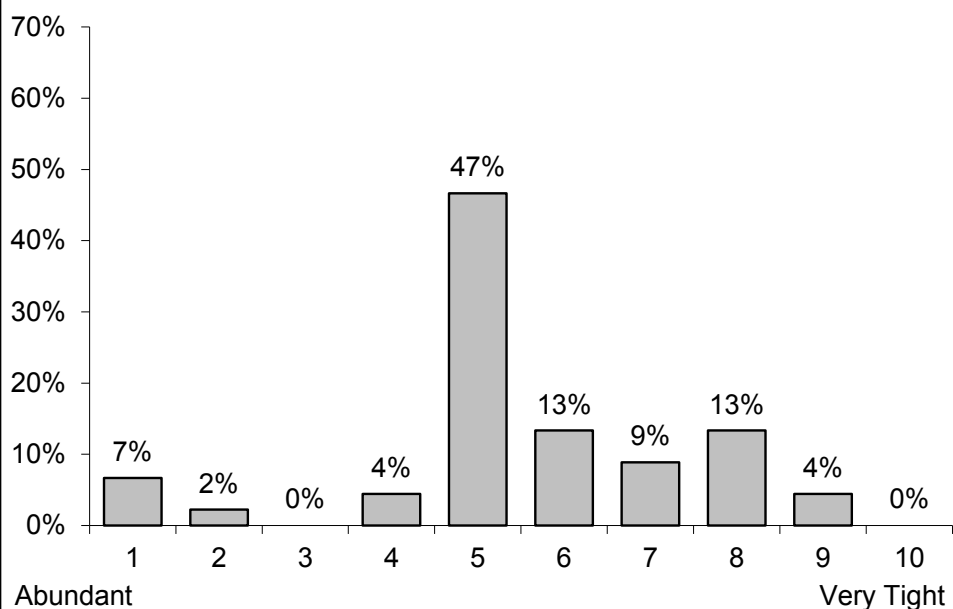
Current Capacity

Airfreight - % of Shippers Providing Rankings



Projected Capacity in 6 Months

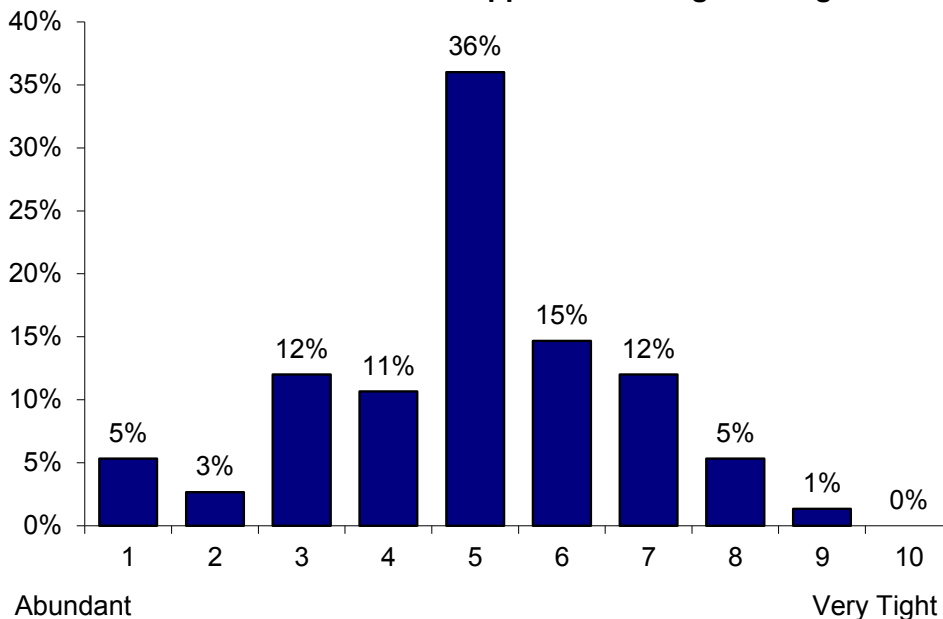
Airfreight - % of Shippers Providing Rankings



Capacity Ranking Skew: Ocean

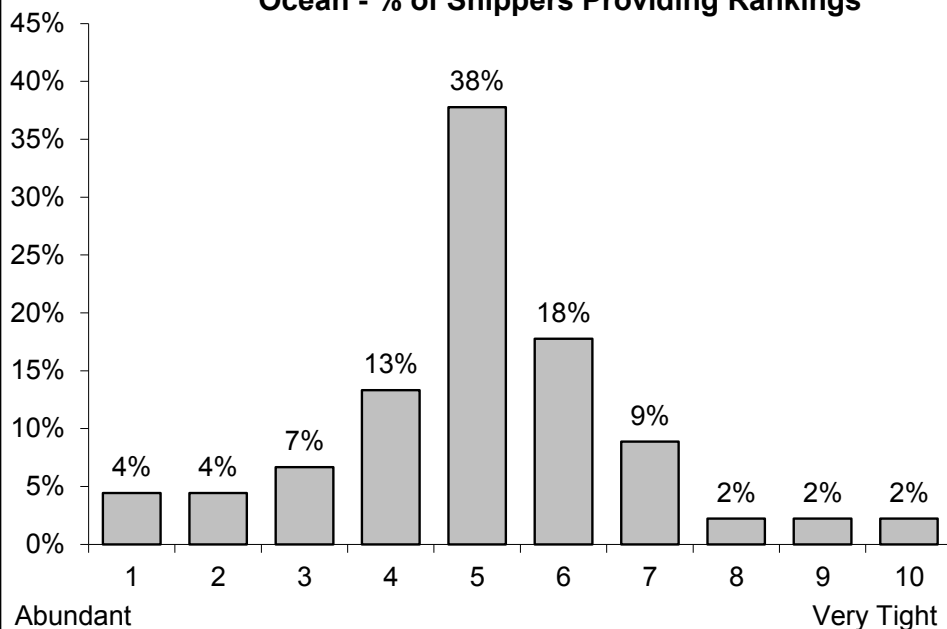
Current Capacity

Ocean - % of Shippers Providing Rankings



Projected Capacity in 6 Months

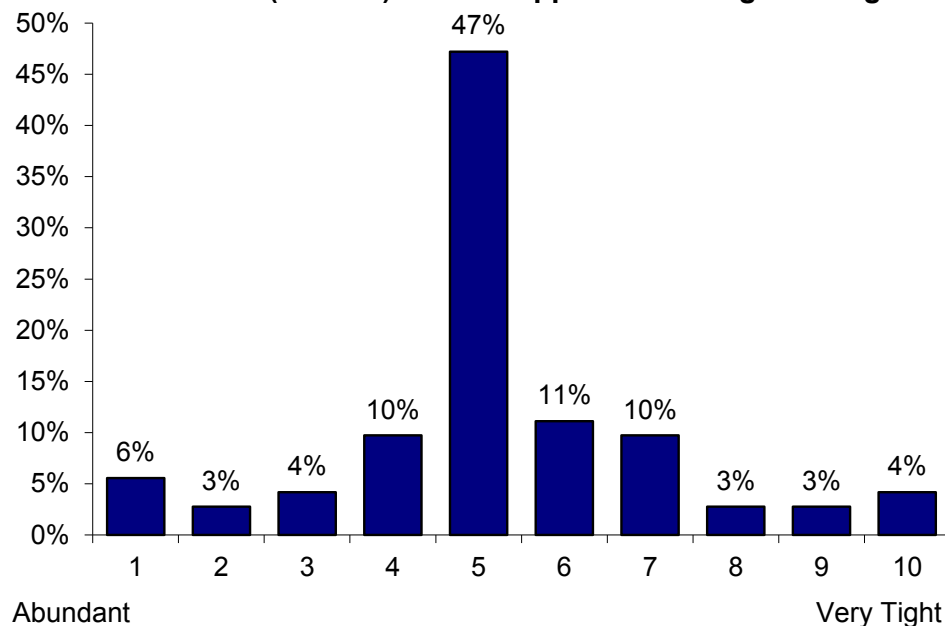
Ocean - % of Shippers Providing Rankings



Capacity Ranking Skew: Rail (Carload)

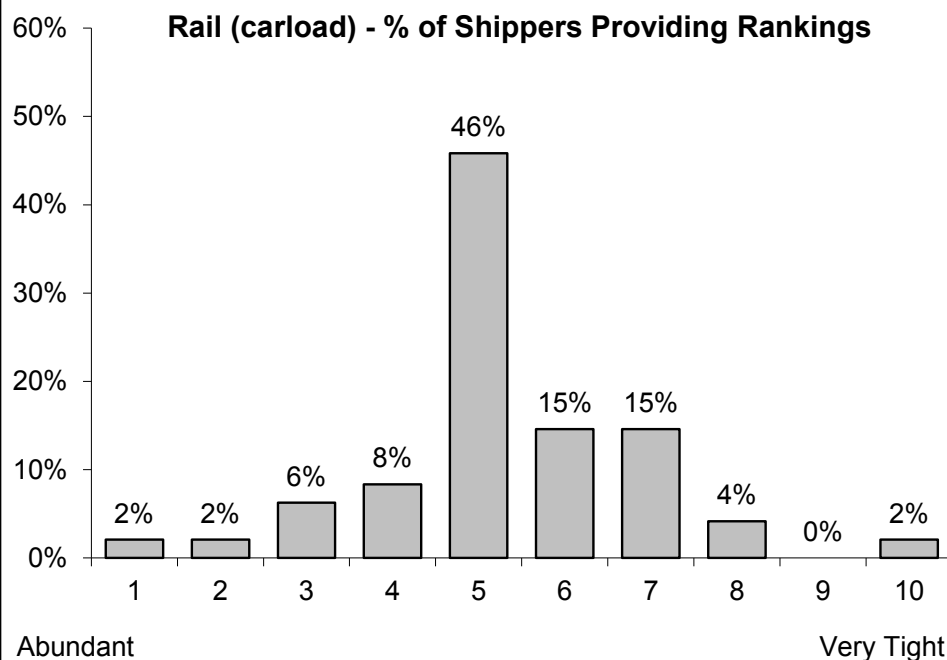
Current Capacity

Rail (carload) - % of Shippers Providing Rankings



Projected Capacity in 6 Months

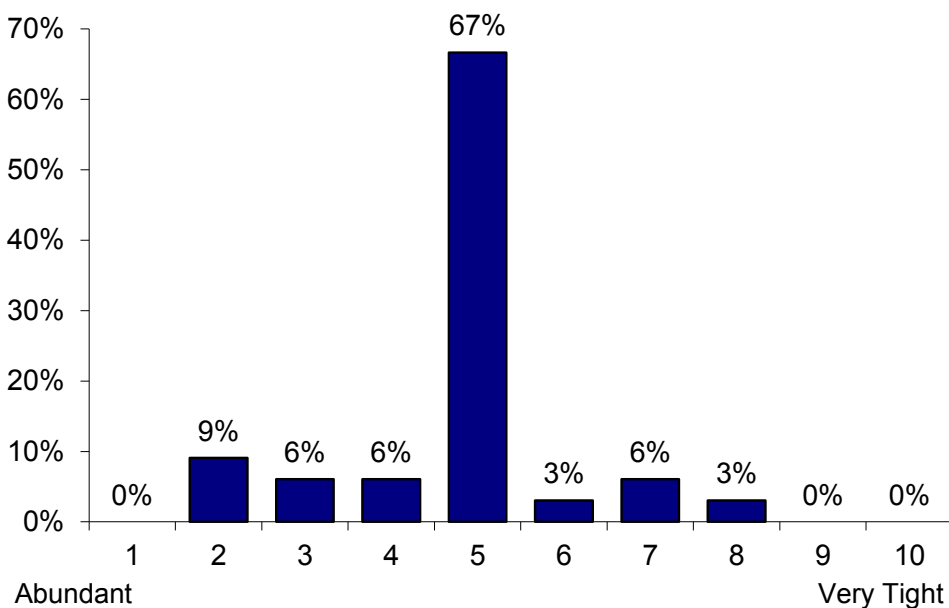
Rail (carload) - % of Shippers Providing Rankings



Capacity Ranking Skew: Barge

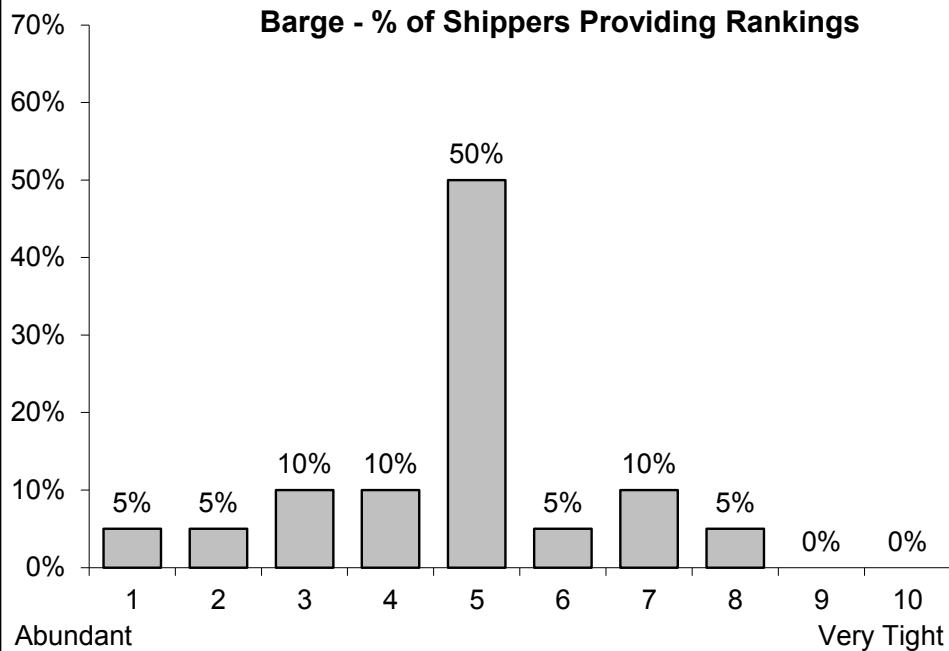
Current Capacity

Barge - % of Shippers Providing Rankings

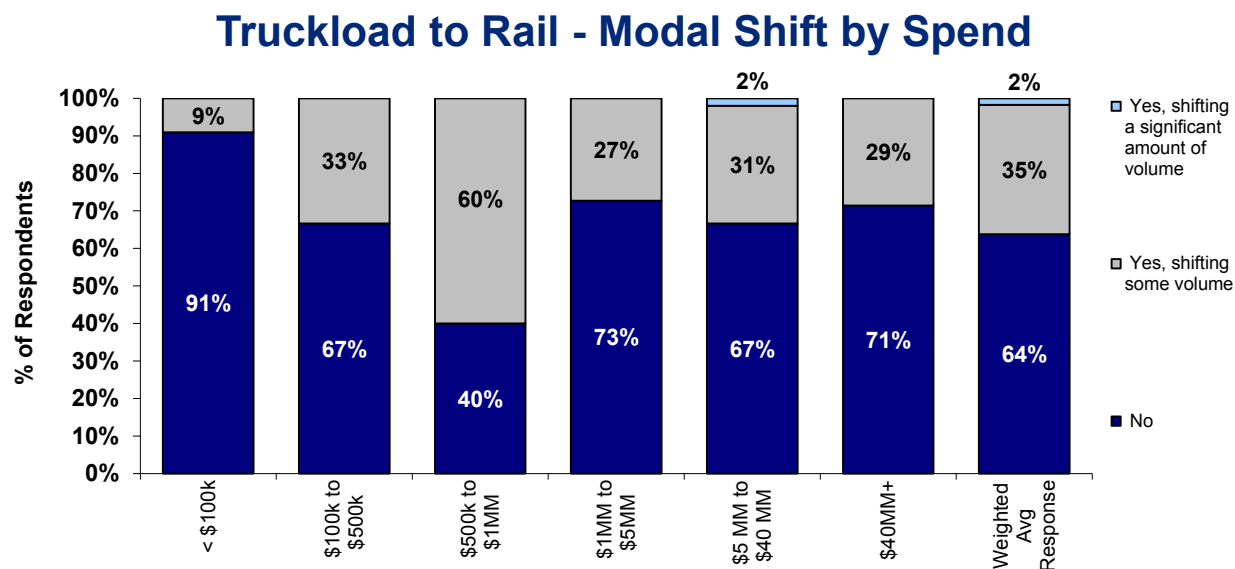
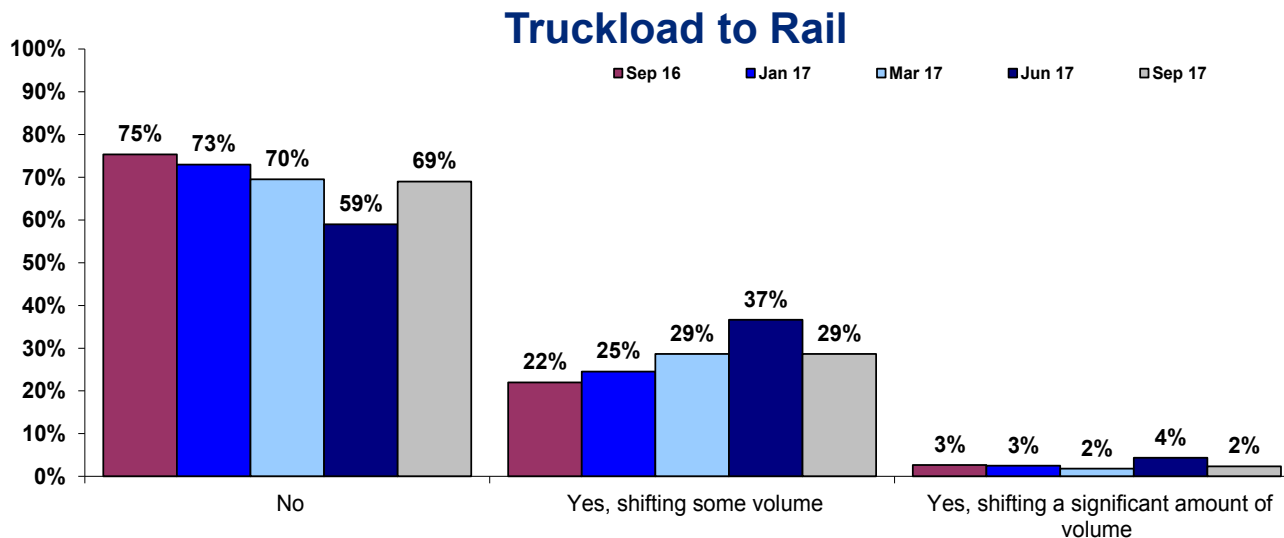


Projected Capacity in 6 Months

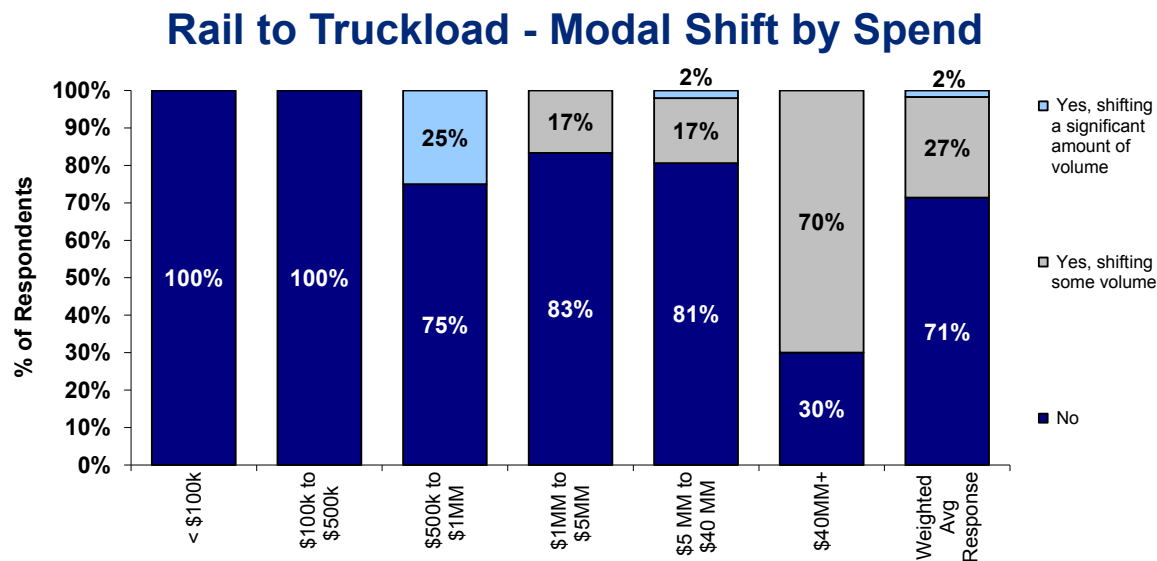
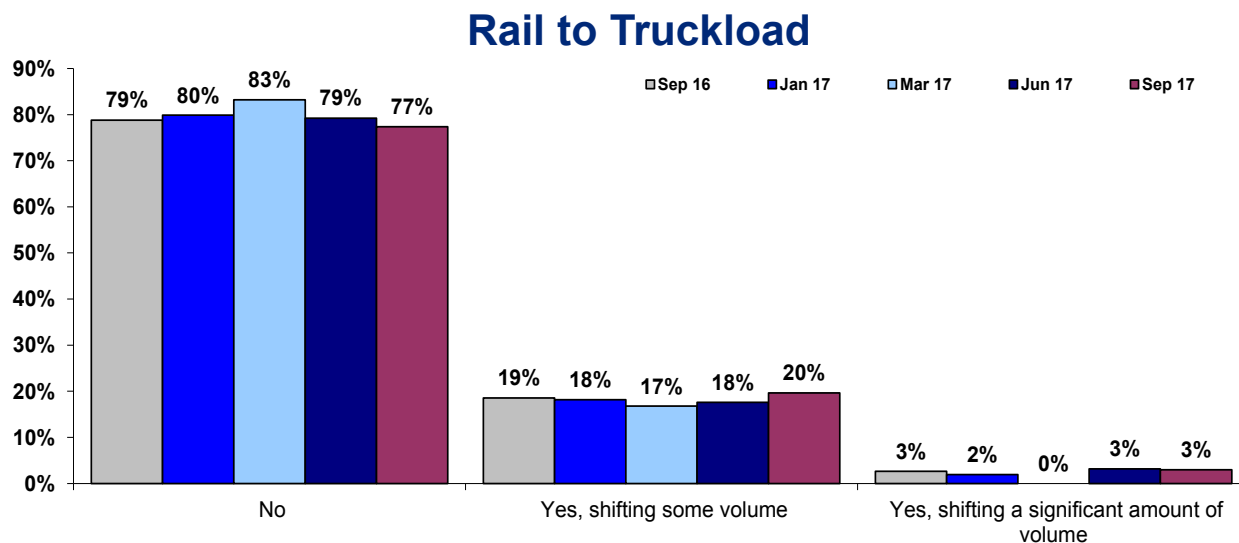
Barge - % of Shippers Providing Rankings



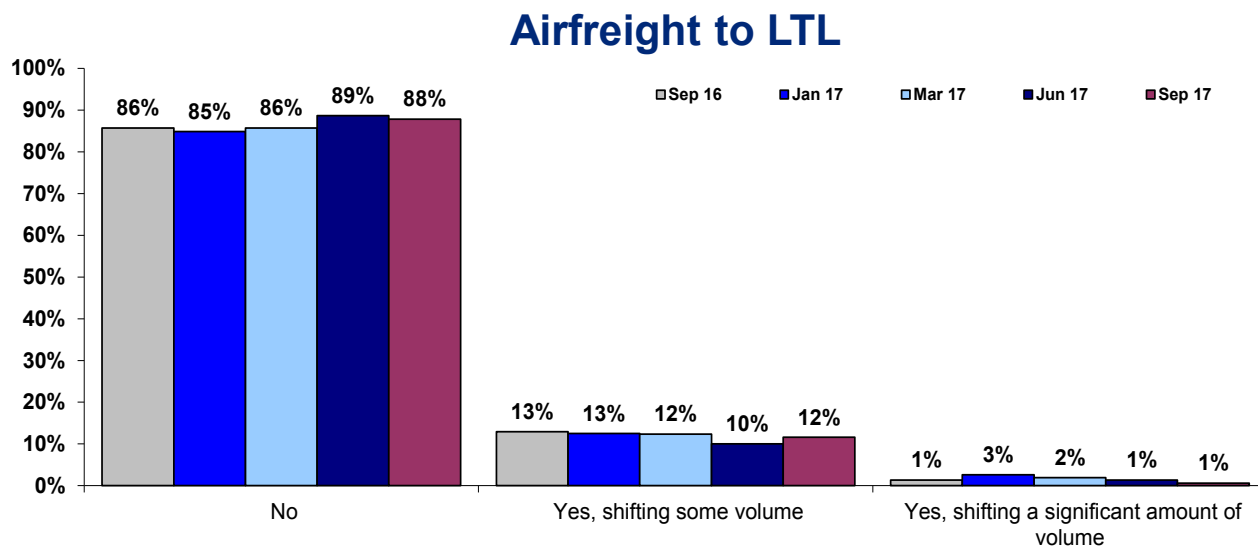
Shipper Modal Shift Statistics – Truckload to Rail



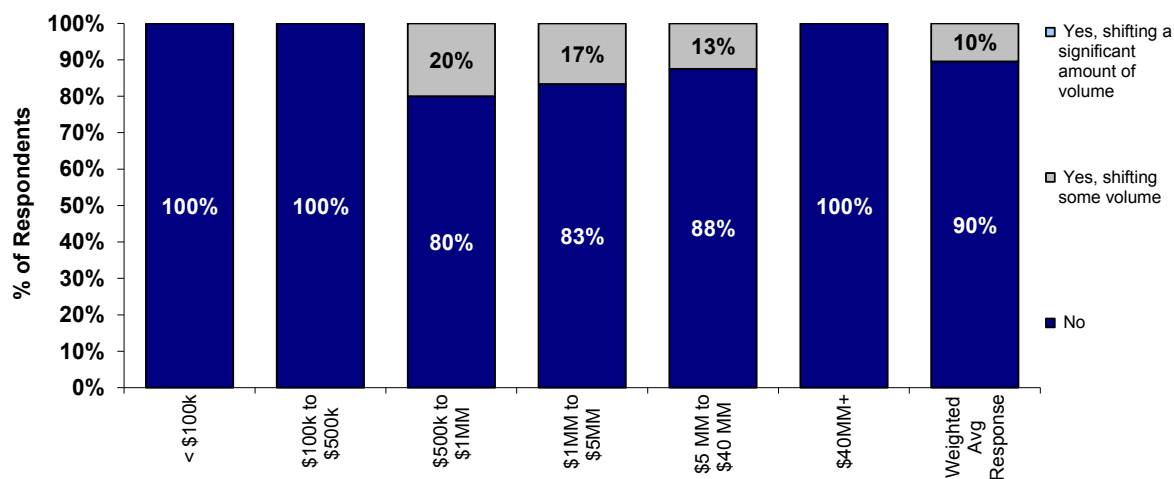
Shipper Modal Shift Statistics – Rail to Truckload



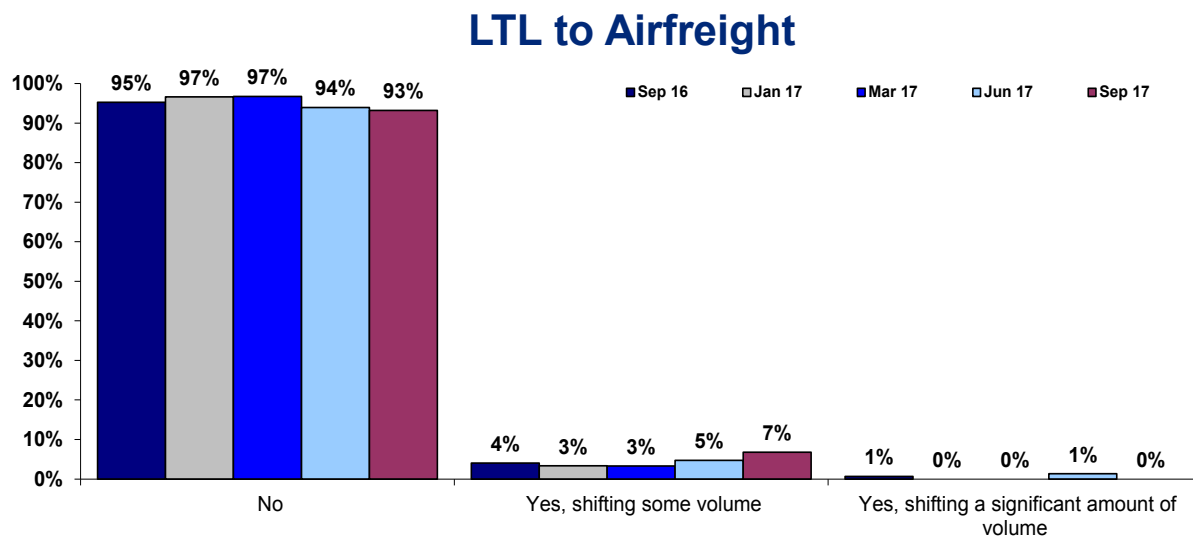
Shipper Modal Shift Statistics – Airfreight to LTL



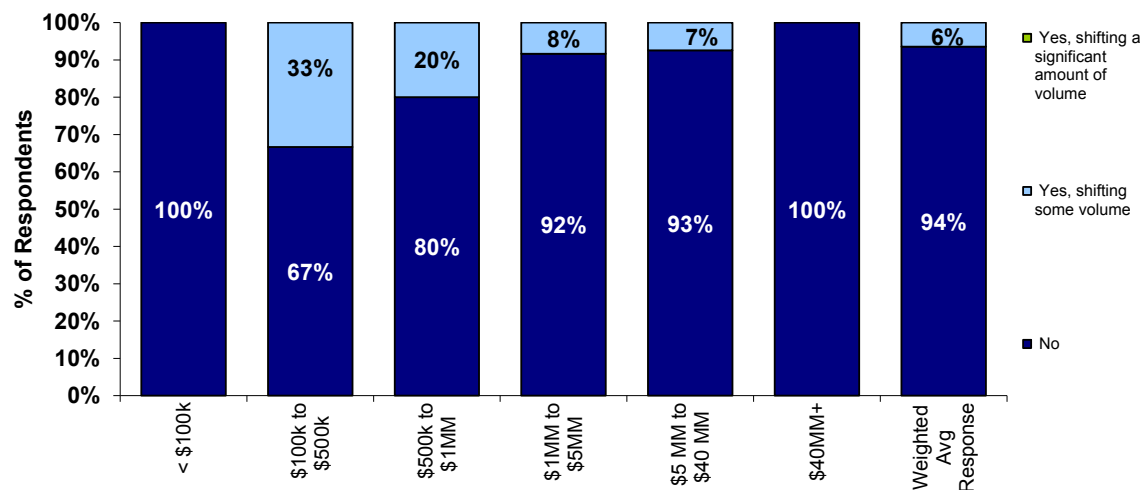
Airfreight to LTL - Modal Shift by Spend



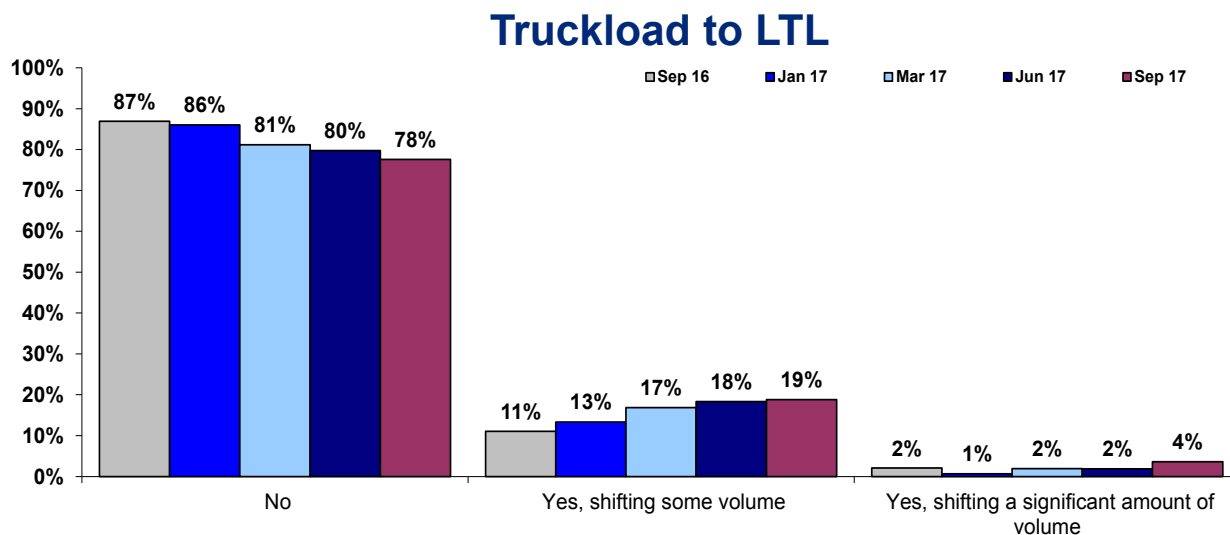
Shipper Modal Shift Statistics – LTL to Airfreight



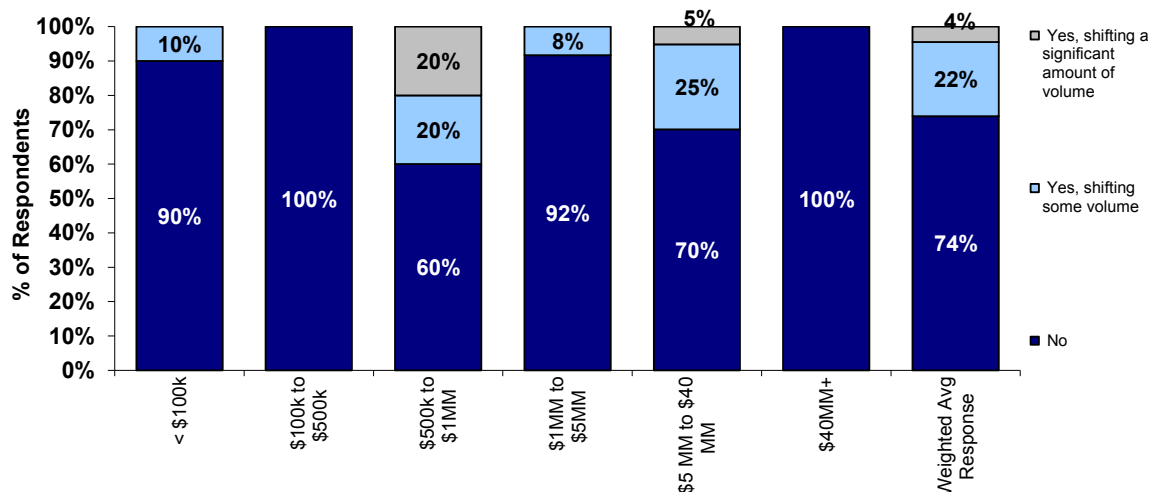
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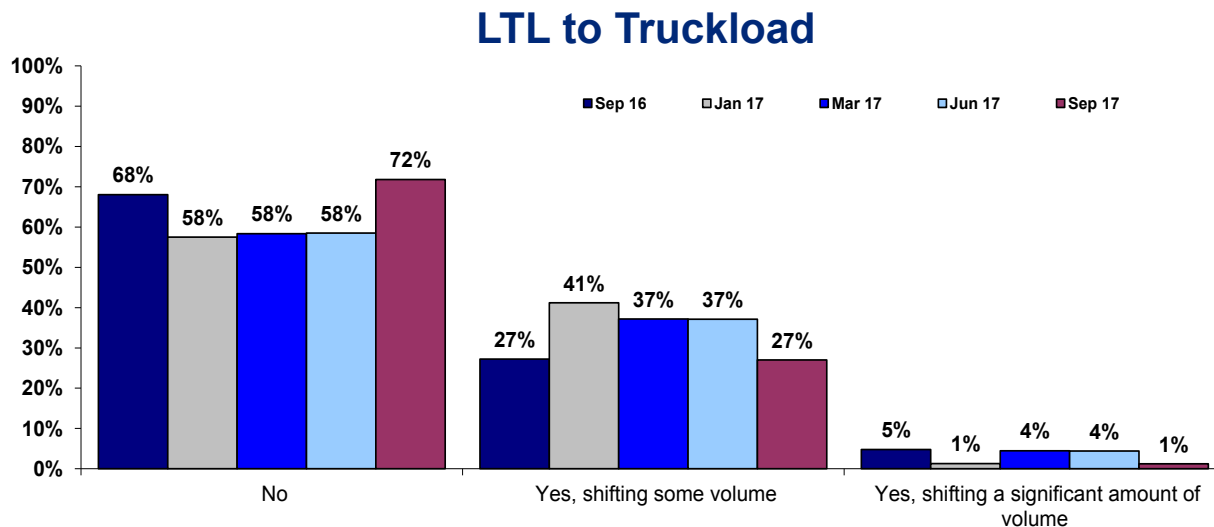
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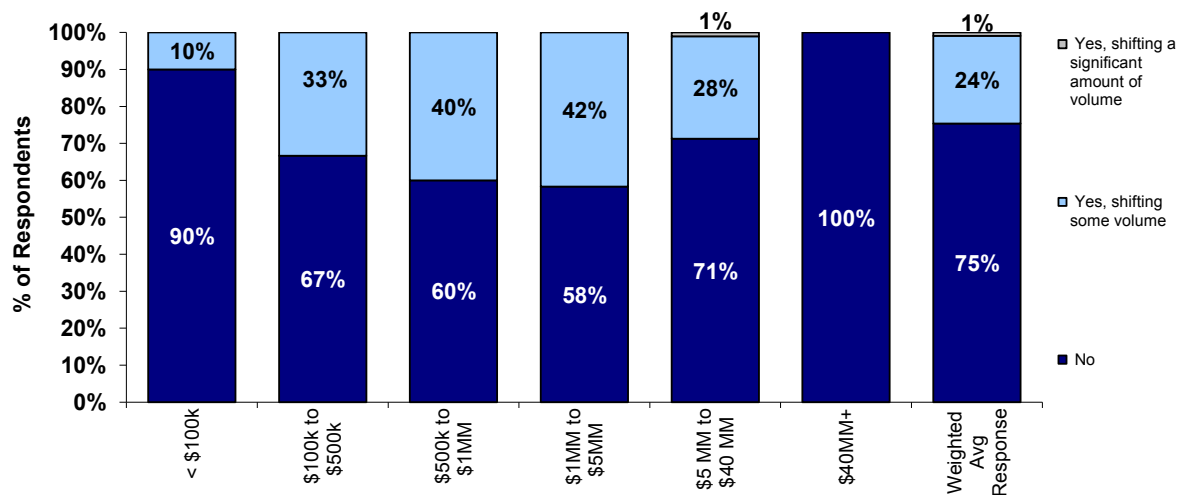
Truckload to LTL - Modal Shift by Spend



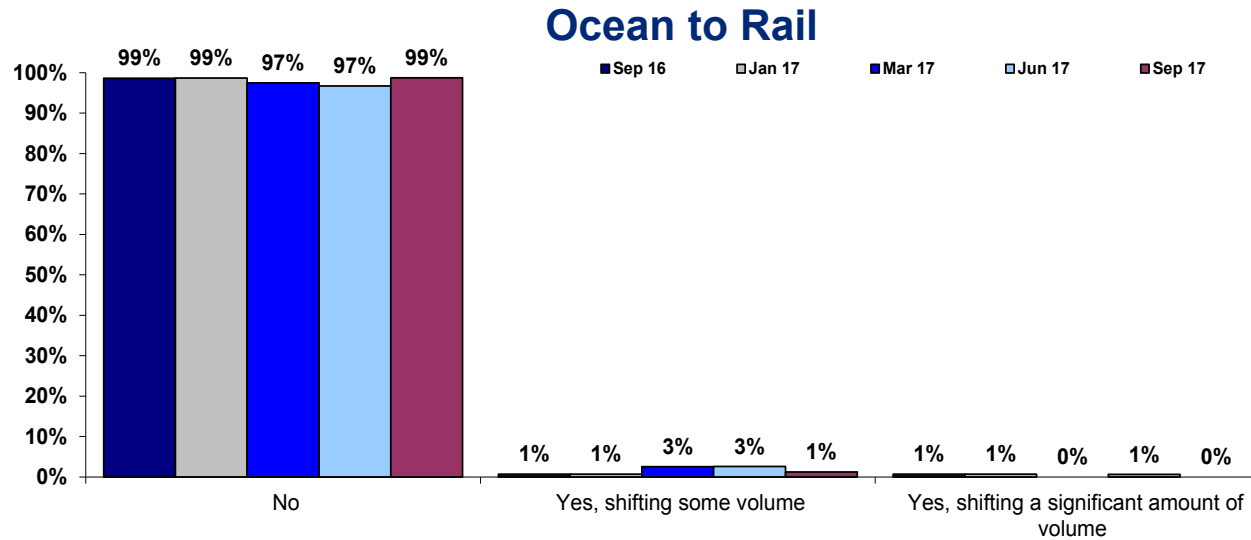
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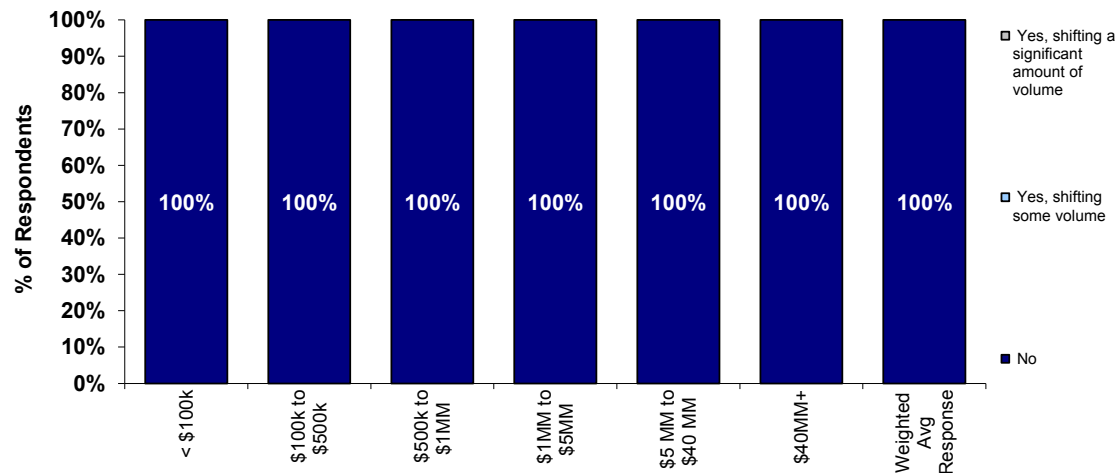
LTL to Truckload - Modal Shift by Spend



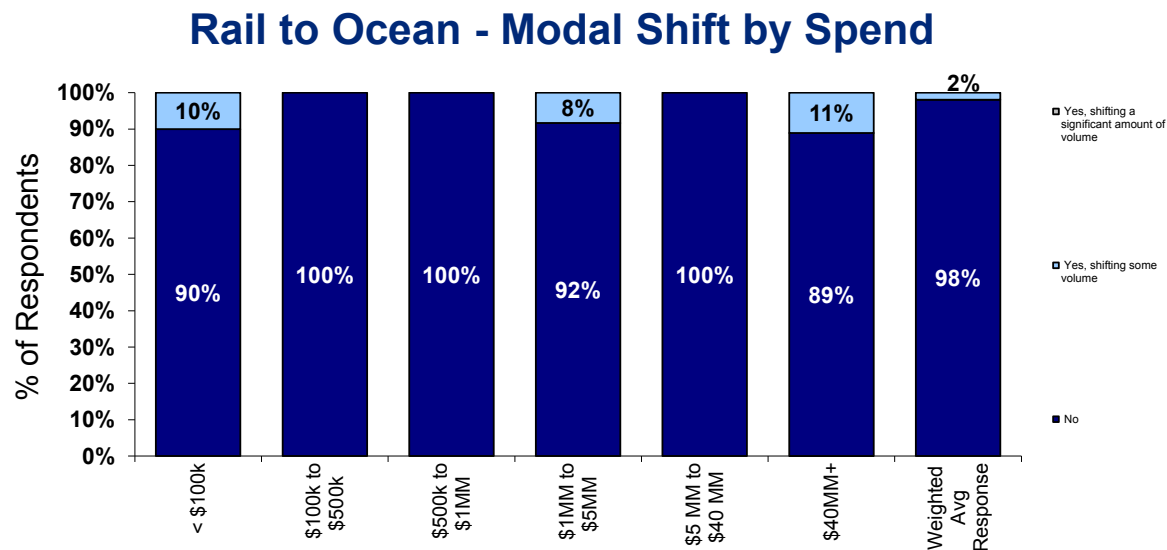
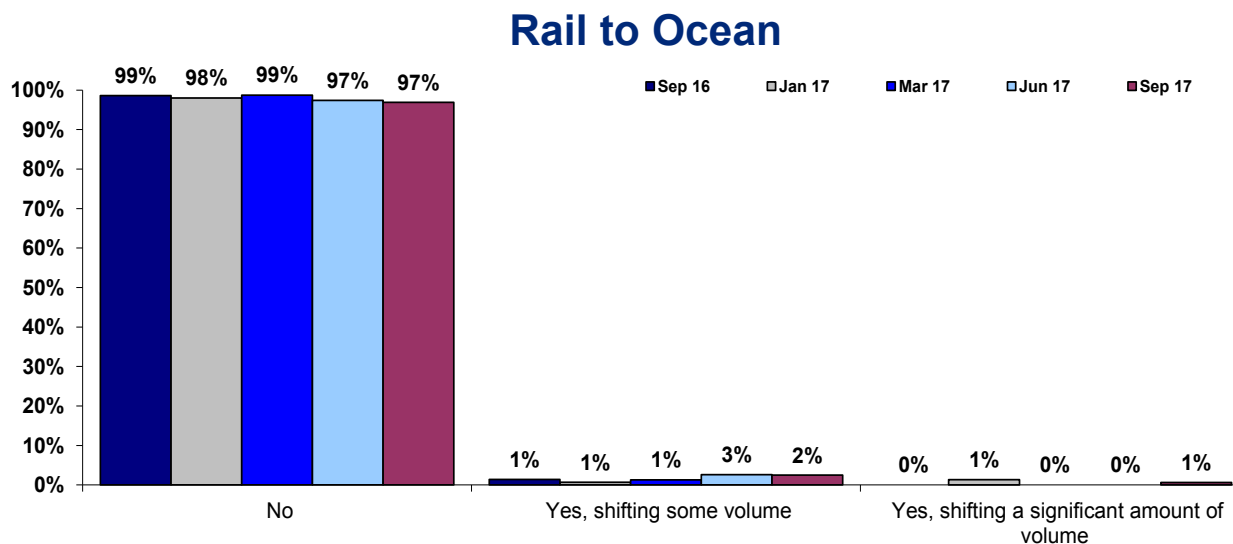
Shipper Modal Shift Statistics – Ocean to Rail



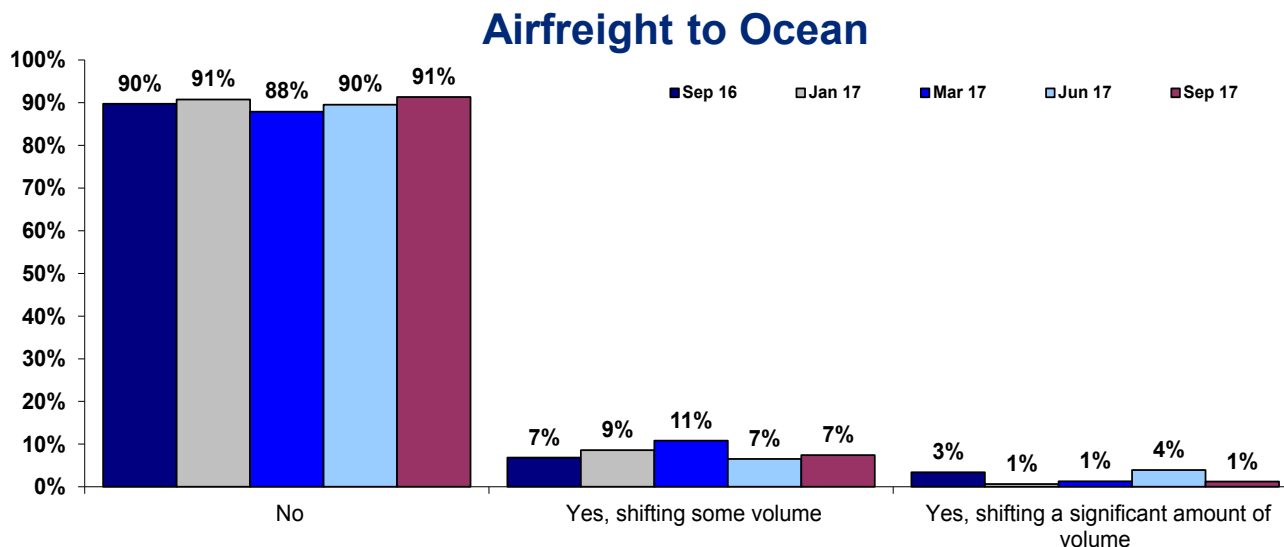
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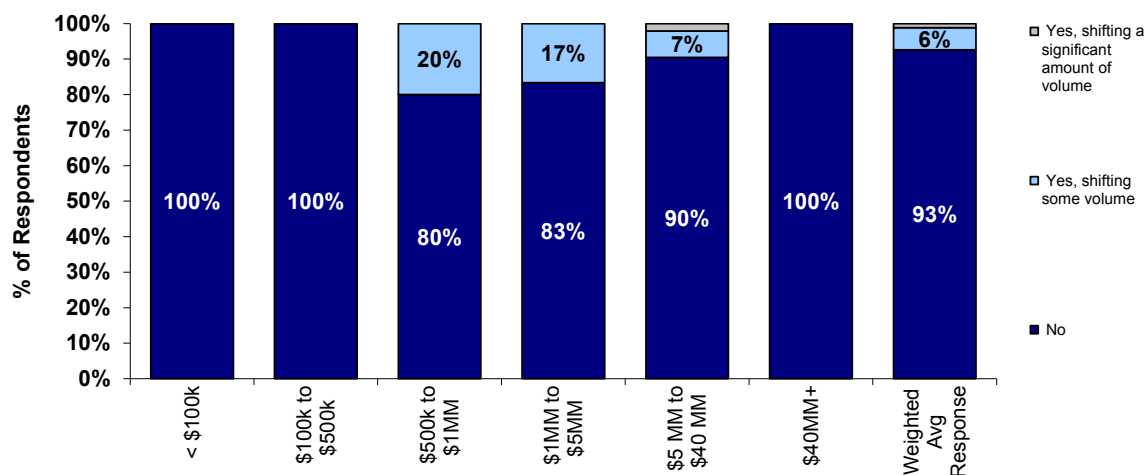
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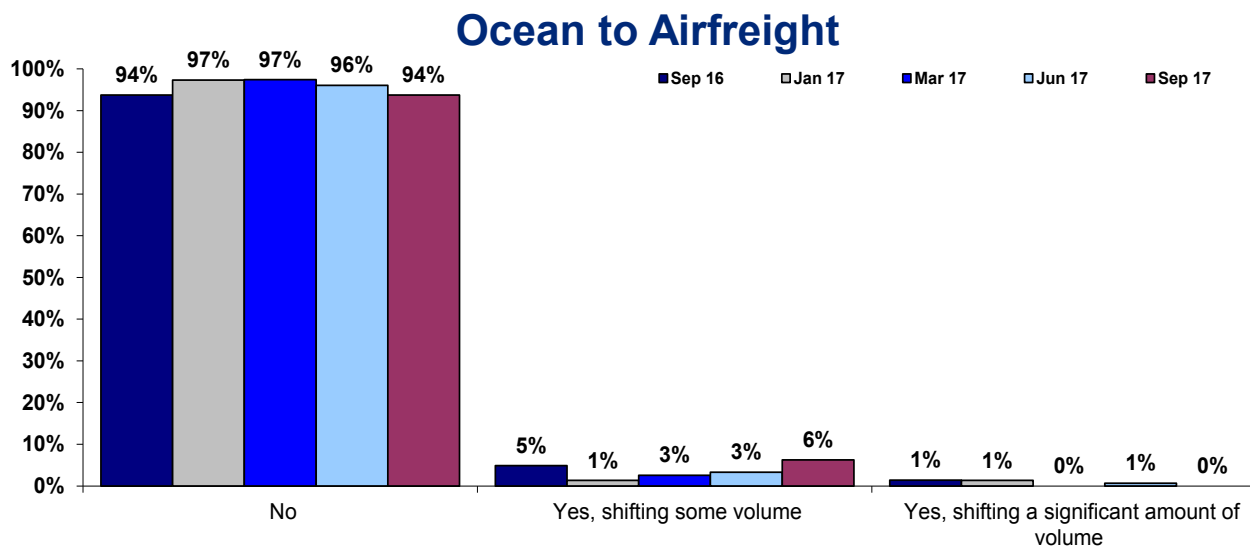
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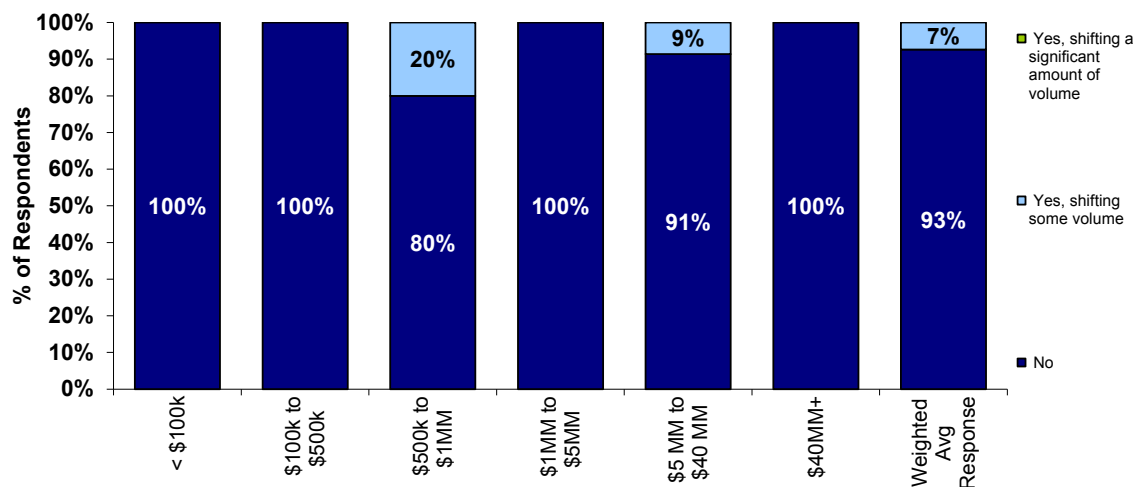
Airfreight to Ocean - Modal Shift by Spend



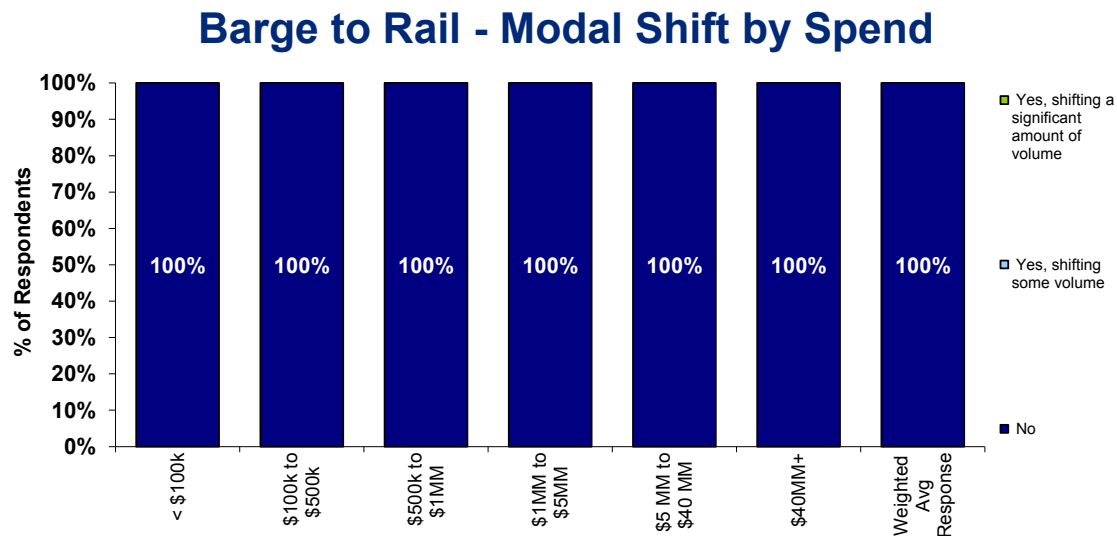
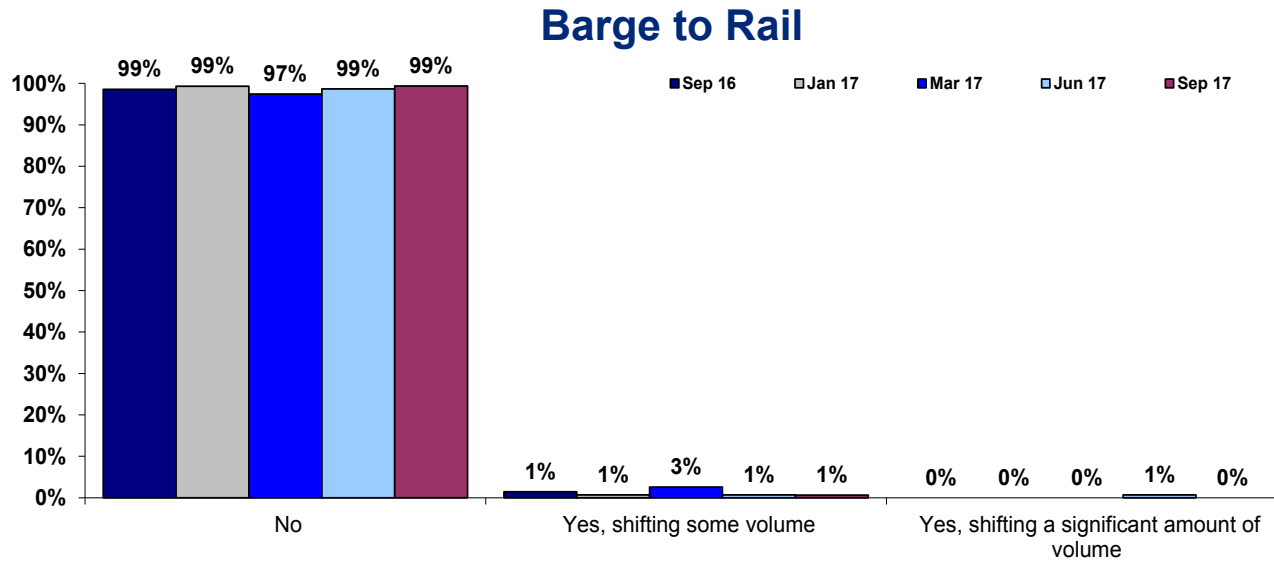
Shipper Modal Shift Statistics – Ocean to Airfreight



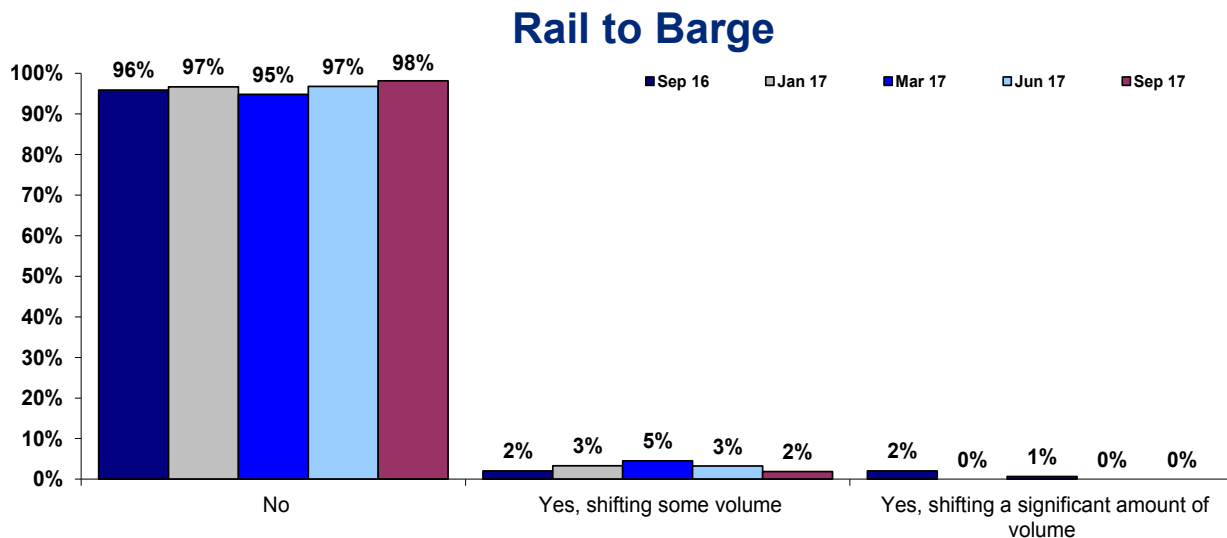
Ocean to Airfreight - Modal Shift by Spend



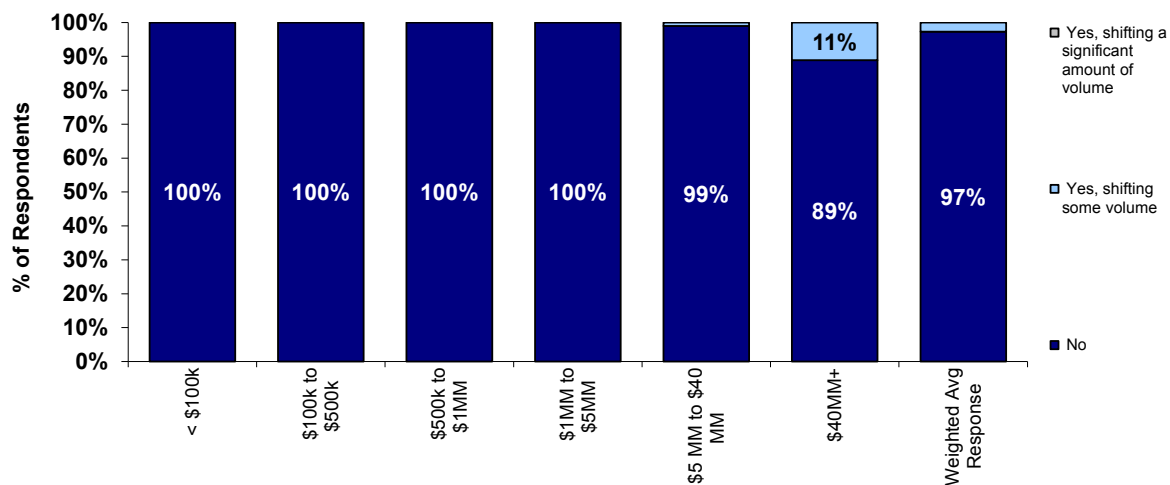
Shipper Modal Shift Statistics – Barge to Rail



Shipper Modal Shift Statistics – Rail to Barge

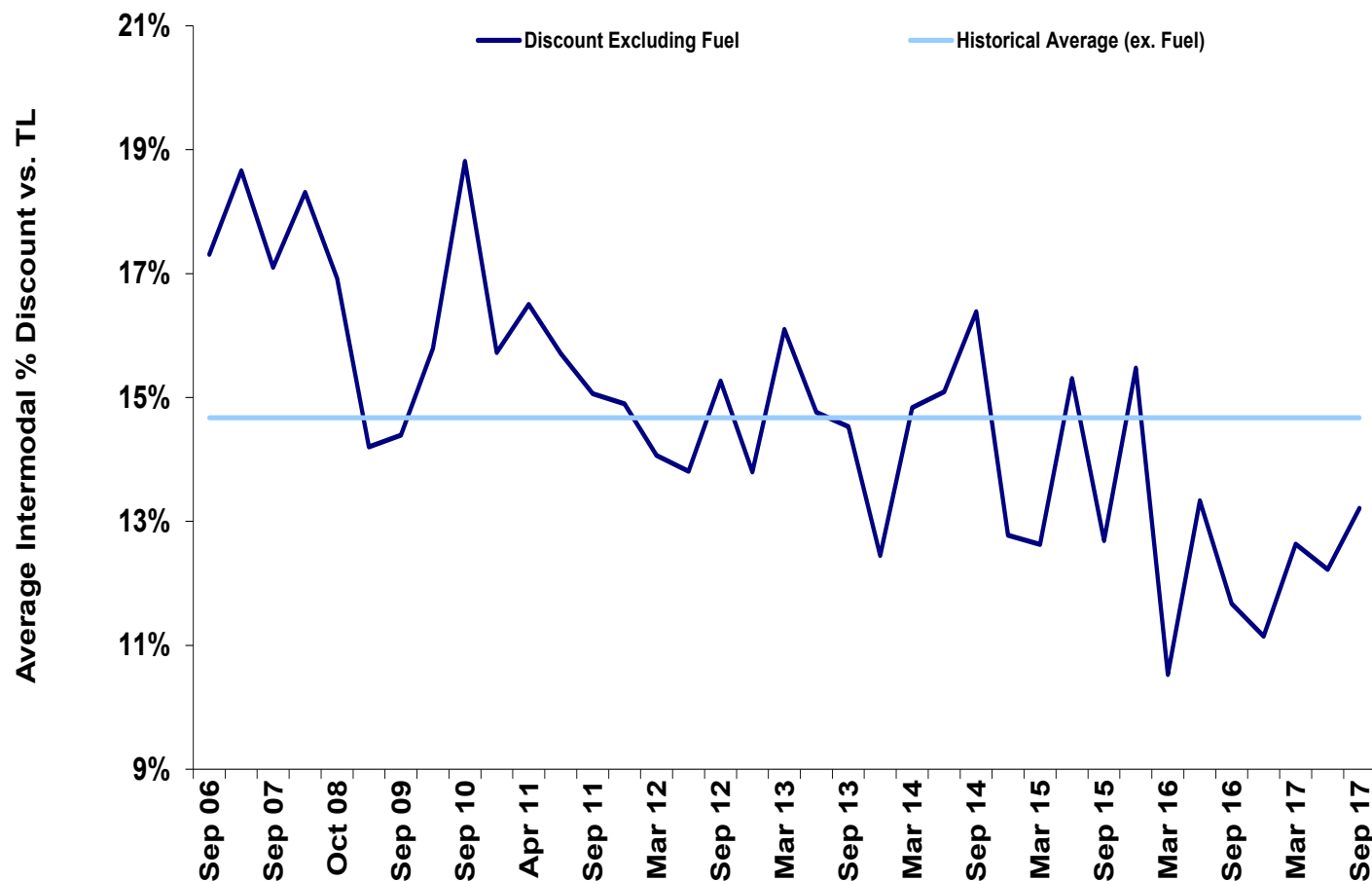


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Intermodal vs. Truck: Intermodal Discount Over Time

What discount is being offered in the marketplace for intermodal services when compared to TL services in a similar lane?



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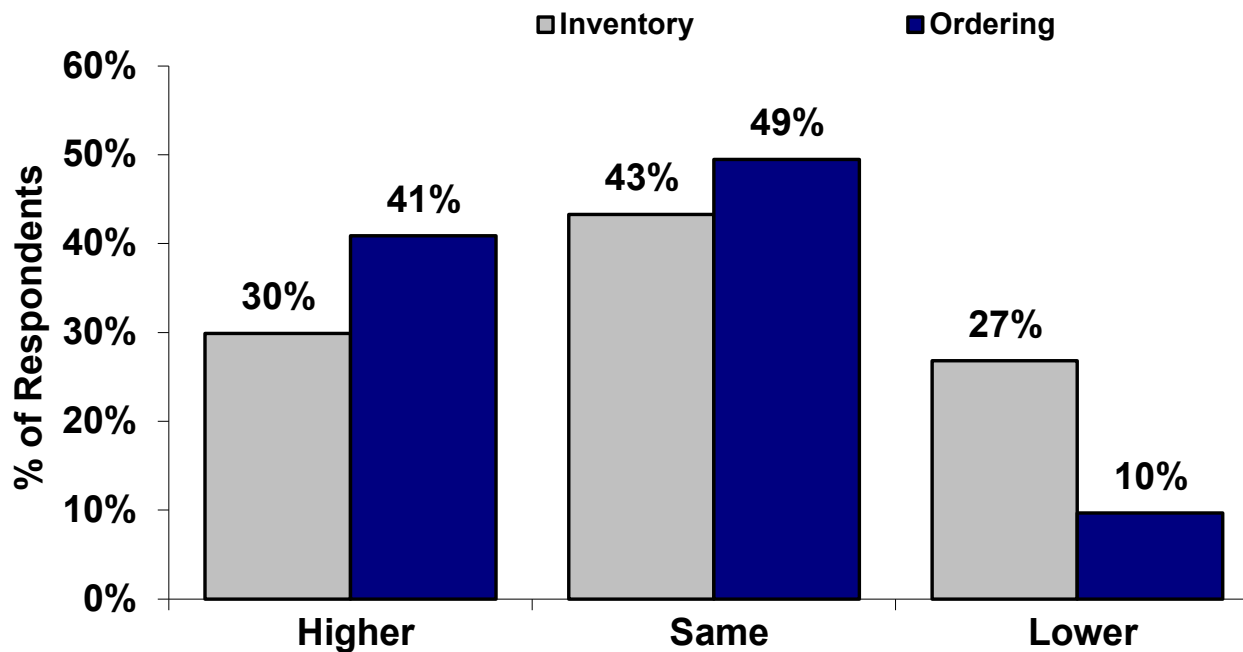
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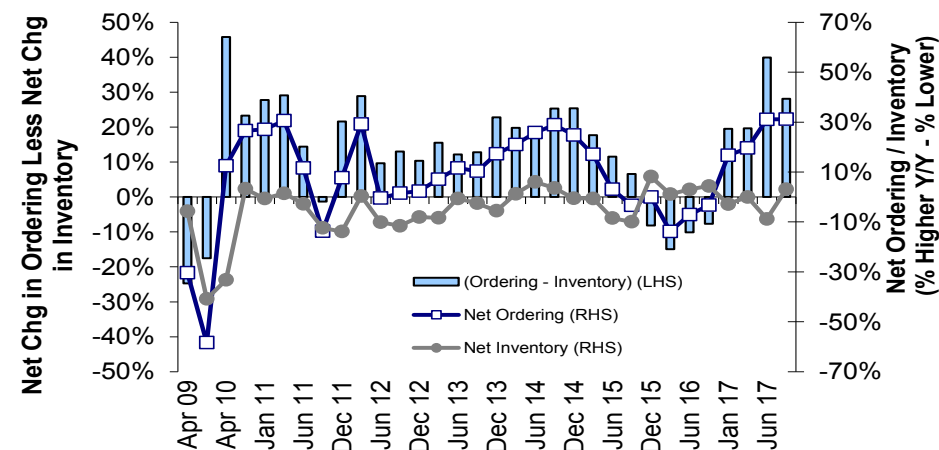
Shipper Inventory and Stocking Trends

Shipper Inventories and Orders Relative to Last Year

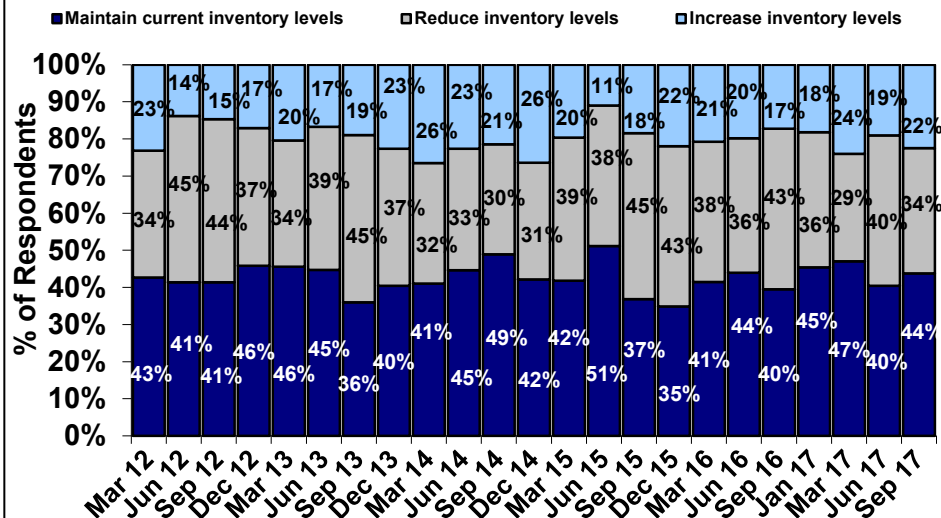


Assessing Restocking Potential: Net Inventory Trends and Inventory Plans

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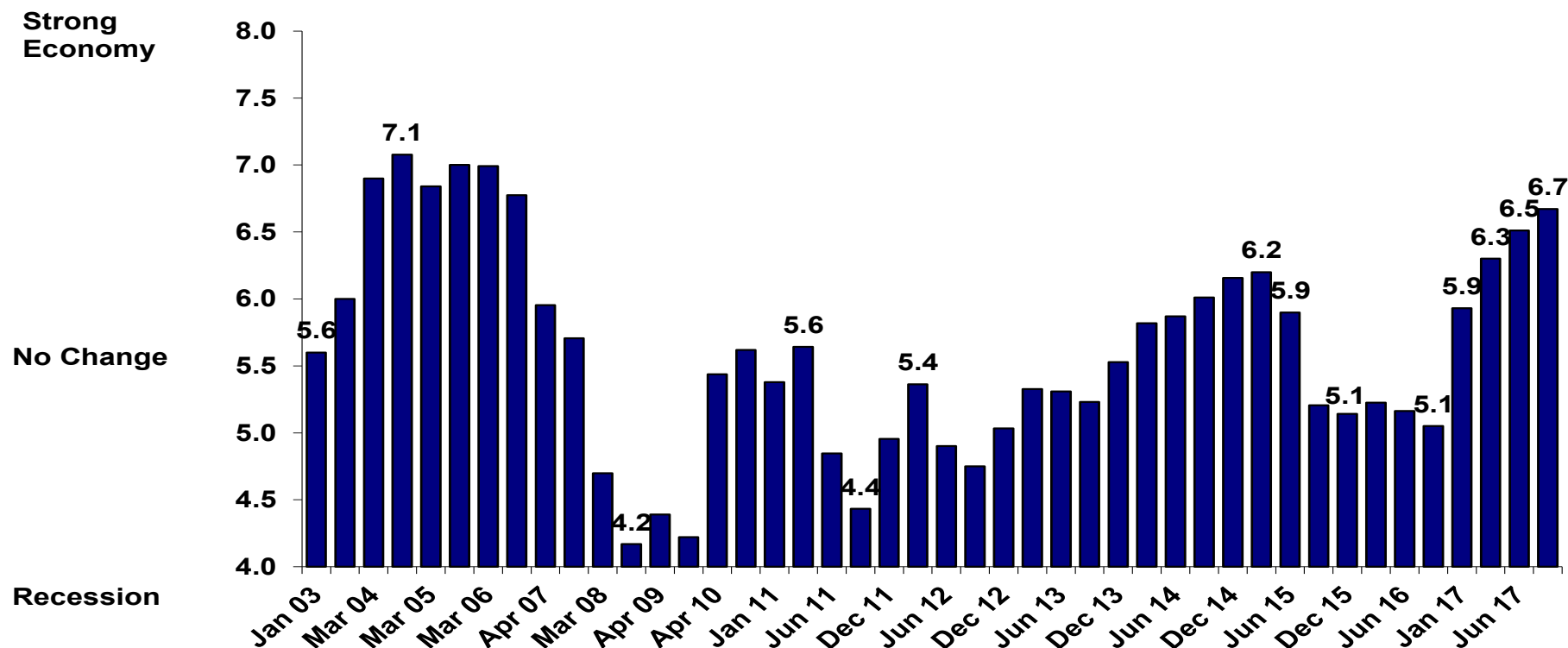


Shippers' Inventory Plans



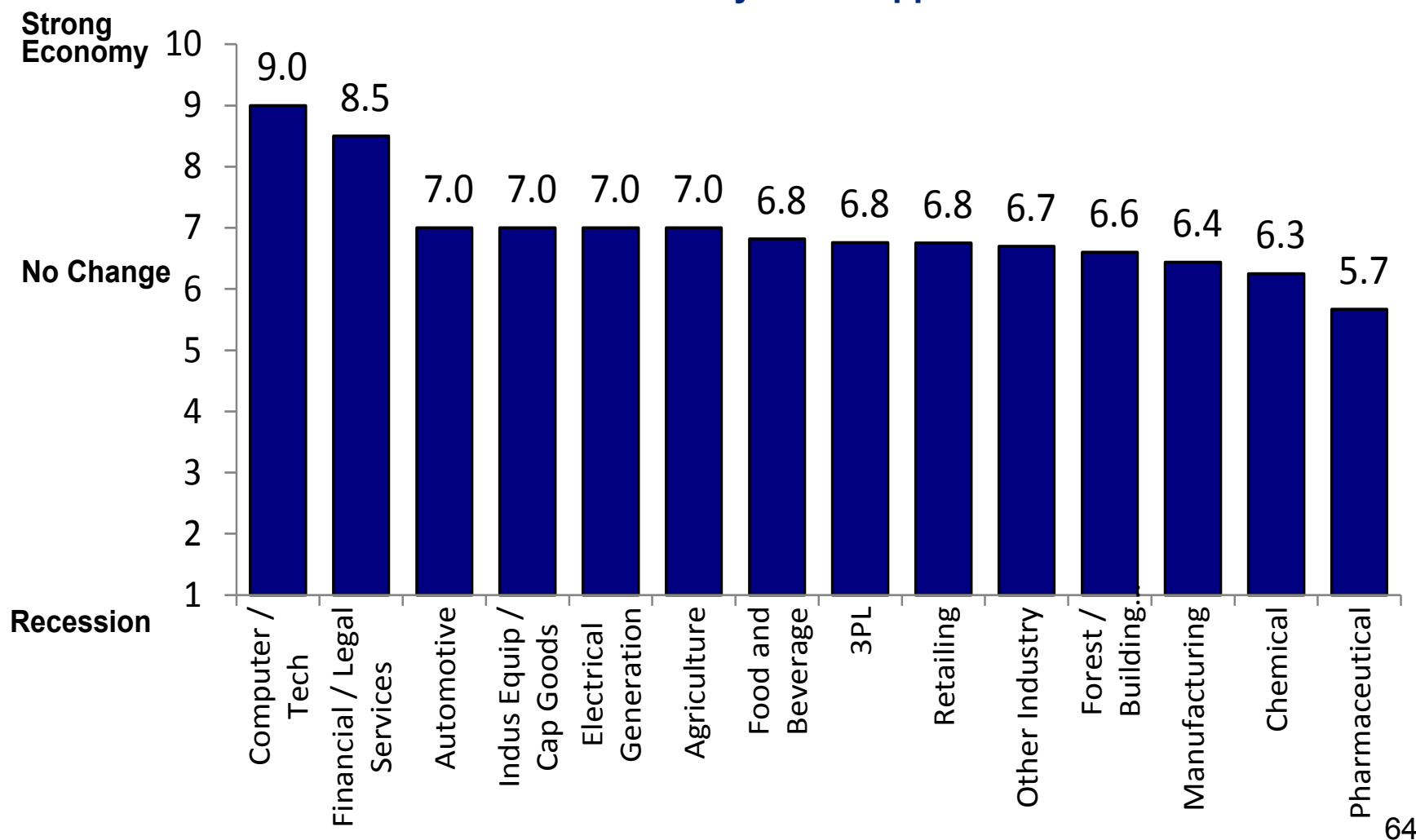
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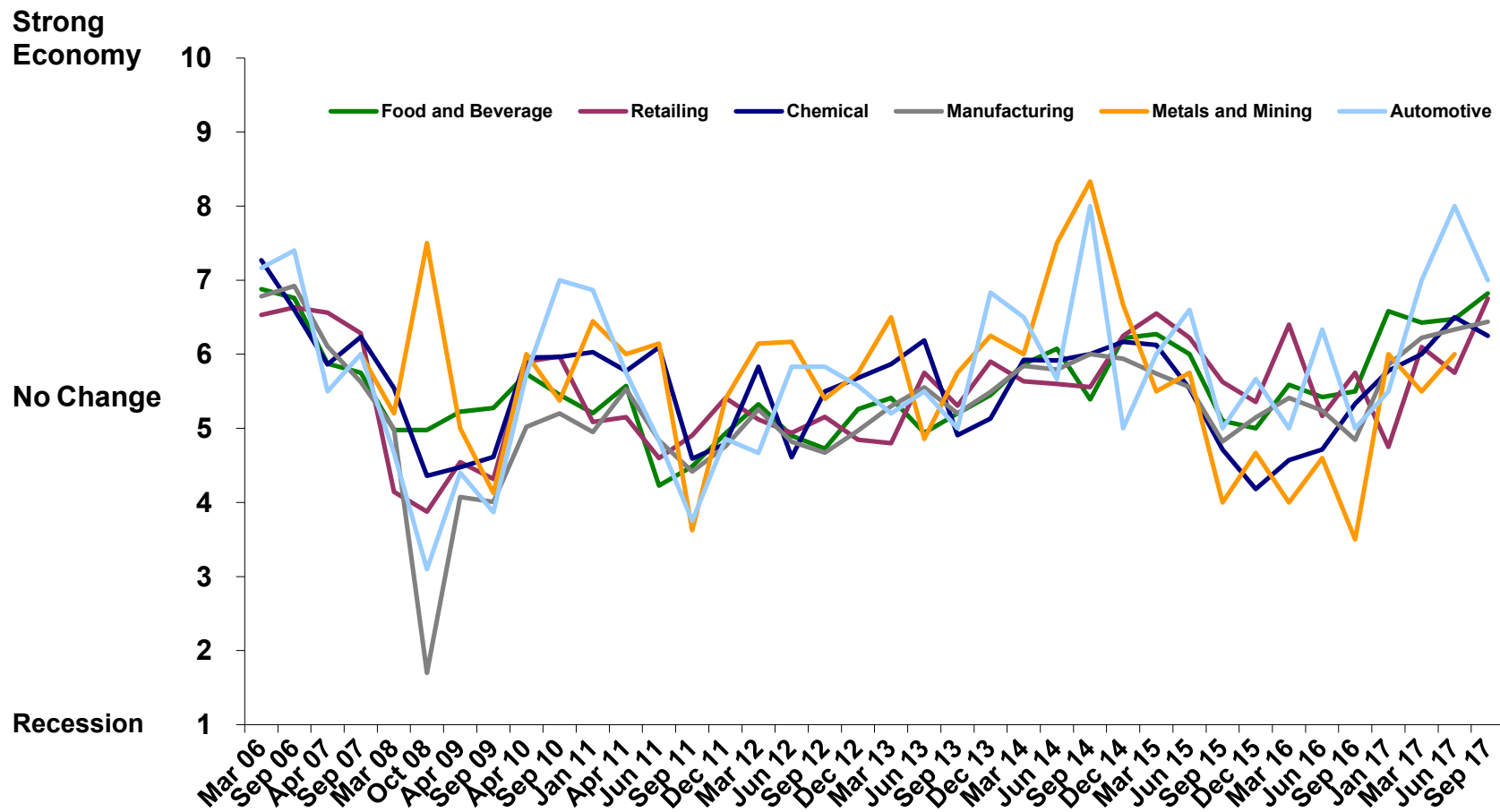
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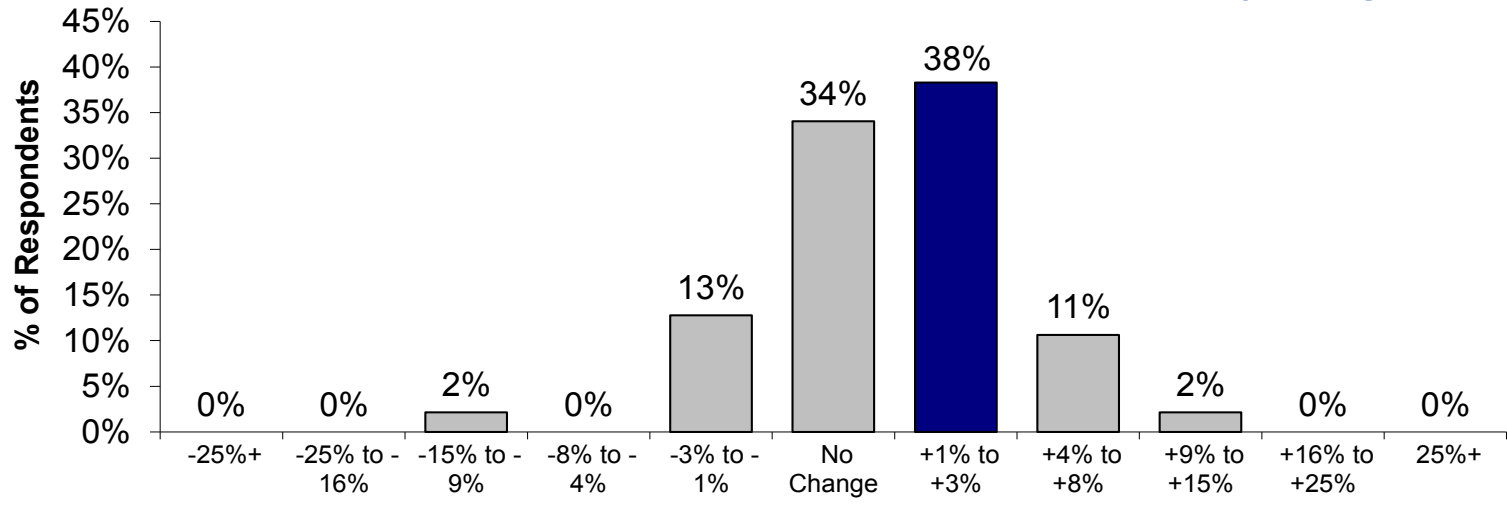
1. Volume Trends
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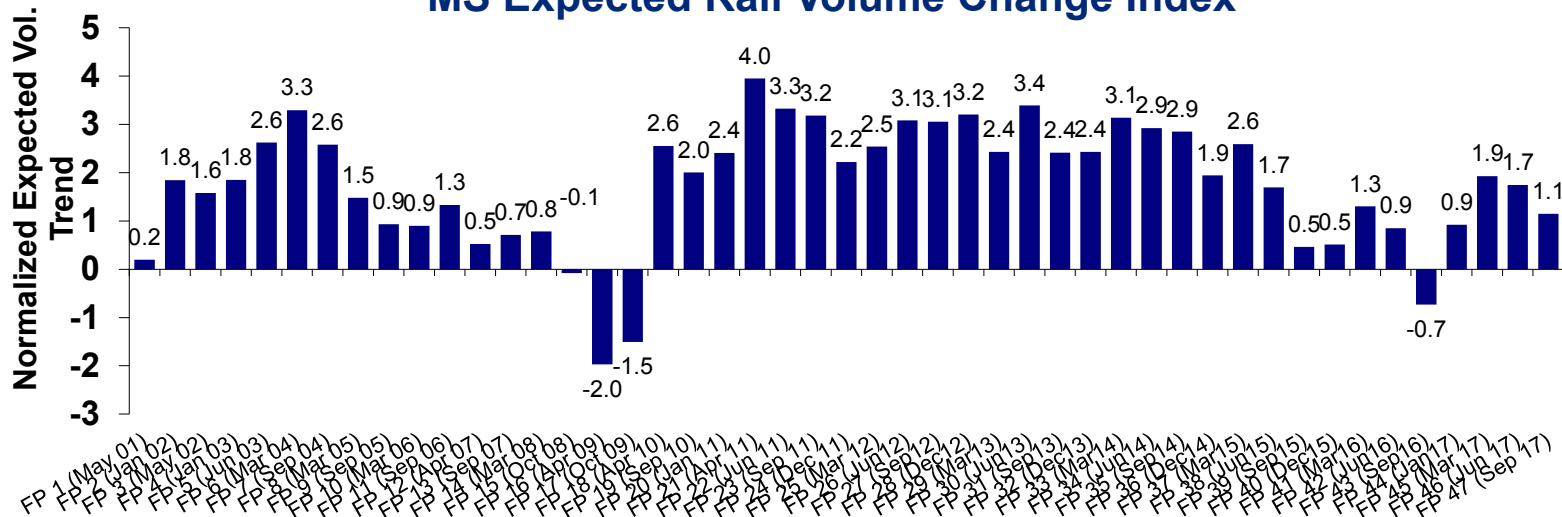
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Rail Volume Trends: Forward 6 Month YoY Volume Expectations

YoY Volume Growth Expectations for Next 6 Mo. by Range

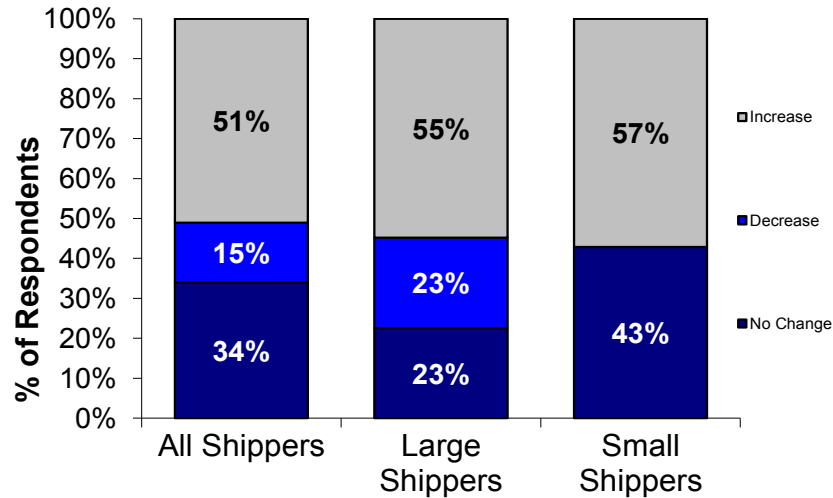


MS Expected Rail Volume Change Index

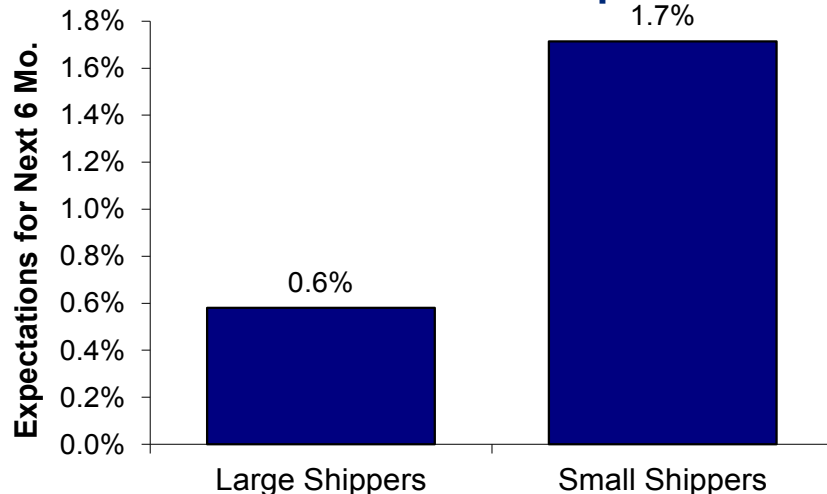


Rail Volume Trends: Forward 6 Month YoY Volume Expectations by Segment

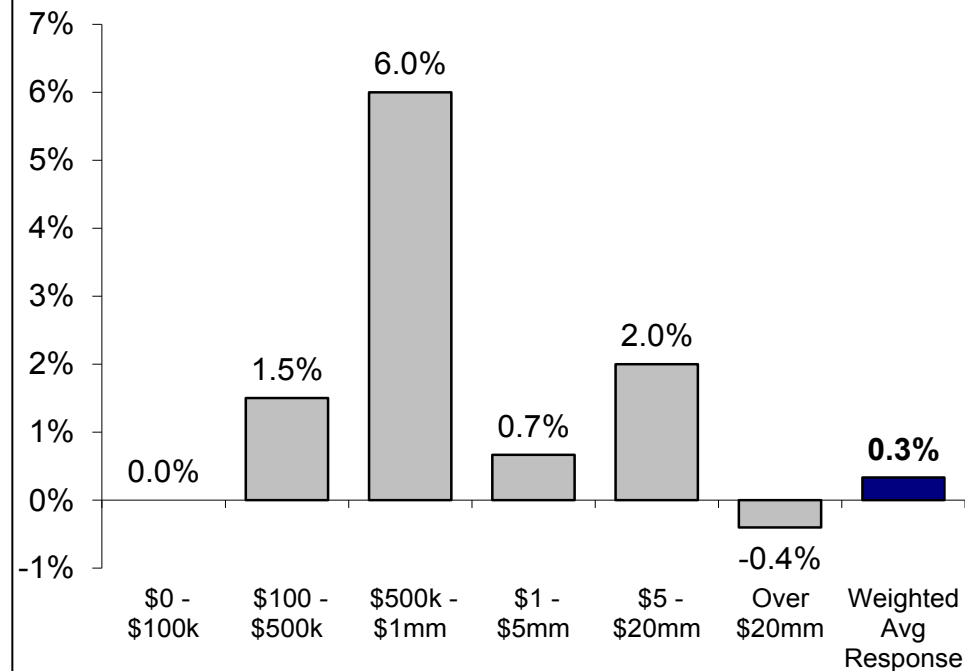
YoY Volume Growth Expectations



YoY Volume Growth Expectations

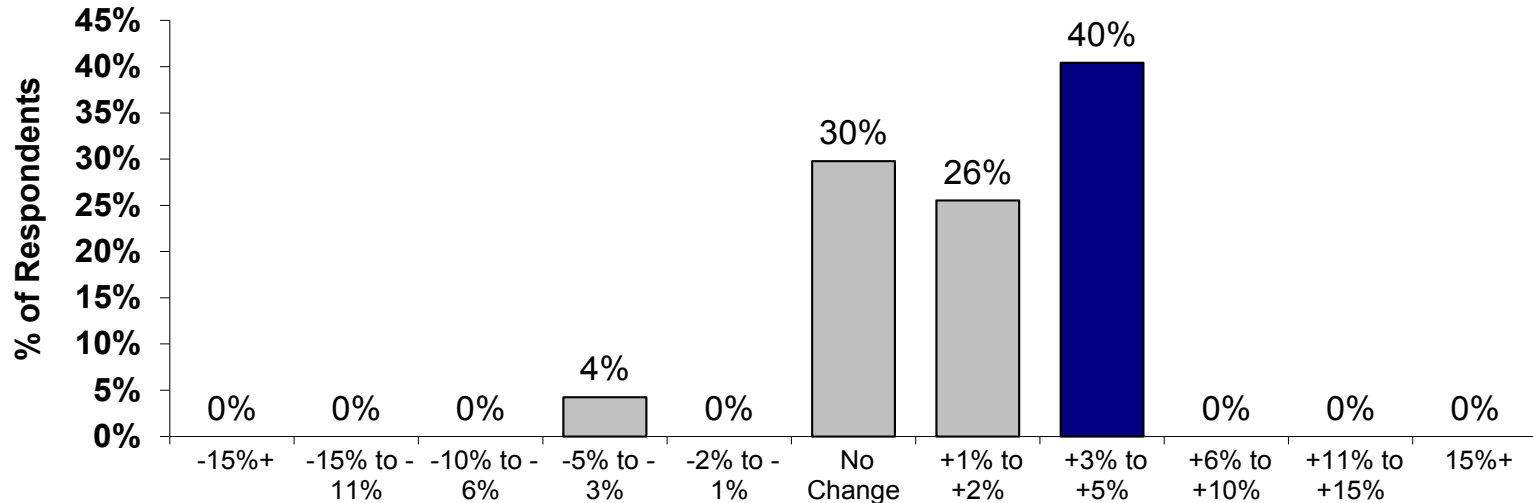


6 Mo. YoY Volume Growth Expectation by Spend

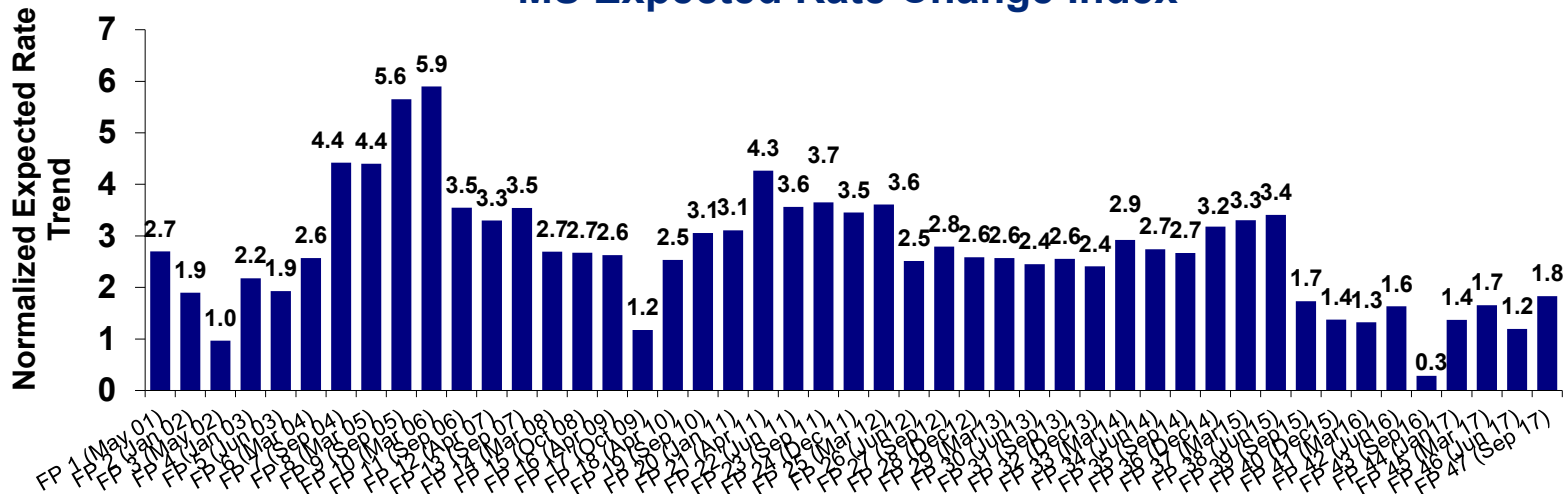


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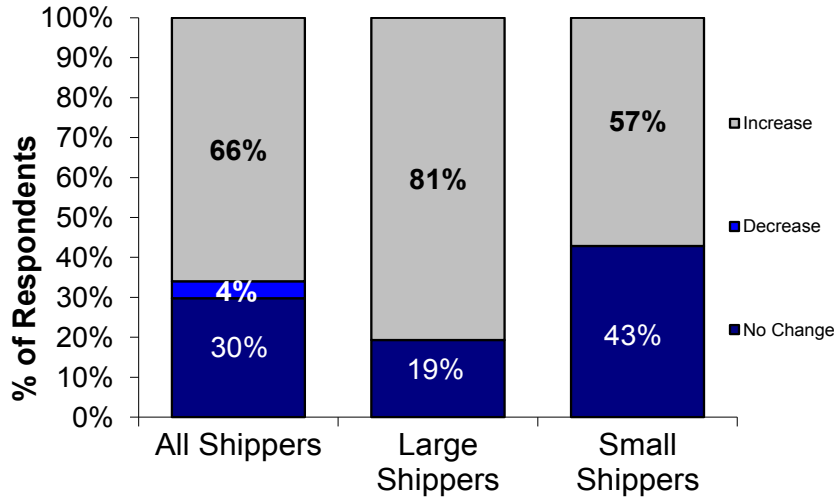


MS Expected Rate Change Index

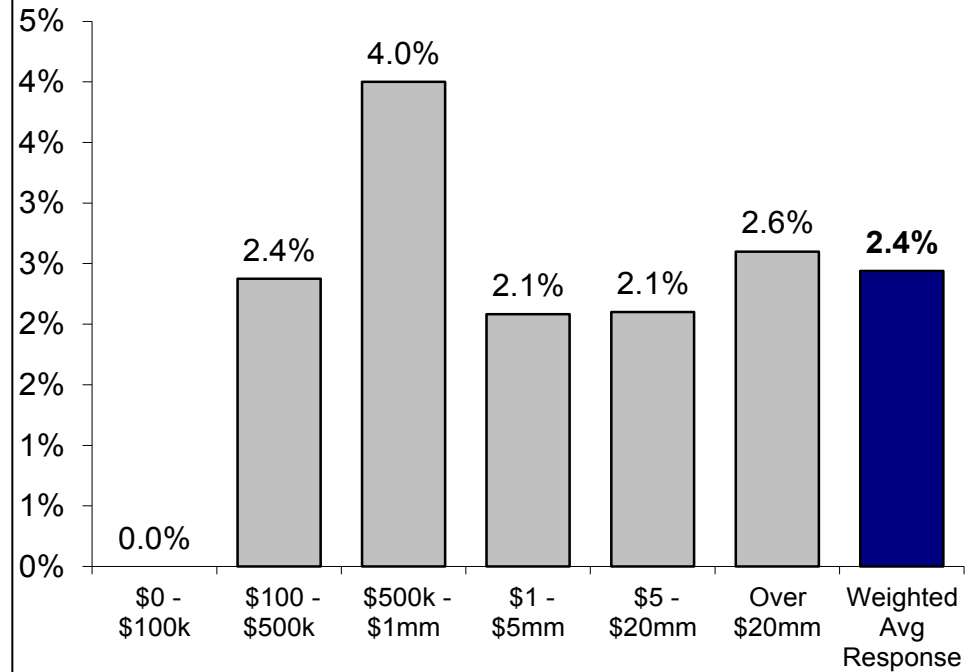


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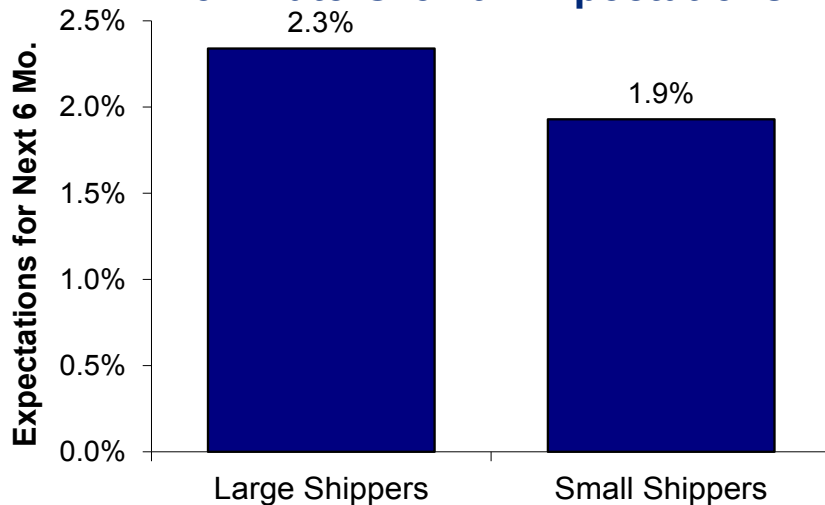
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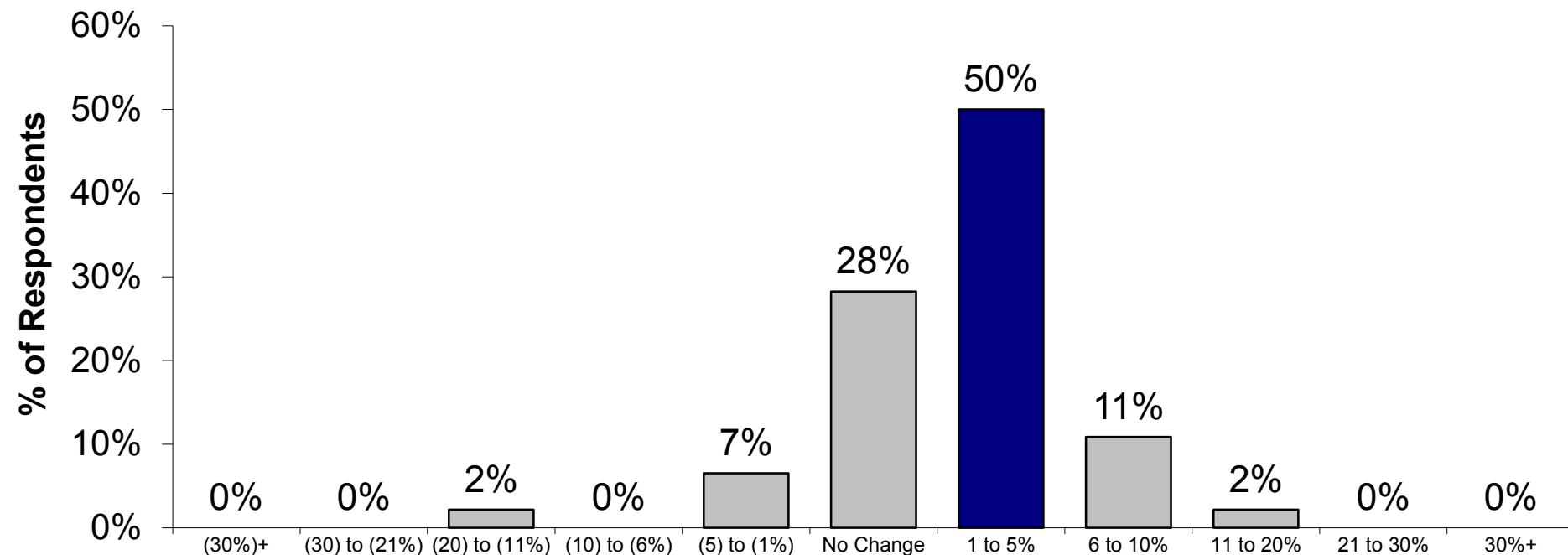


YoY Rate Growth Expectations



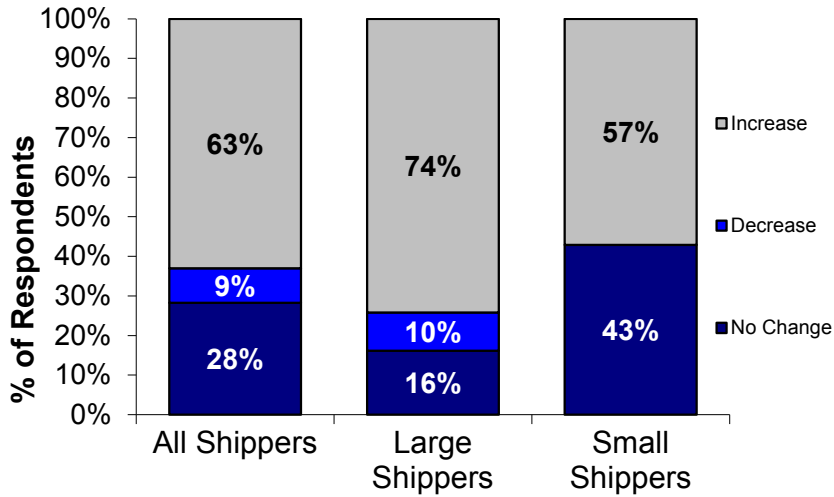
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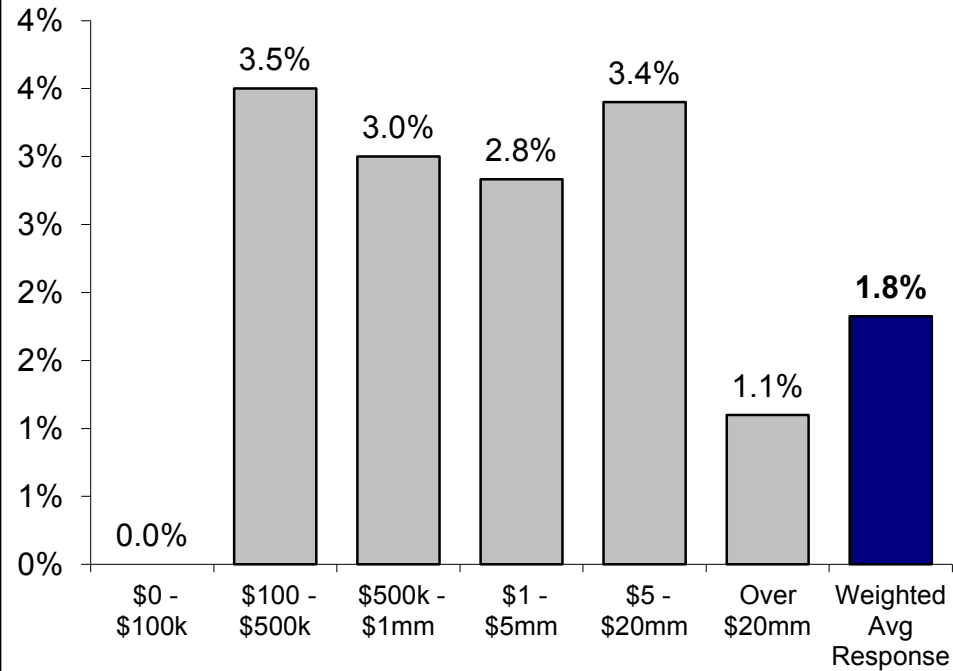


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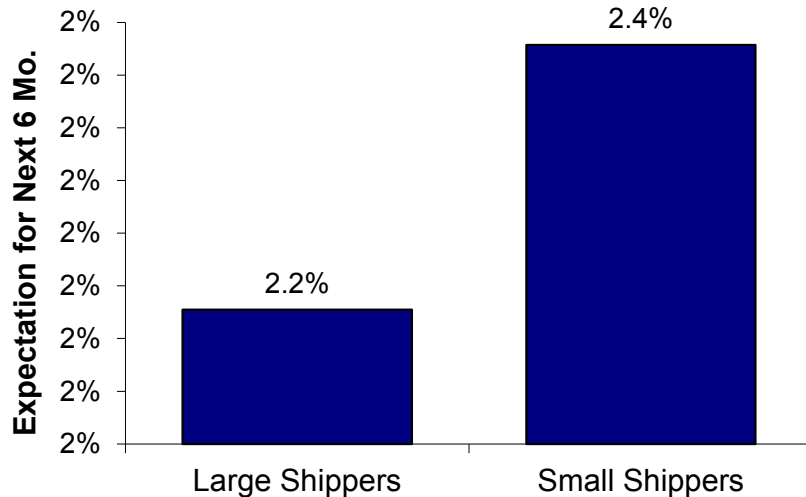
YoY Spend Growth Expectations



6 Mo. YoY Spend Growth Expectation by Spend

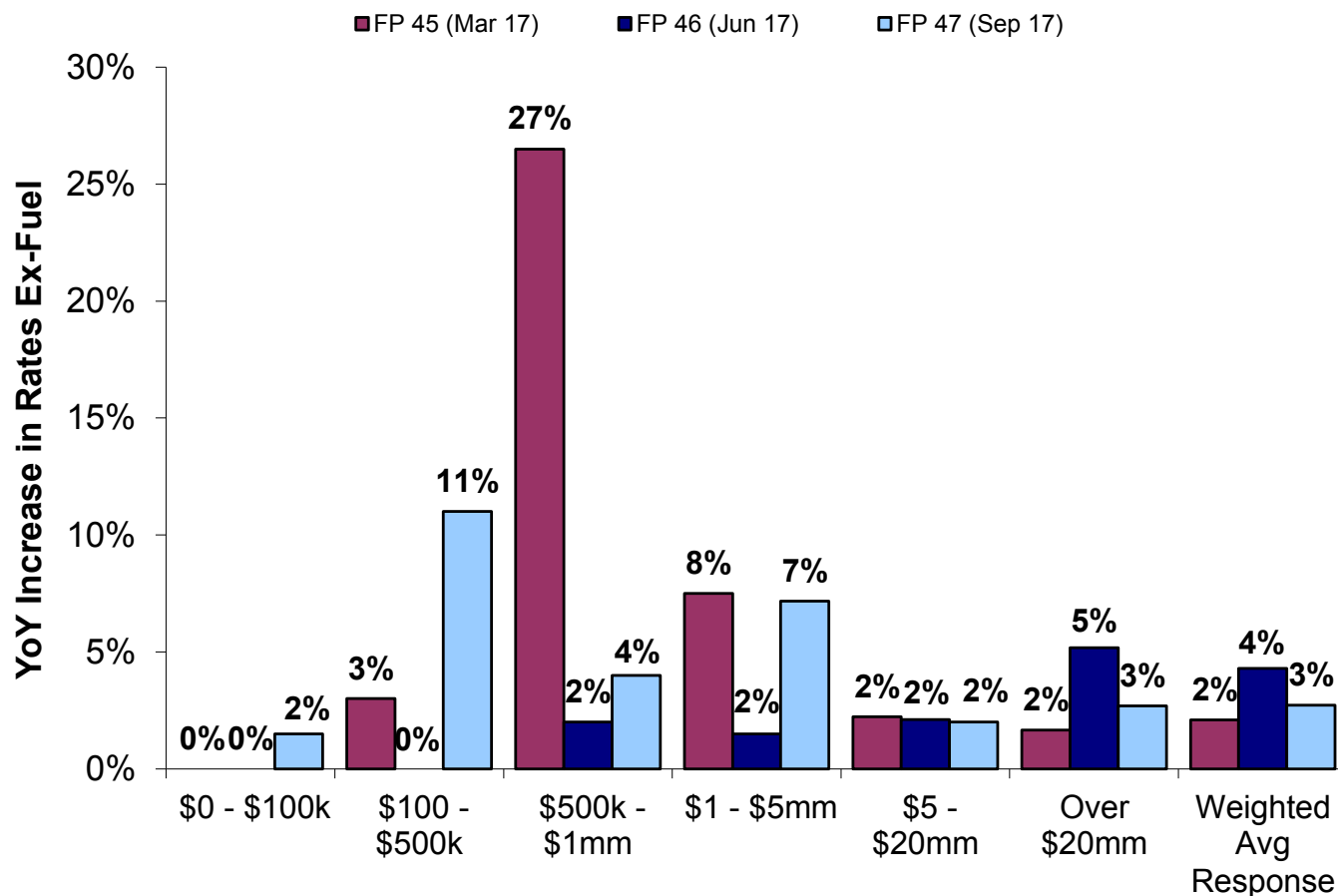


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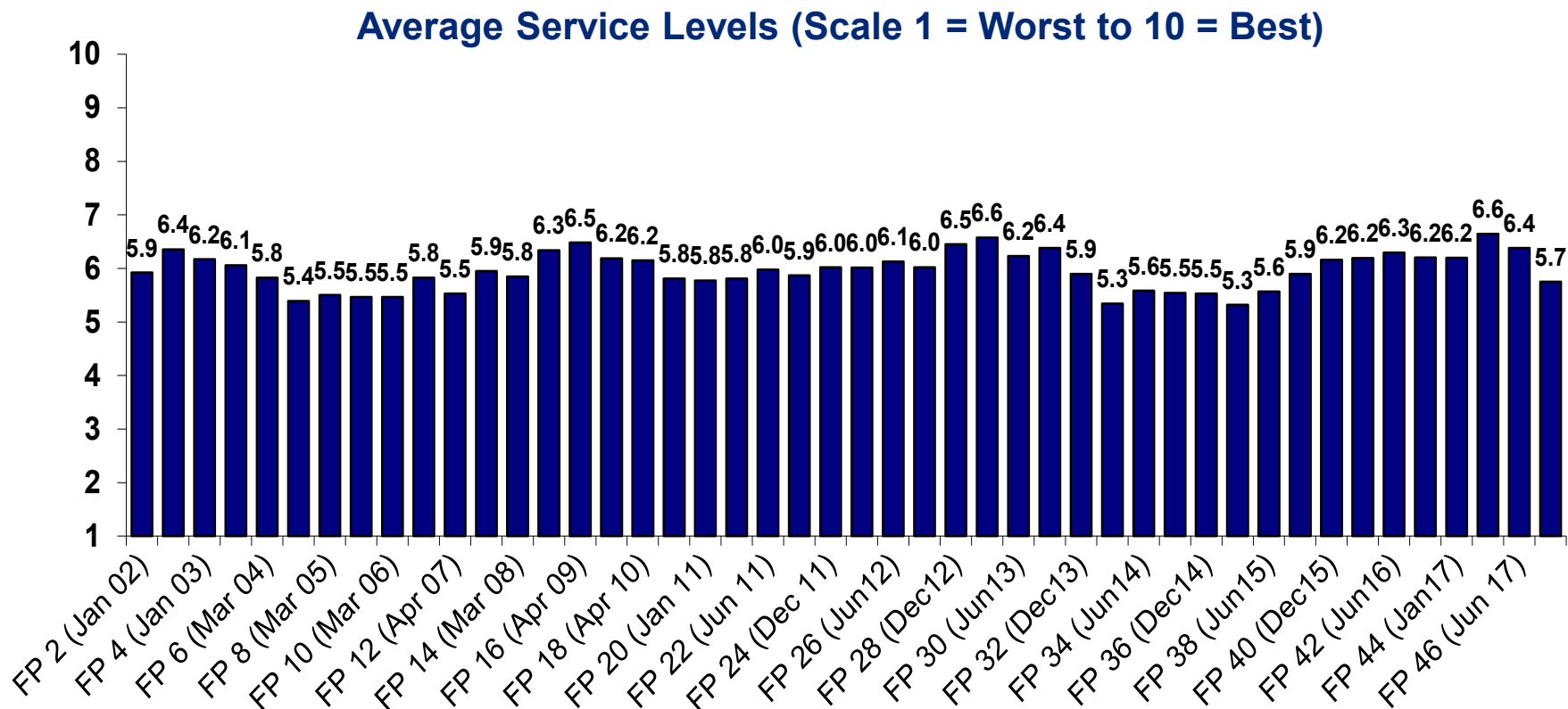


Rail Pricing Trends: Renewal Rates

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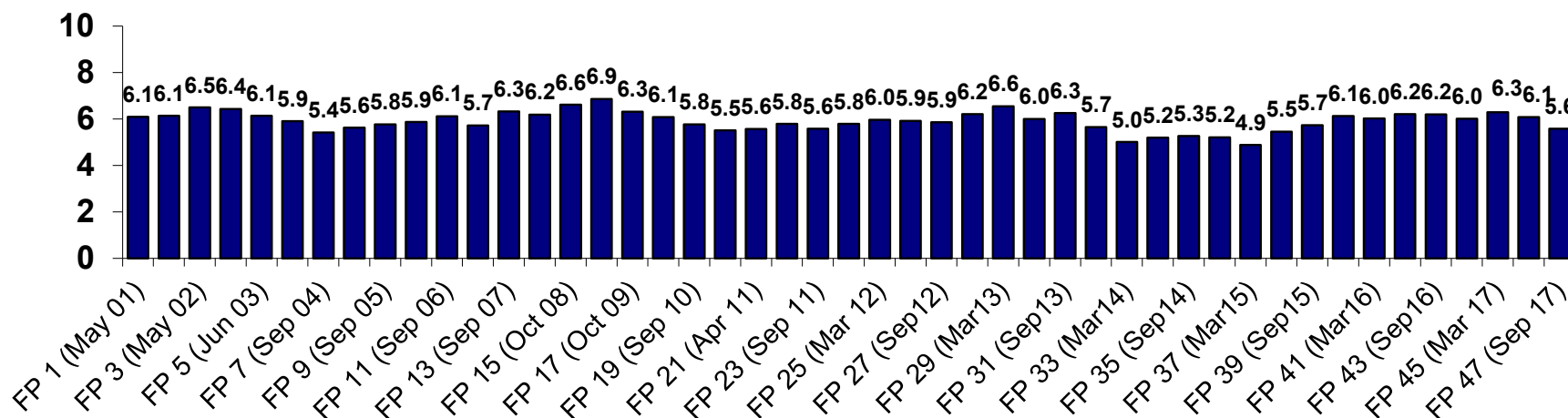


Rail Service Trends: Average Service Levels

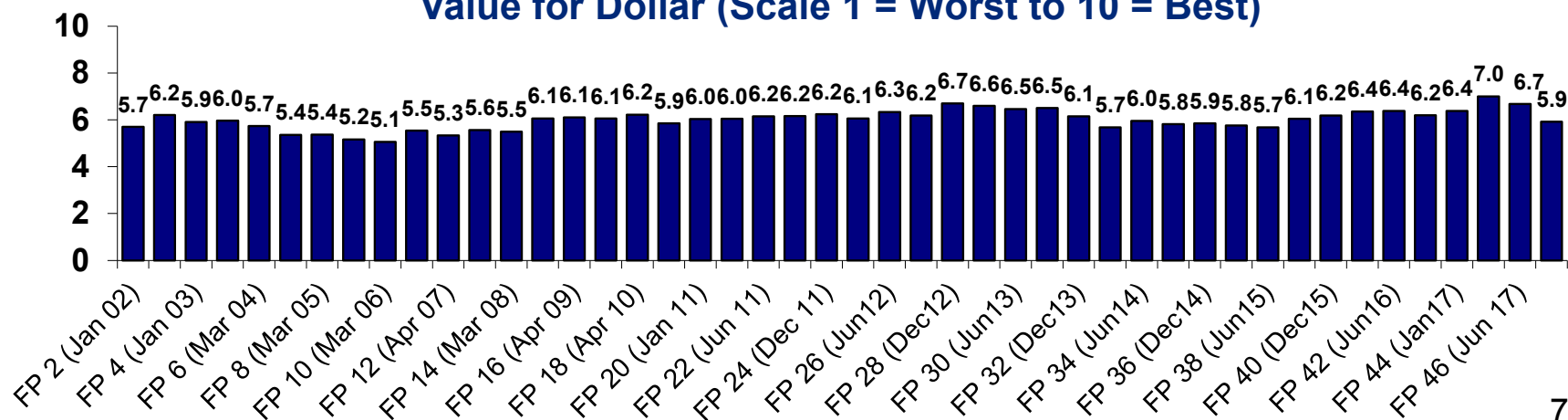


Rail Service Trends: Detail

Service Reliability (Scale 1 = Worst to 10 = Best)



Value for Dollar (Scale 1 = Worst to 10 = Best)



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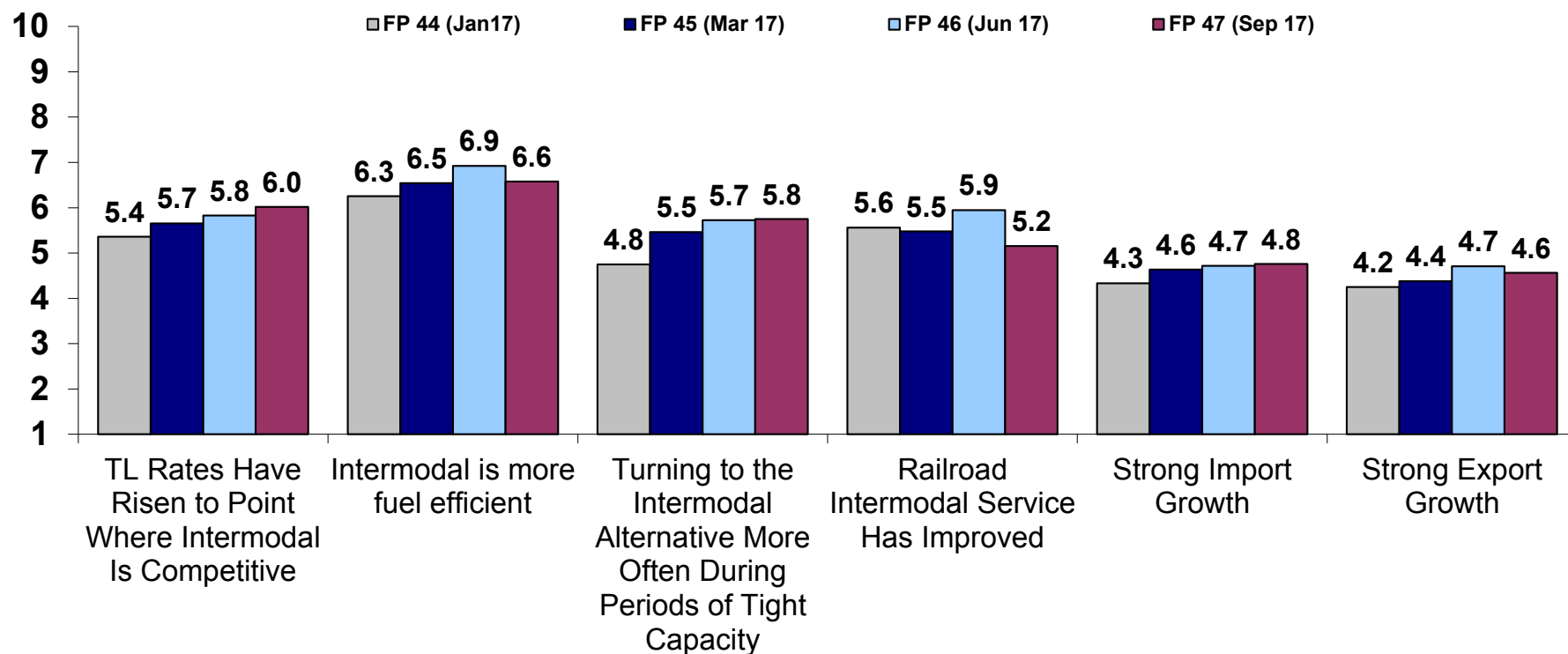
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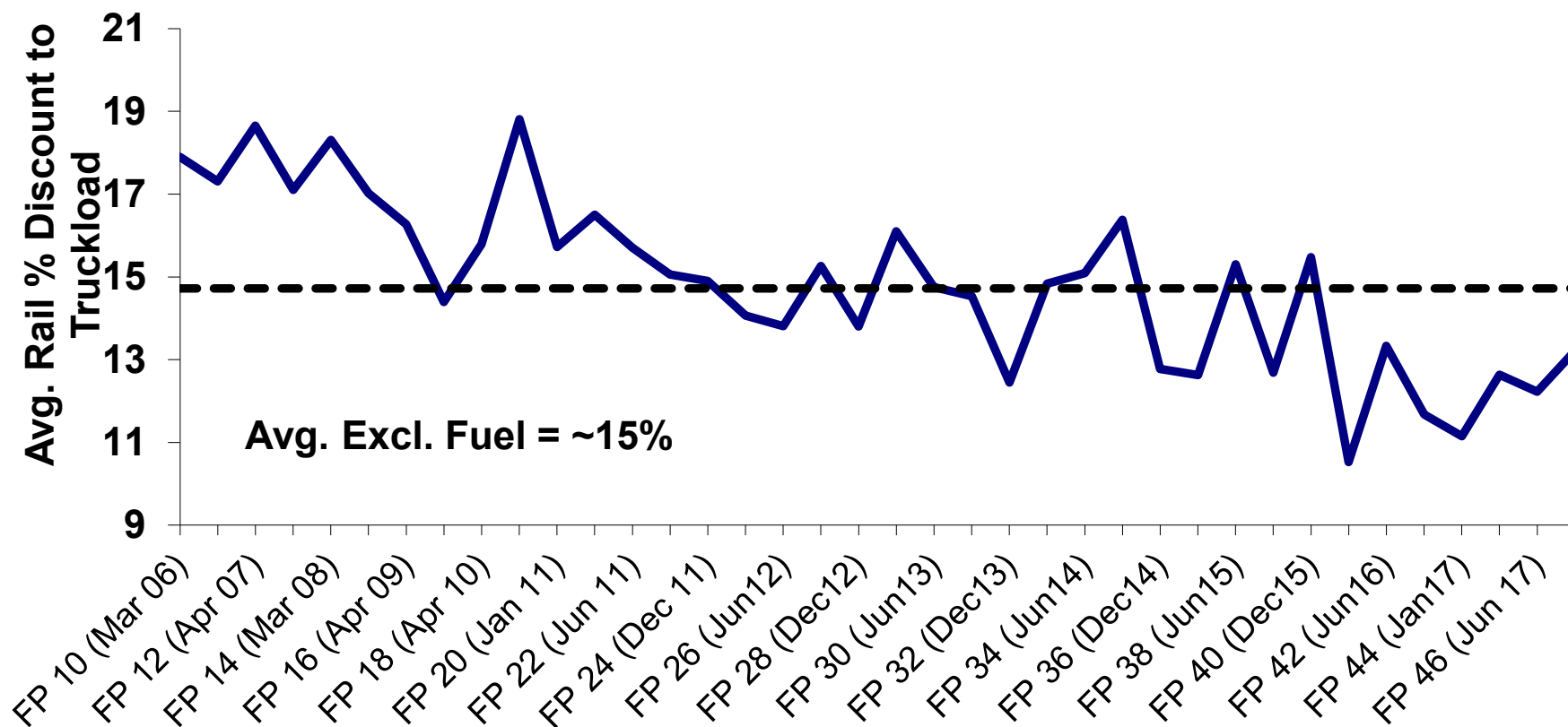
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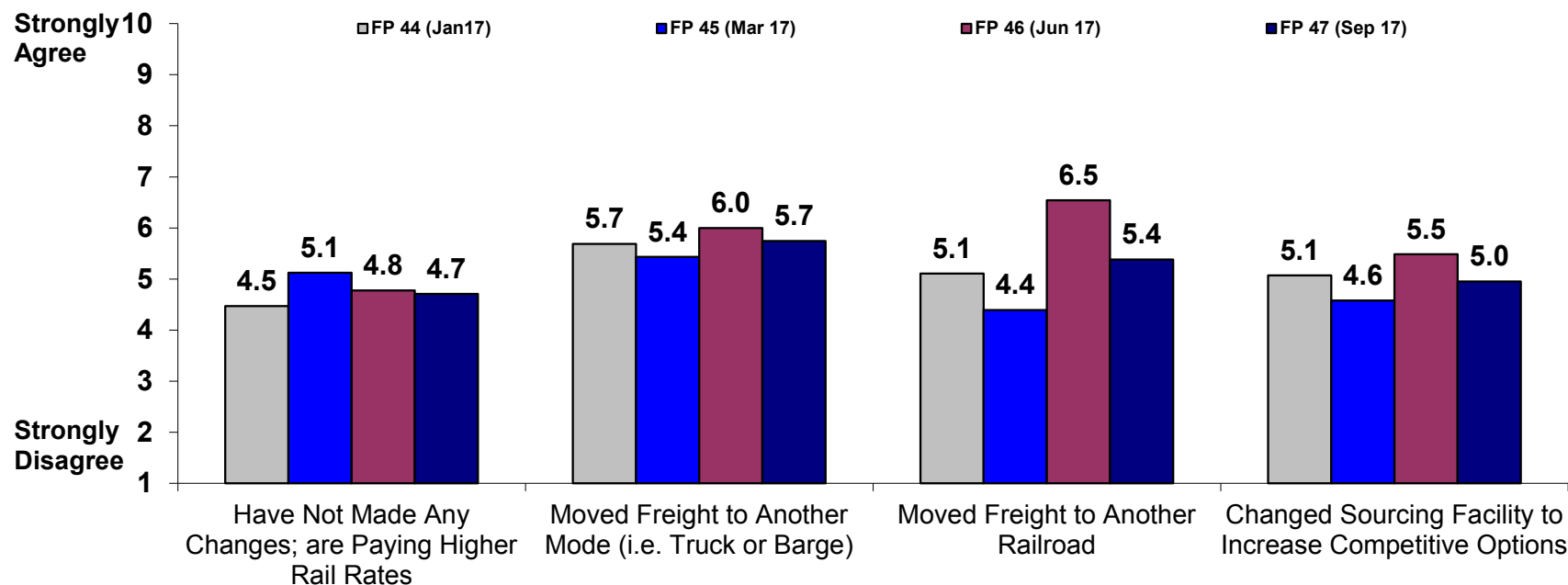
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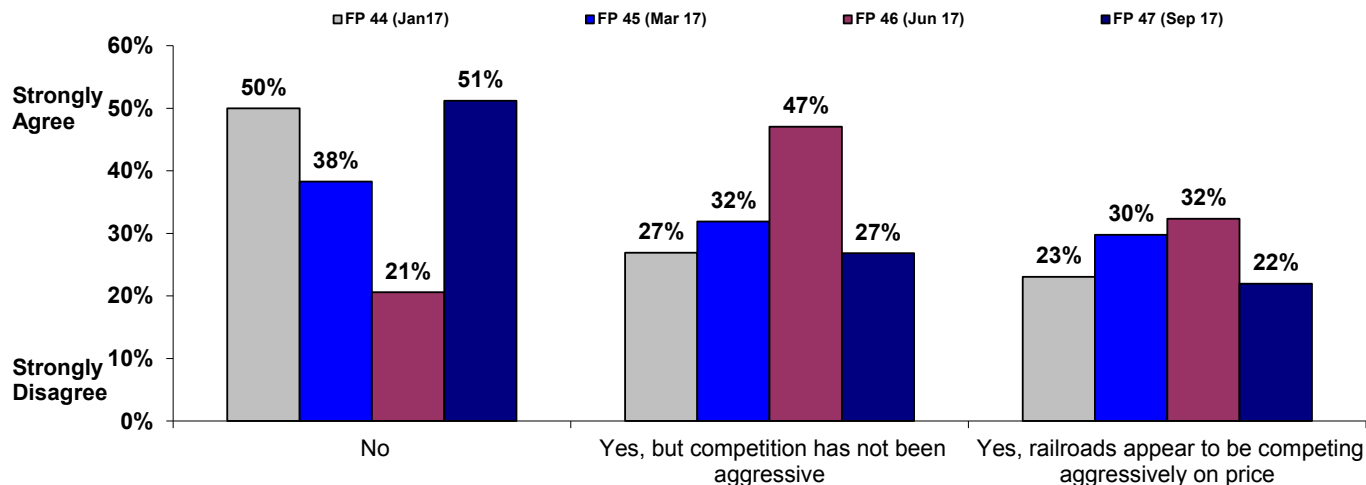
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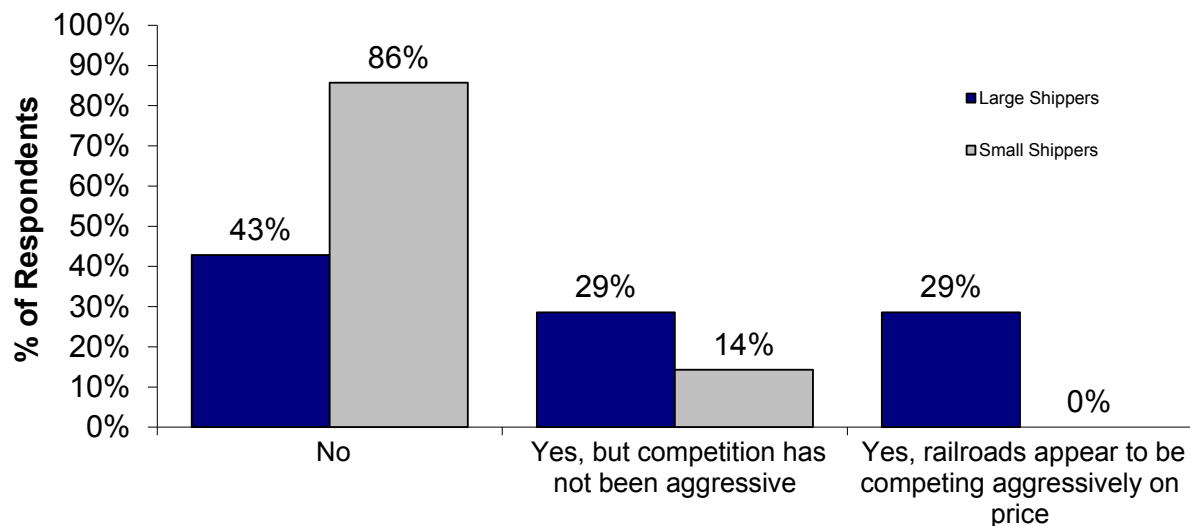


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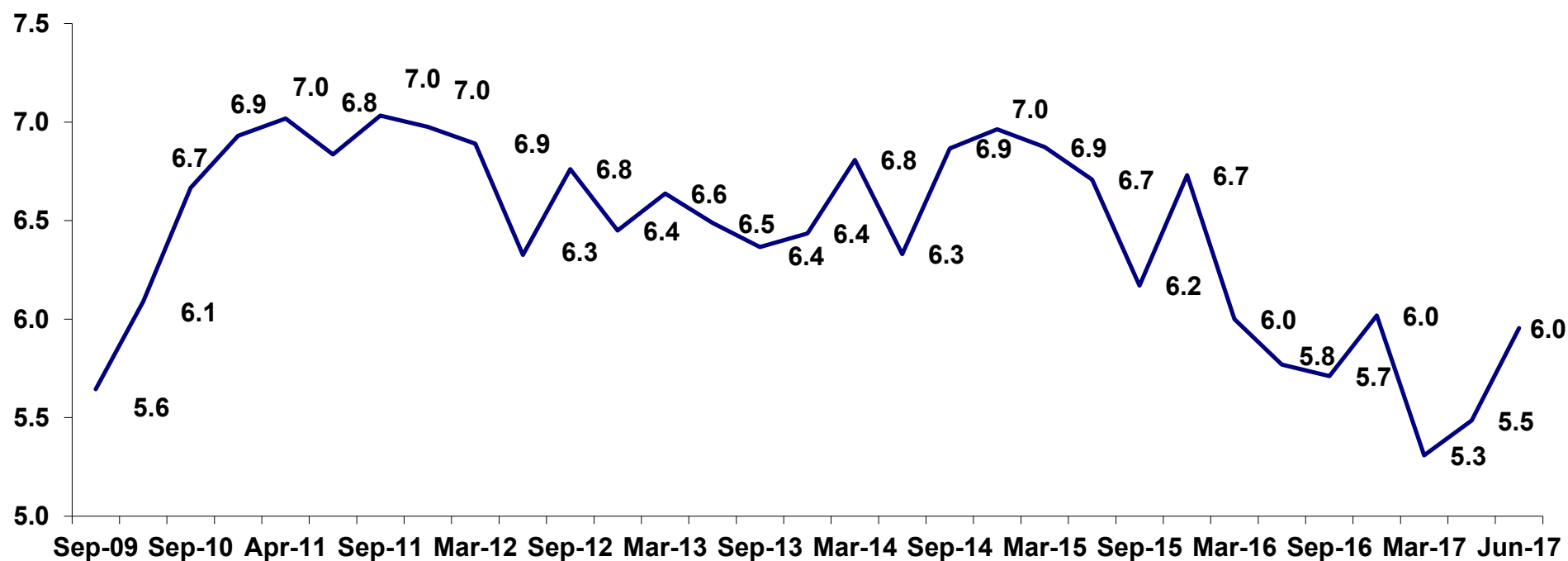


Price Competition from Railroads



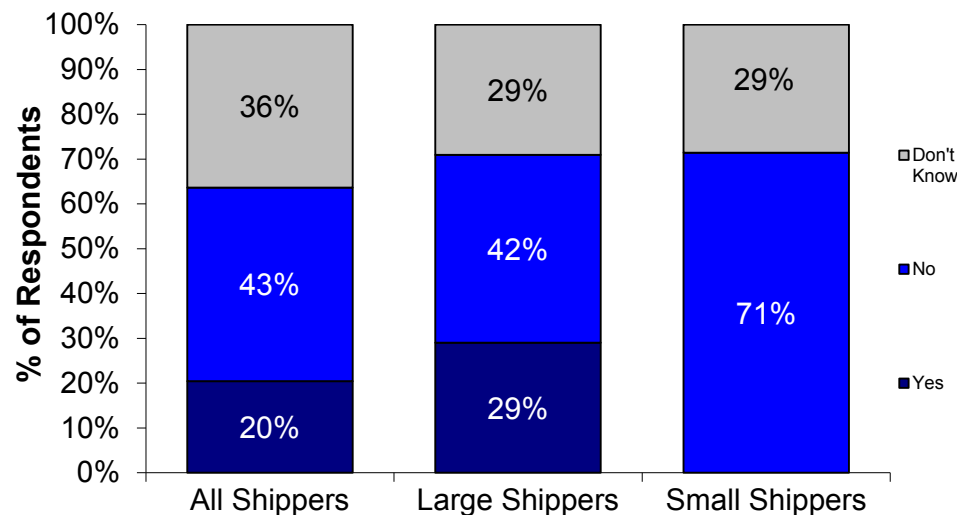
Rail Rate Negotiations: Rate the Difficulty of Recent Rate Negotiations

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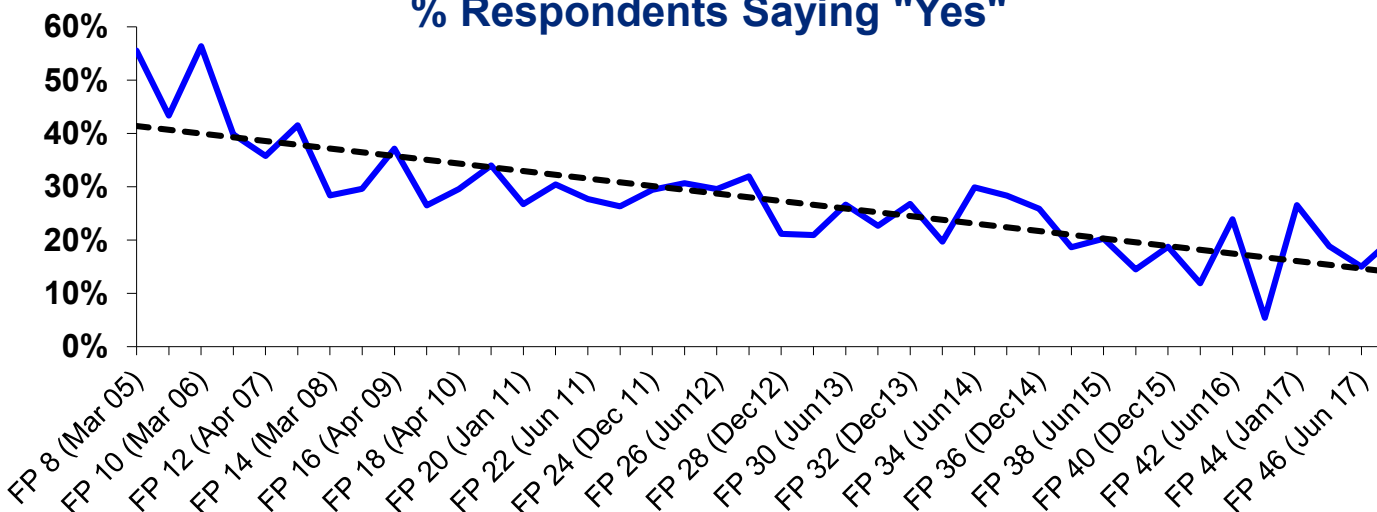


Legislation: Do You Expect to Take a More Active Role in Legislative Rail Reform?

Action on Legislative Rail Reform



% Respondents Saying "Yes"



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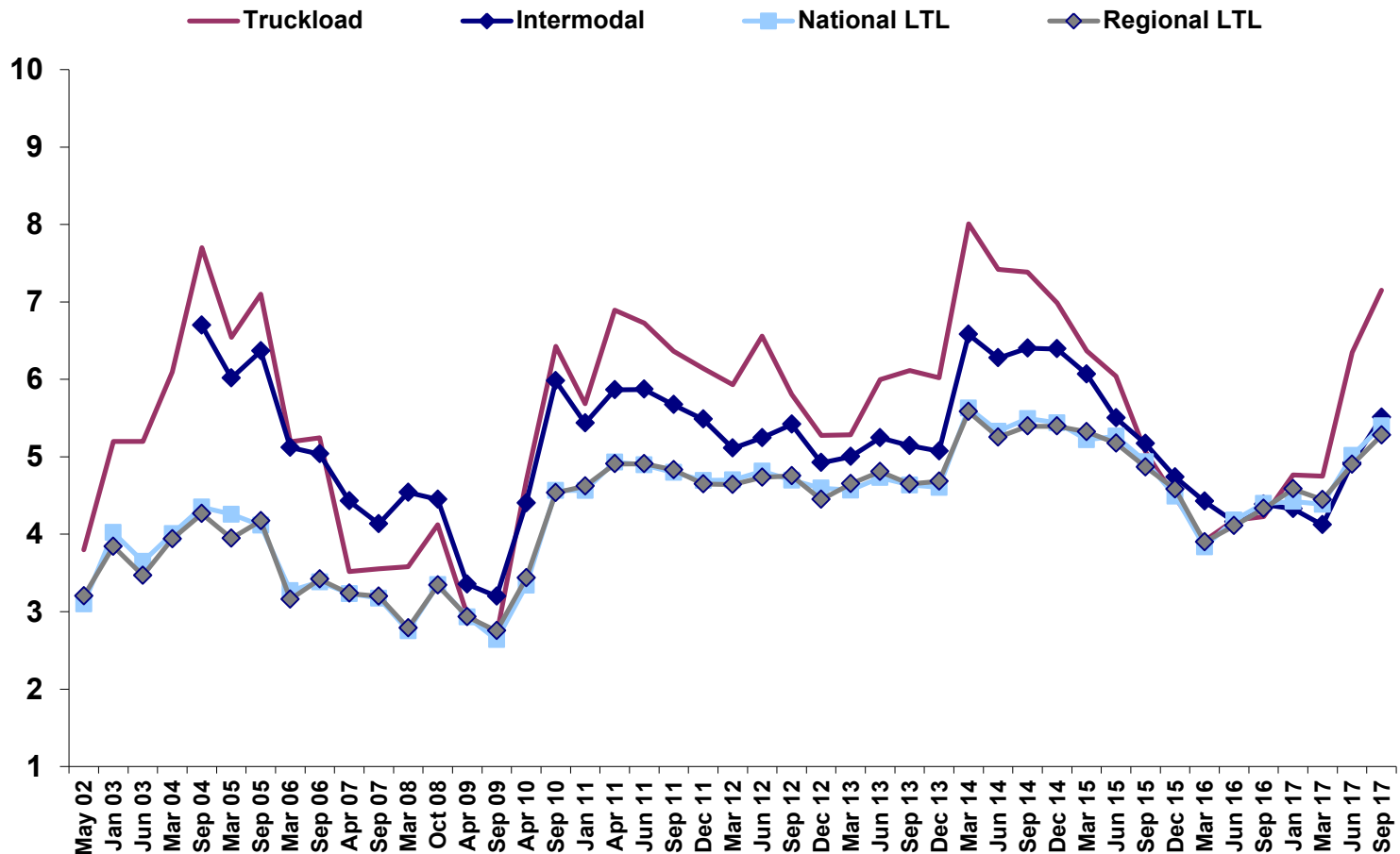
Trucking Shipper Responses to “How Would You Currently Characterize the Availability of Equipment?”

Capacity is:

Very
Tight

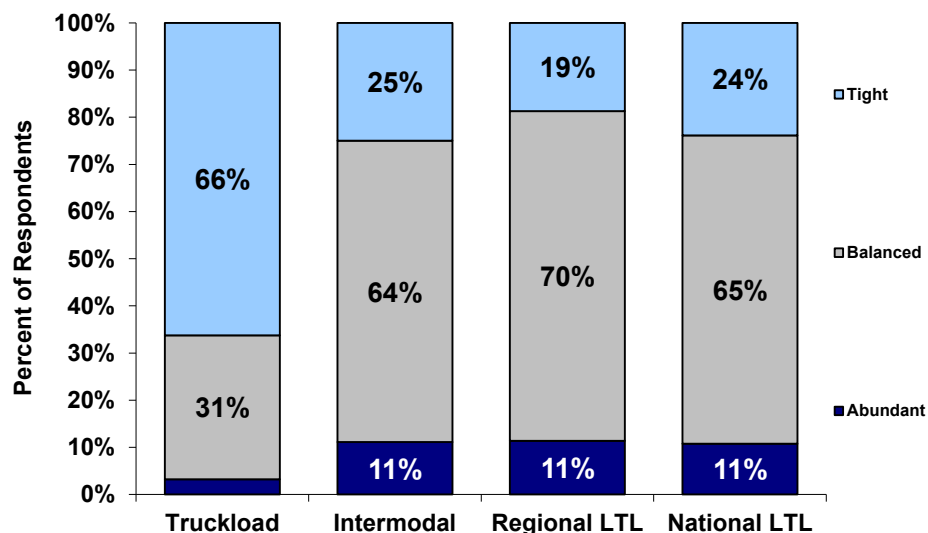
Balanced

Abundant

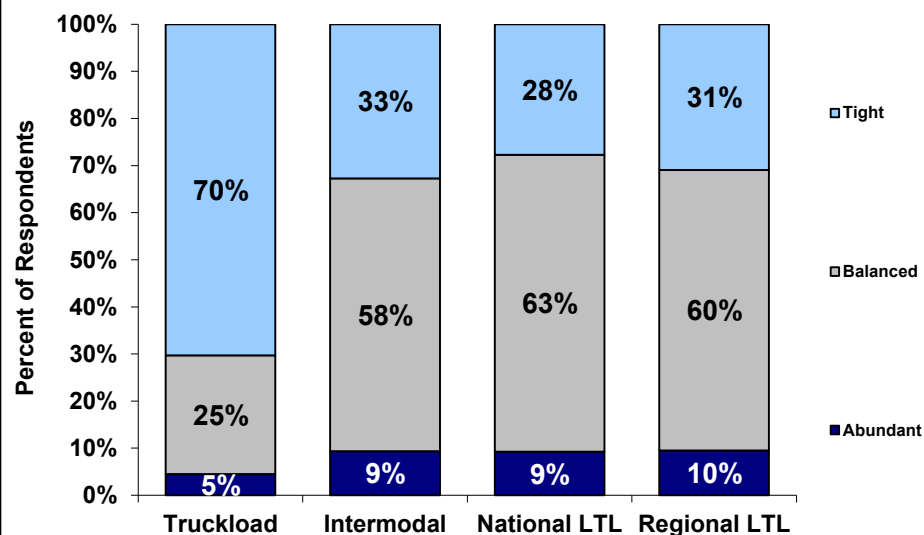


Shipper Expectations for Availability of Truck Capacity

Current Capacity



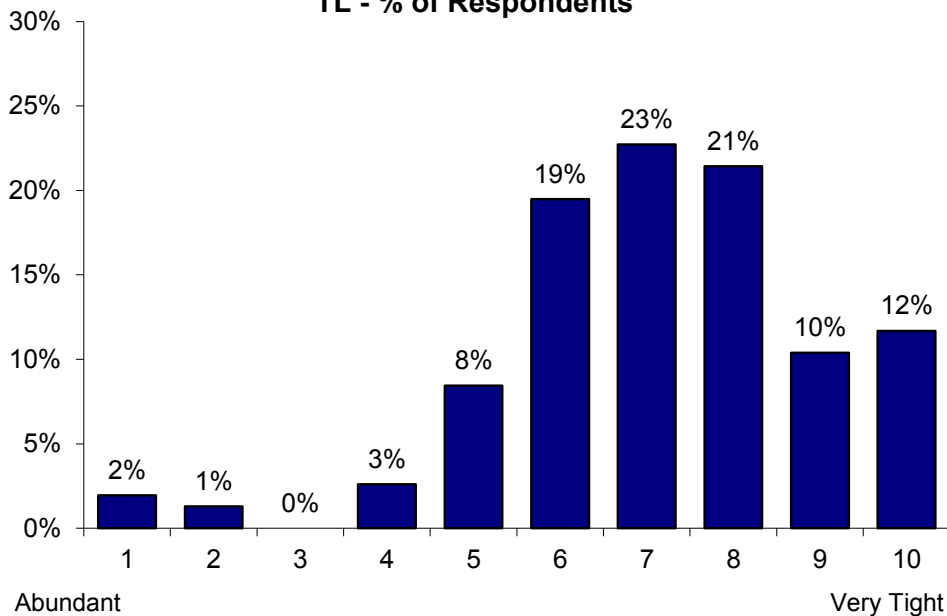
Projected Capacity in 6 Months



Capacity: Distribution of Truckload Capacity Rankings

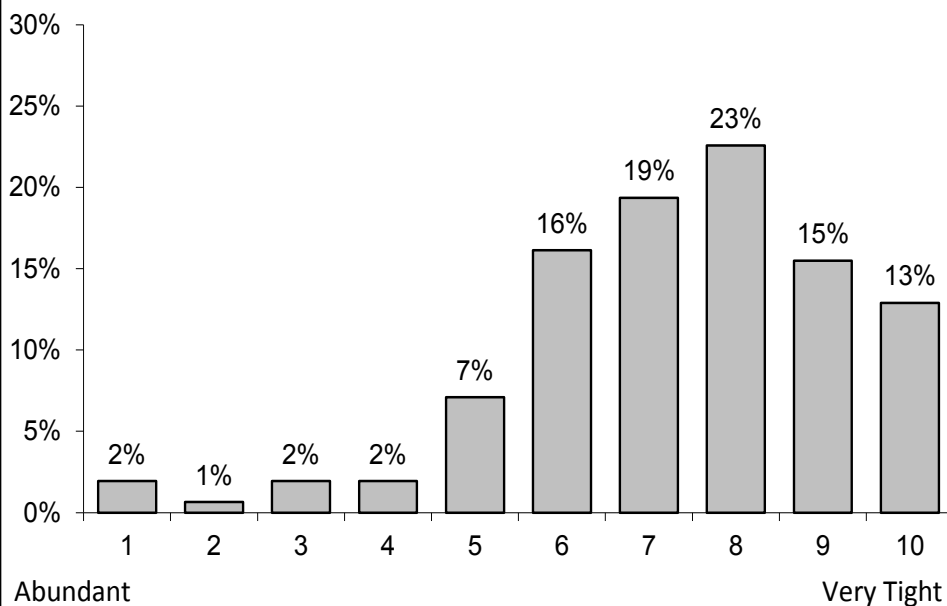
Current Capacity

TL - % of Respondents



Projected Capacity in 6 Months

TL - % of Respondents



* Shipper rankings of available capacity where 1= Abundant and 10 = Very Tight

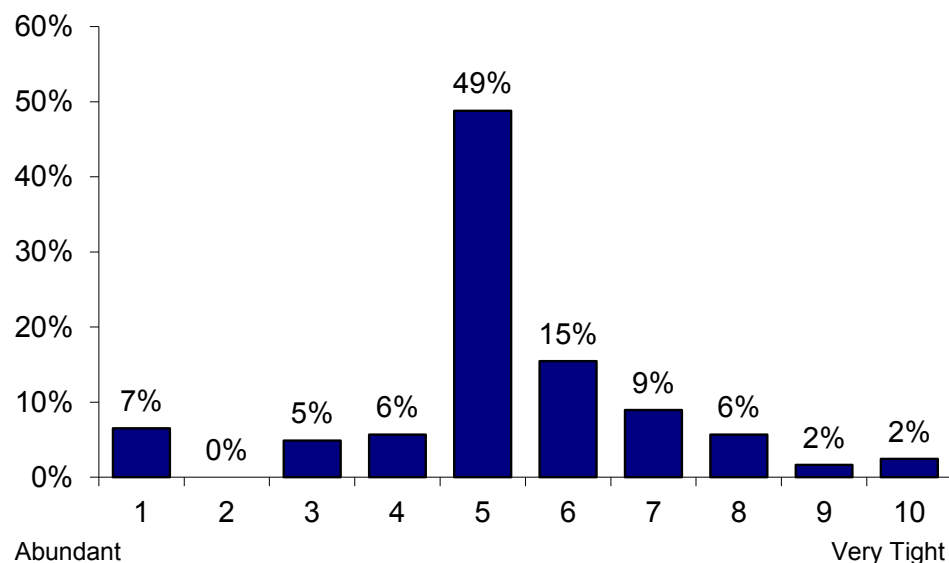
Source: Morgan Stanley Freight Pulse Surveys

Ravi Shanker, (212) 761-6350, Ravi.Shanker@morganstanley.com

Capacity: Distribution of Regional Less-Than-Truckload Capacity Rankings

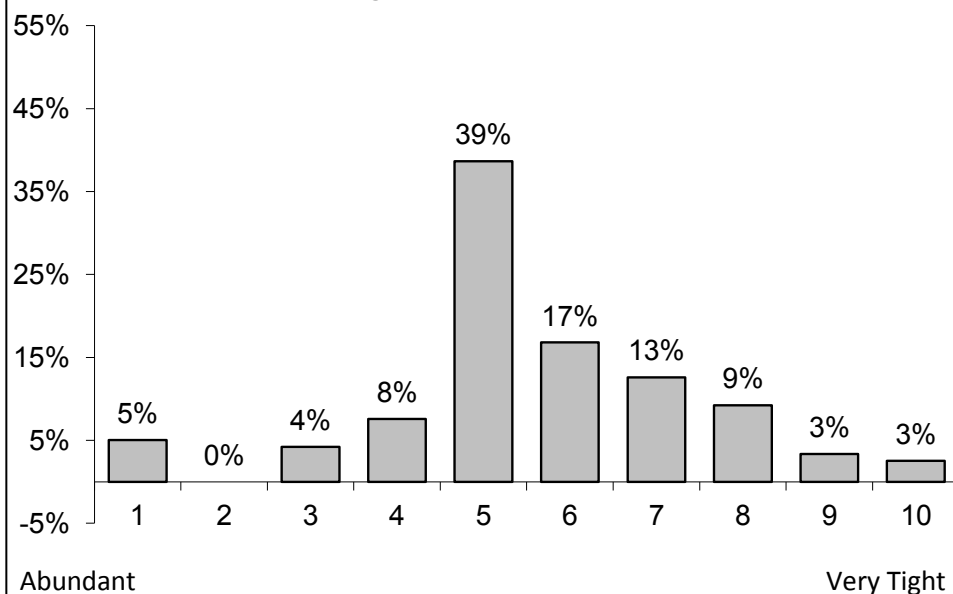
Current Capacity

Regional LTL - % of Respondents



Projected Capacity in 6 Months

Regional LTL - % of Respondents



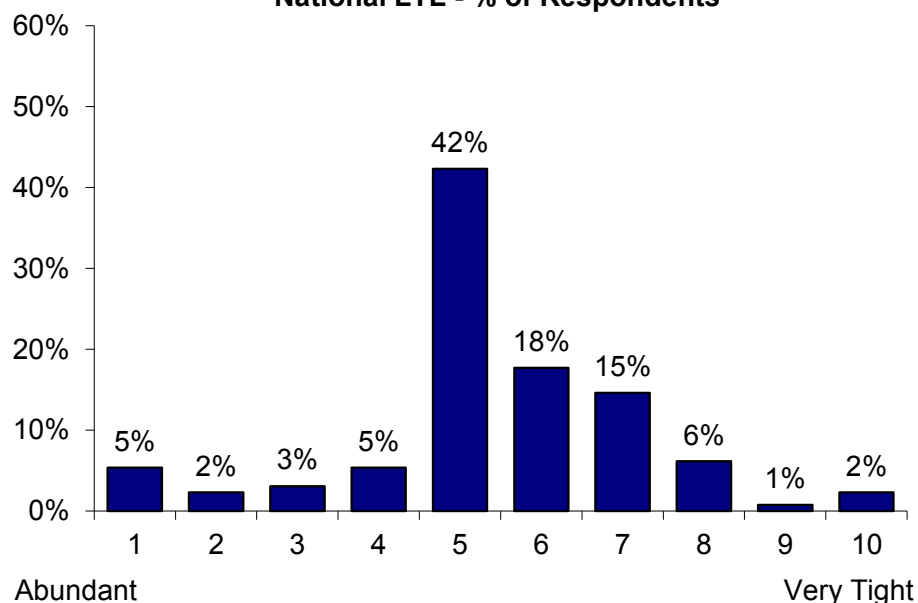
* Shipper rankings of available capacity where 1= Abundant and 10 = Very Tight

Source: Morgan Stanley Freight Pulse Surveys

Capacity: Distribution of National Less-Than-Truckload Capacity Rankings

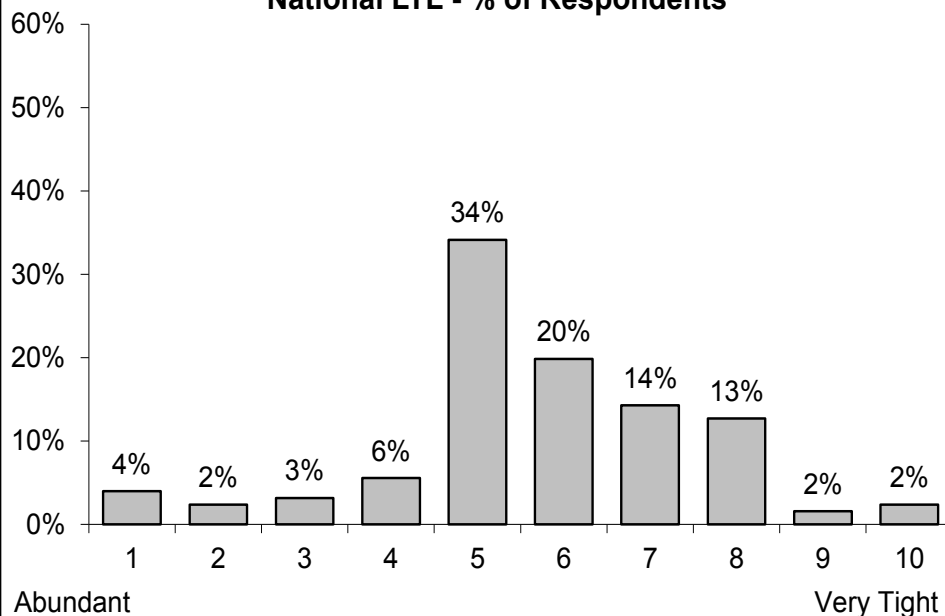
Current Capacity

National LTL - % of Respondents



Projected Capacity in 6 Months

National LTL - % of Respondents



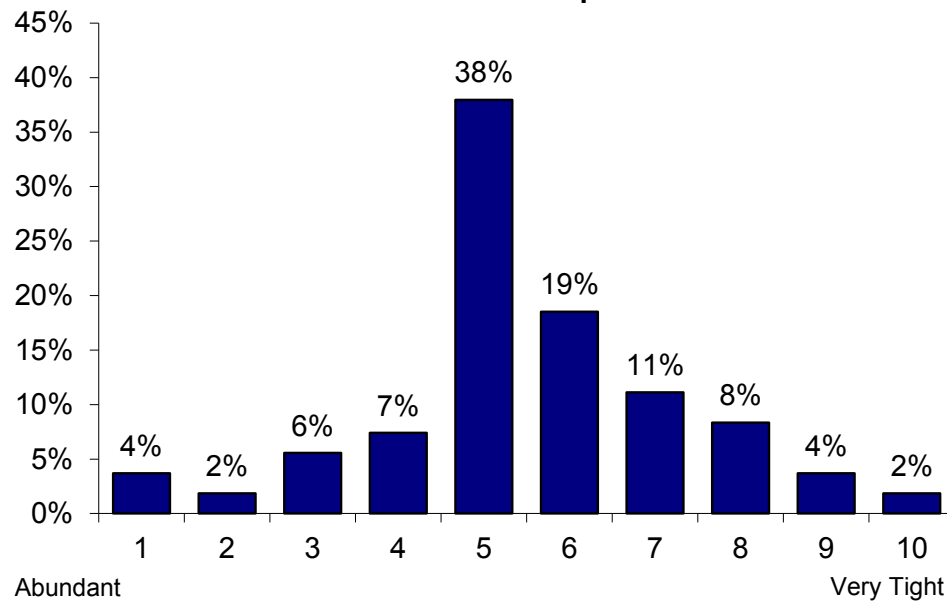
* Shipper rankings of available capacity where 1= Abundant and 10 = Very Tight

Source: Morgan Stanley Freight Pulse Surveys

Capacity: Distribution of Intermodal Capacity Rankings

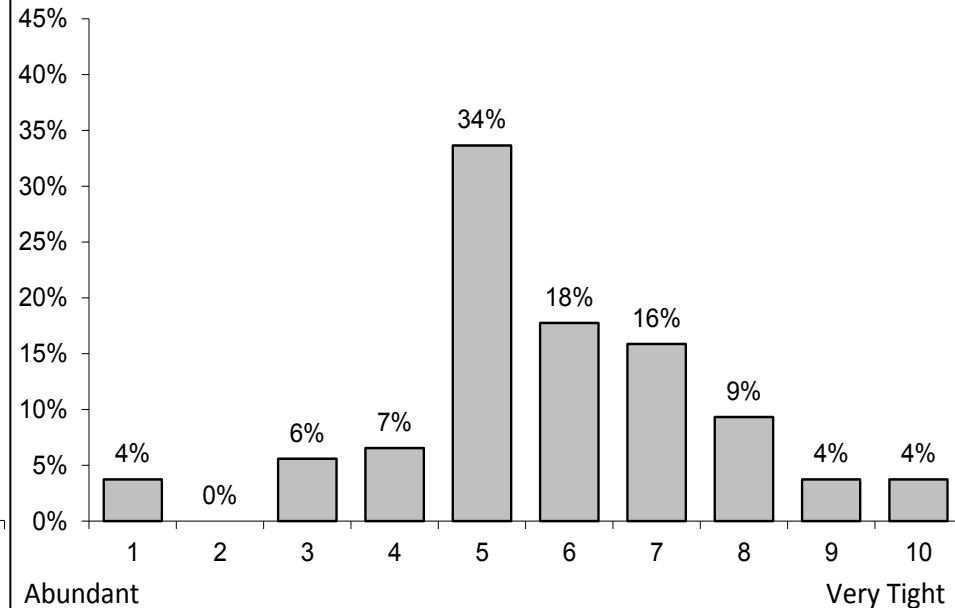
Current Capacity

Intermodal - % of Respondents



Projected Capacity in 6 Months

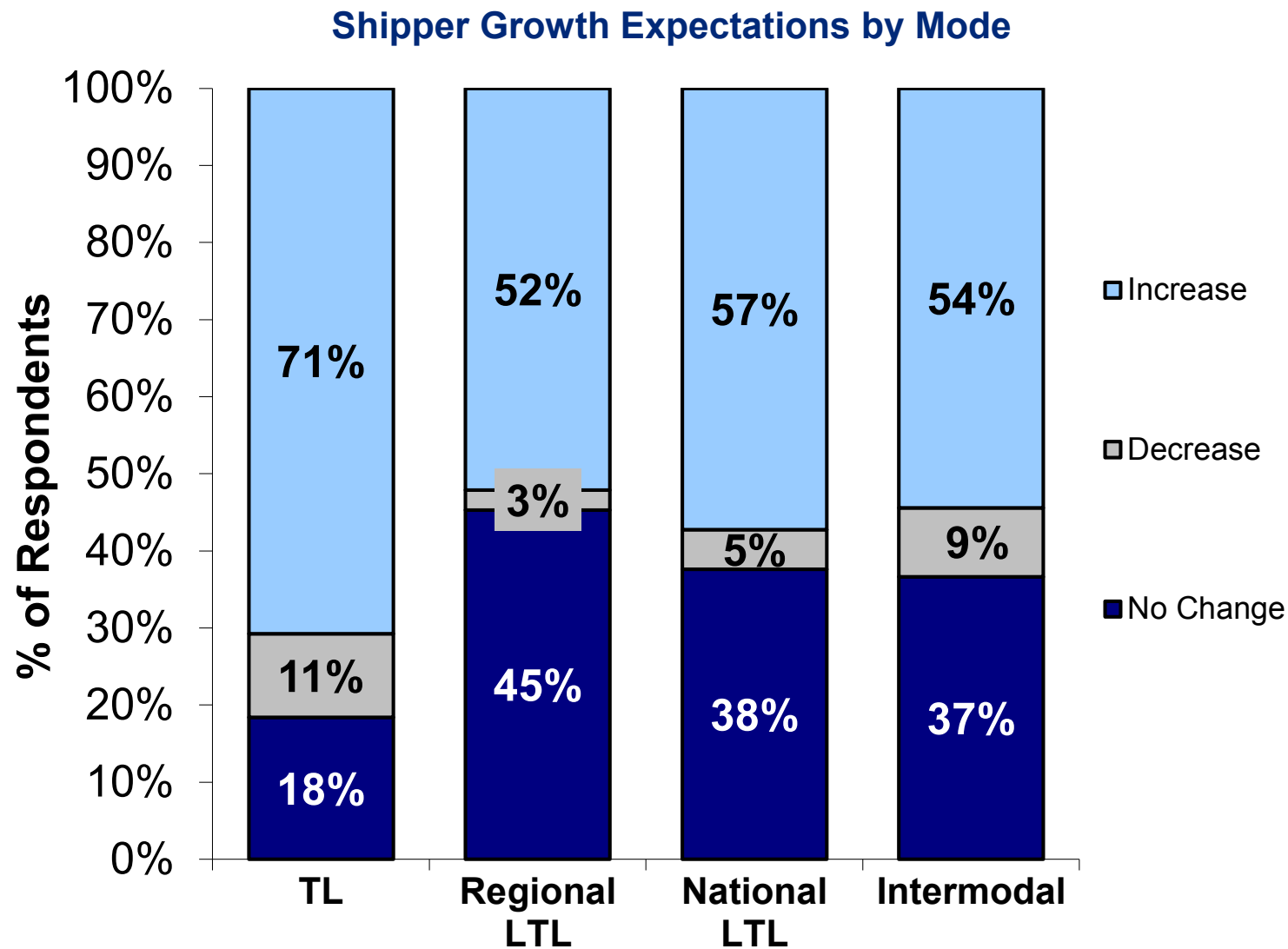
Intermodal - % of Respondents



* Shipper rankings of available capacity where 1= Abundant and 10 = Very Tight

Source: Morgan Stanley Freight Pulse Surveys

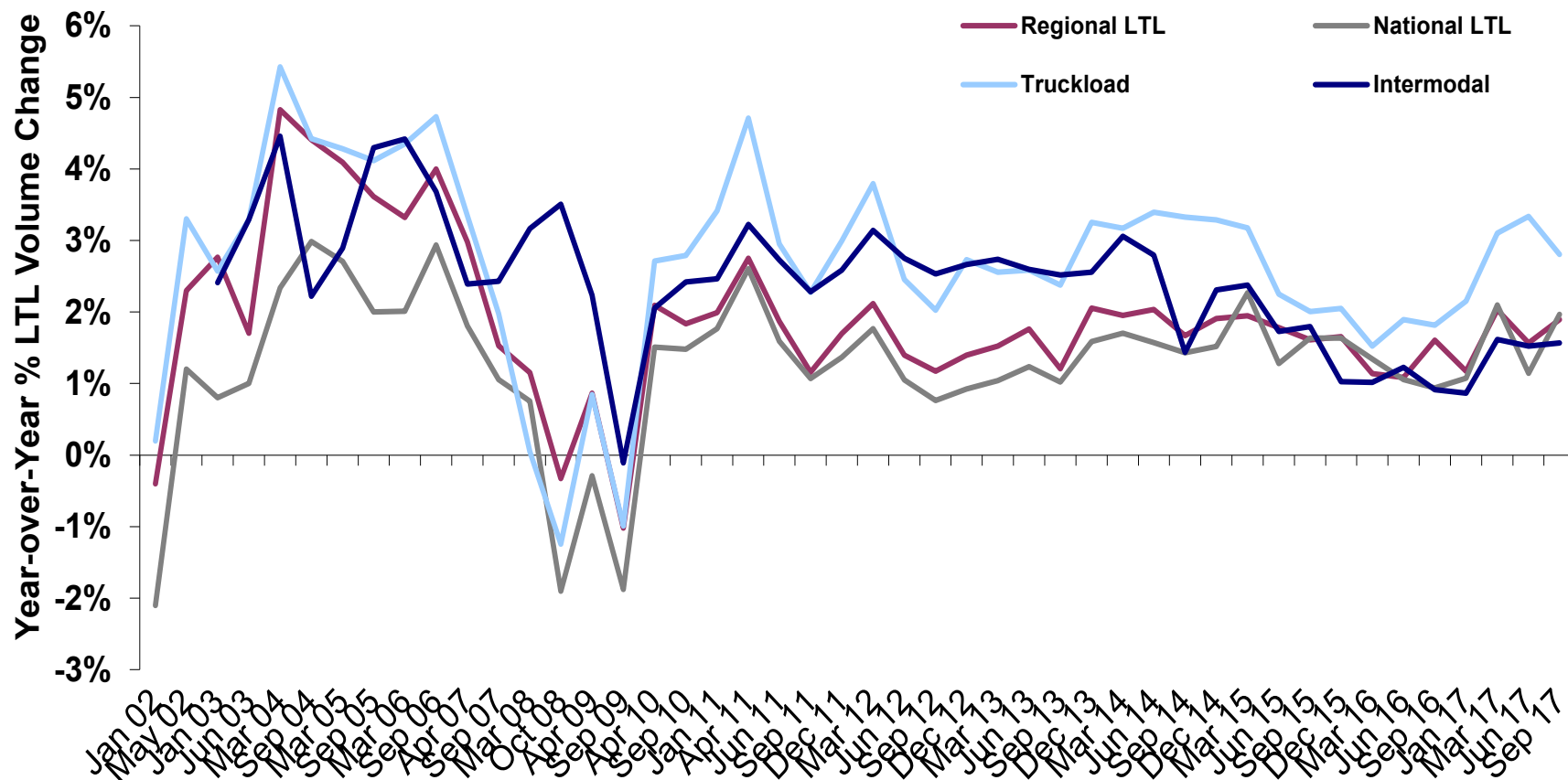
Truck Volume Outlook Over The Next 6 Months



Source: Morgan Stanley Freight Pulse Surveys

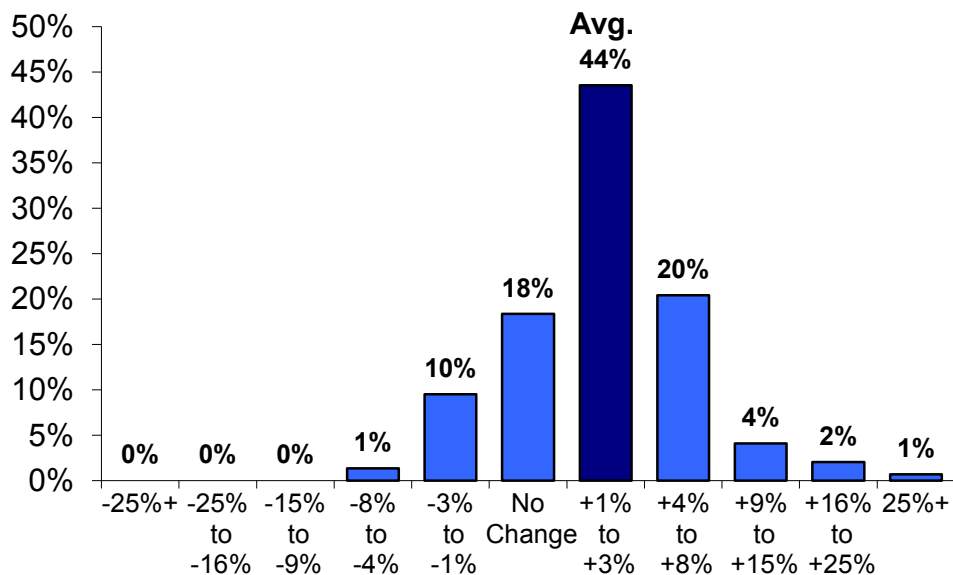
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Trends in Trucking Shippers' Expectations Over the Next 6 Months vs. the Same Period in the Prior Year"

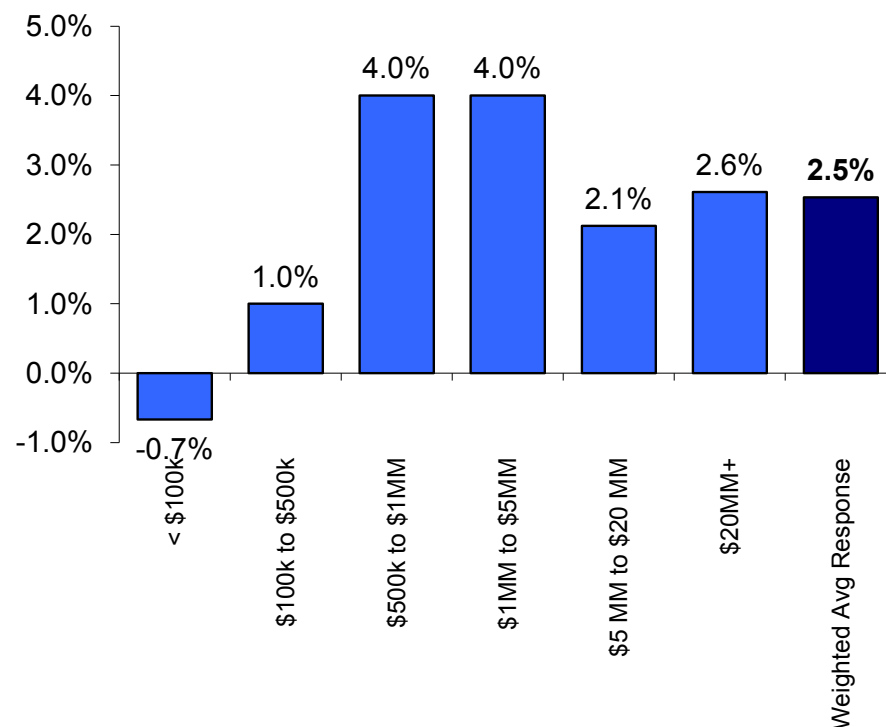


Truckload Volume Detail by Spend, Industry, and Response Skew

Truckload - Y/Y Volume Expectation by Range

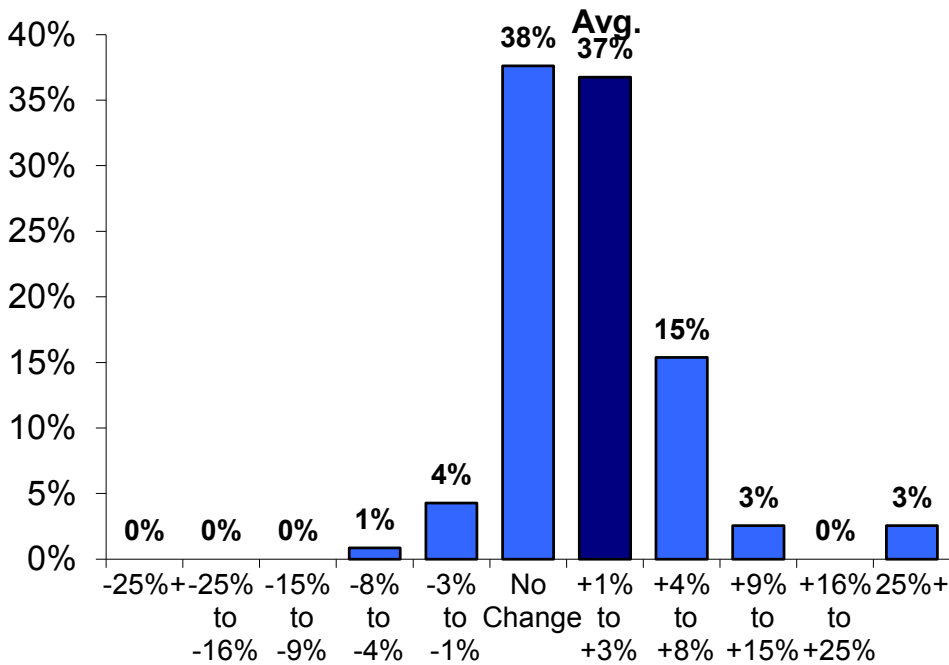


Truckload - Avg Volume Change by Spend

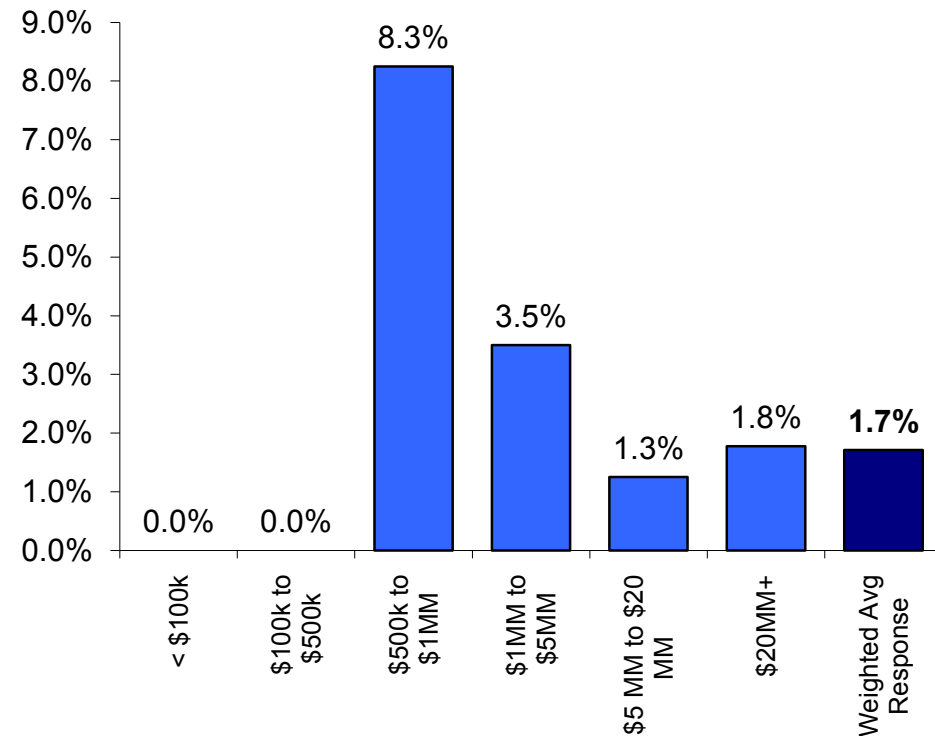


National LTL Volume Detail by Spend, Industry, and Response Skew

National LTL - Y/Y Volume Expectation by Range



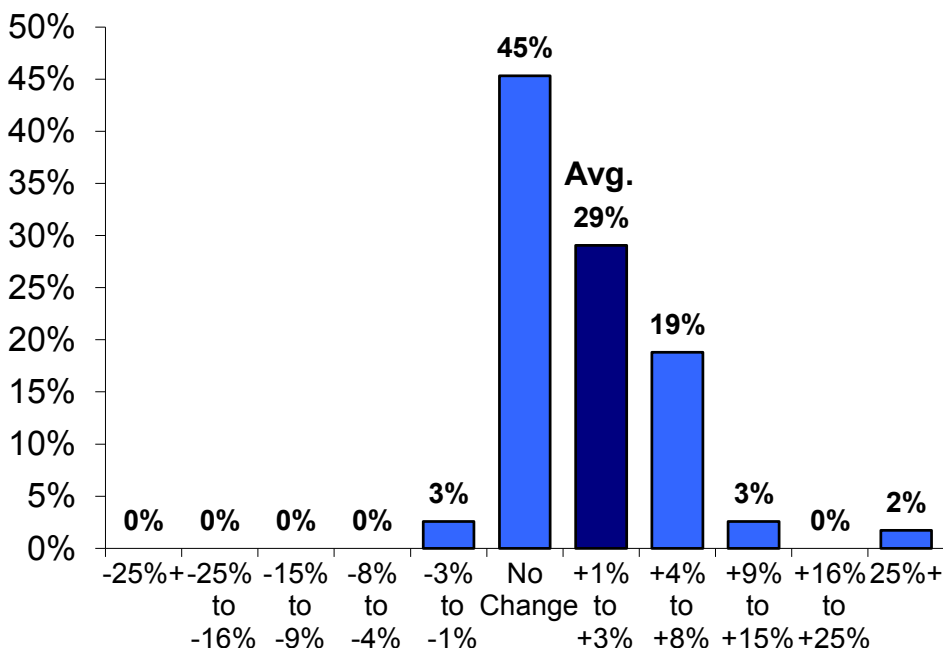
National LTL - Avg Volume Change by Spend



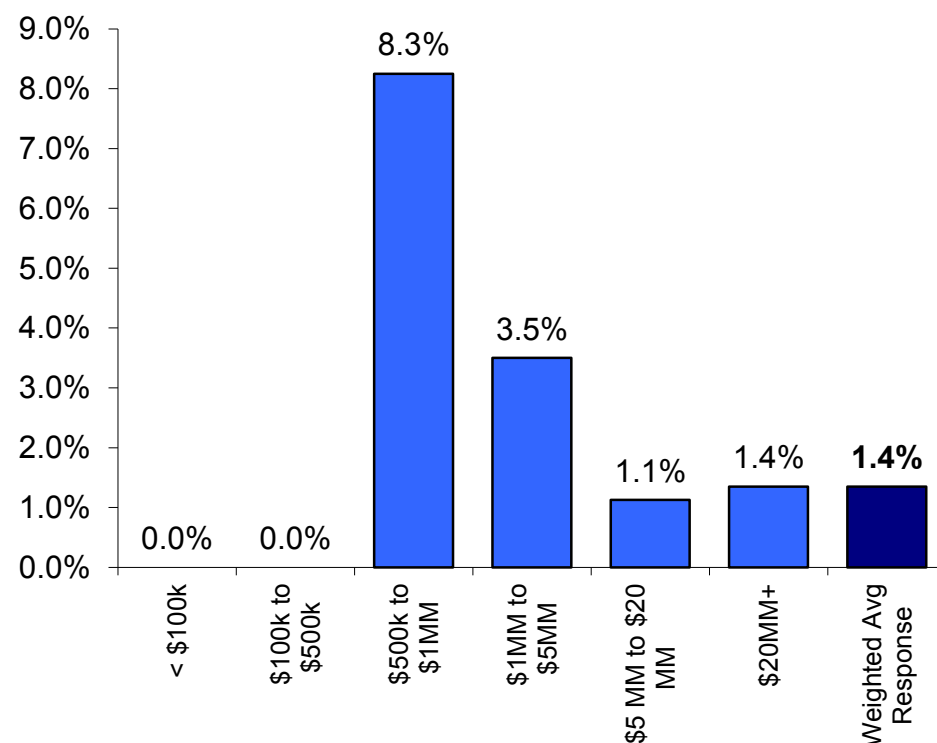
Source: Morgan Stanley Freight Pulse Surveys

Regional LTL Volume Detail by Spend, Industry, and Response Skew

Regional LTL - Y/Y Volume Expectation by Range



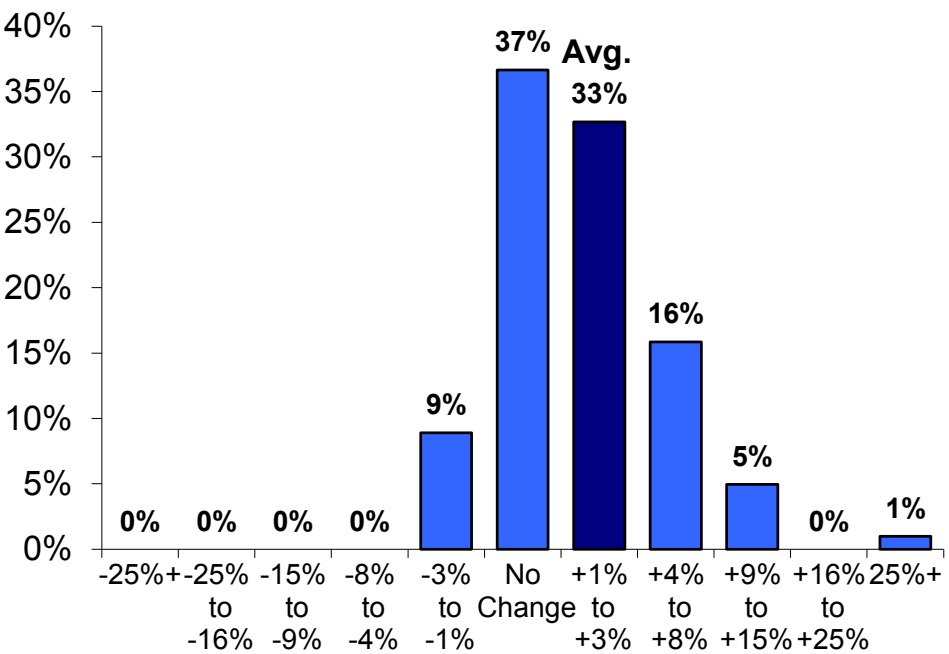
Regional LTL - Avg Volume Change by Spend



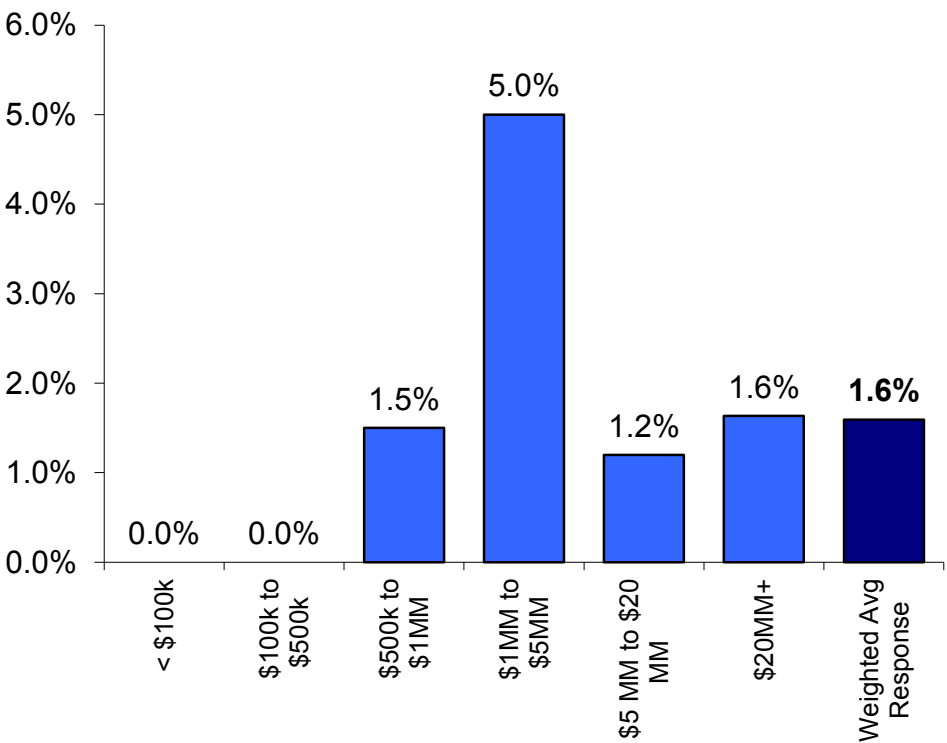
Source: Morgan Stanley Freight Pulse Surveys

Intermodal Volume Detail by Spend, Industry, and Response Skew

Intermodal - Y/Y Volume Expectation by Range



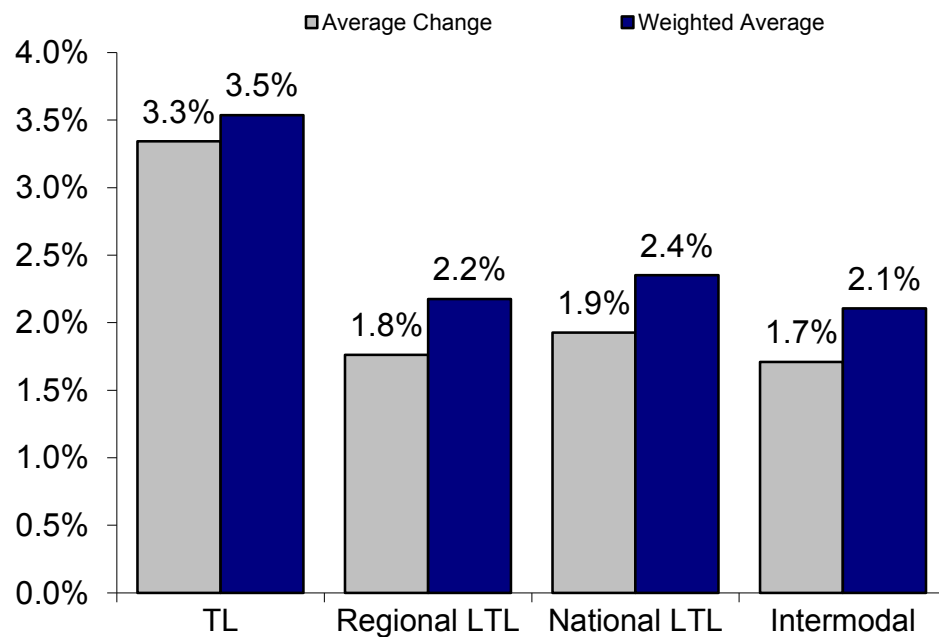
Intermodal - Avg Volume Change by Spend



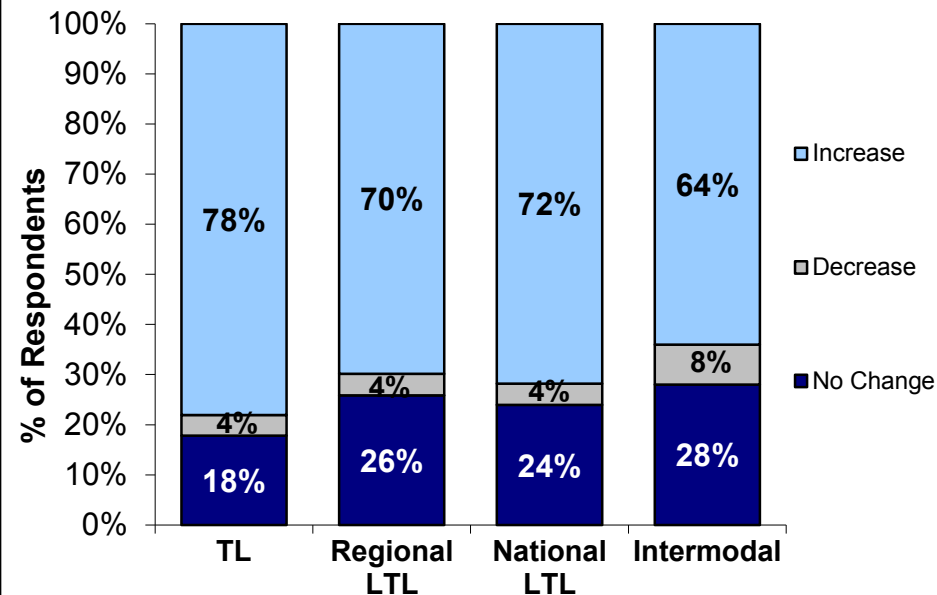
Source: Morgan Stanley Freight Pulse Surveys

Truck Base Rates Outlook Over The Next 6 Months

Base Rates: Average vs. Weighted Average

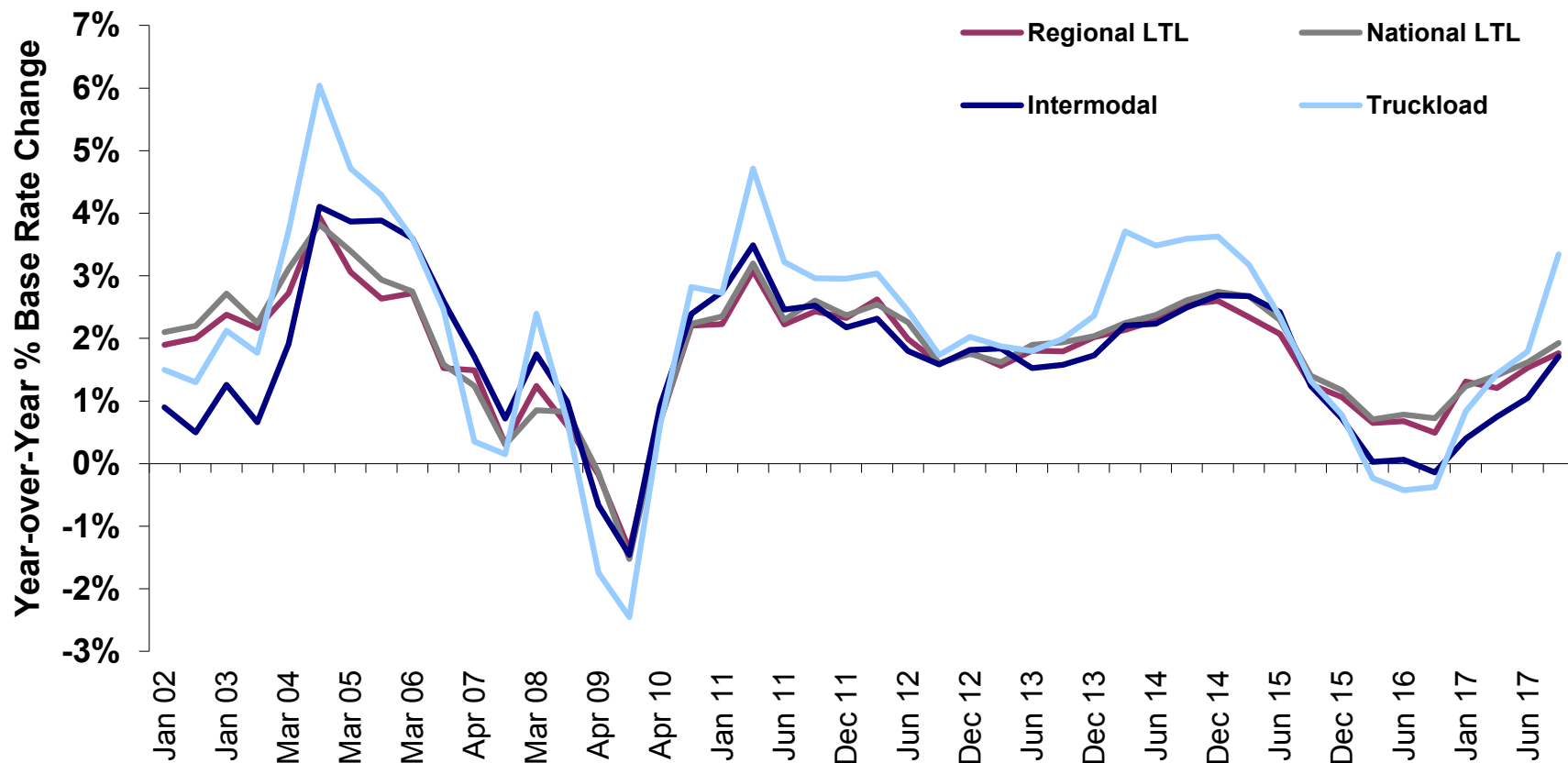


Shipper Rate Expectations by Mode



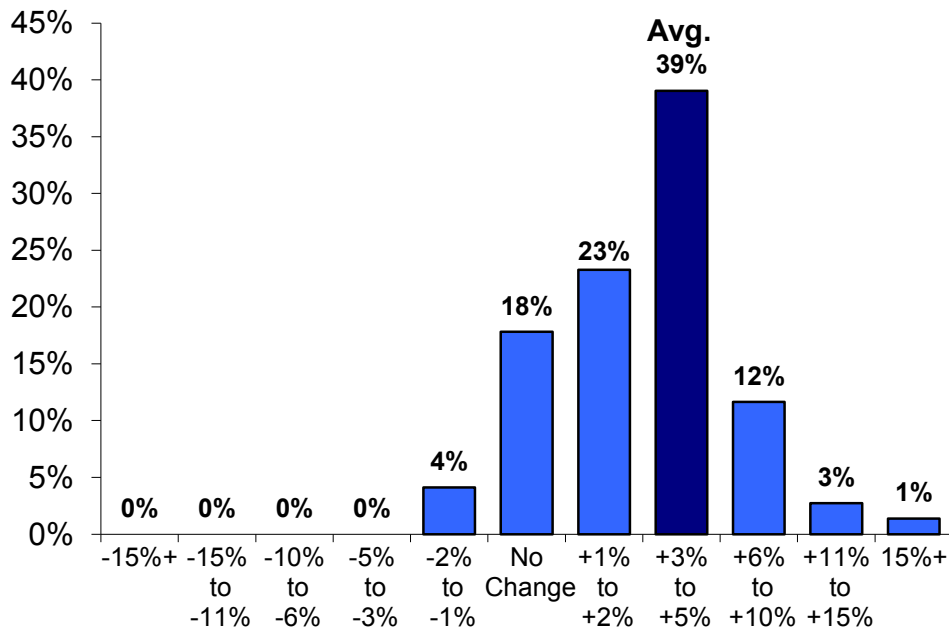
Base Rate Response History

Trends in Trucking Shippers' Expectations Over the Next 6 Months vs. the Same Period in the Prior Year"

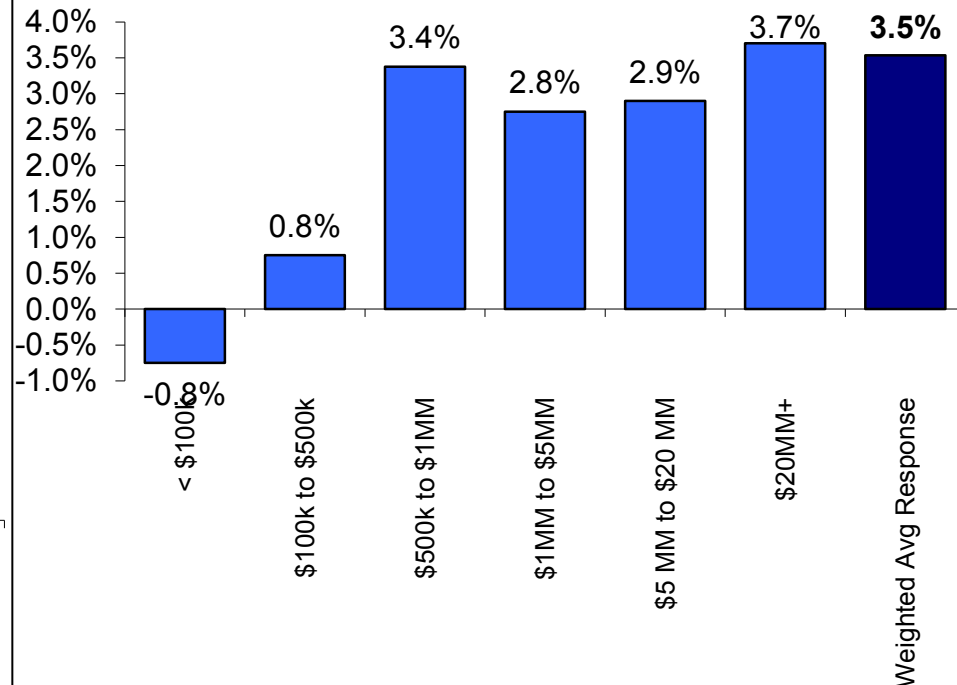


TL Base Rate Detail by Spend, Industry, and Response Skew

Truckload - Y/Y Base Rate Expectation by Range

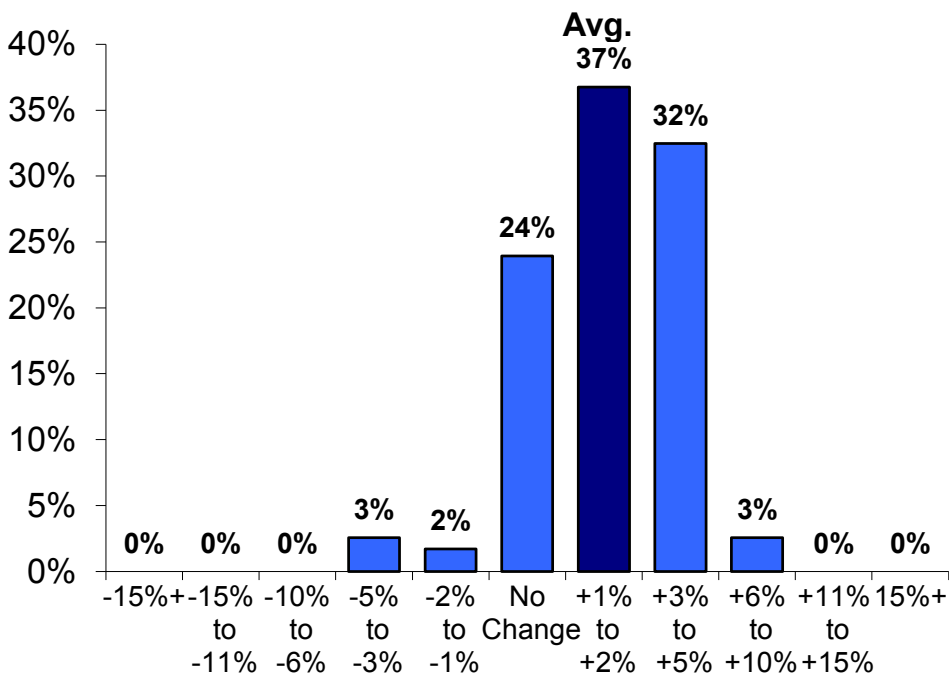


TL - Avg Change by Spend

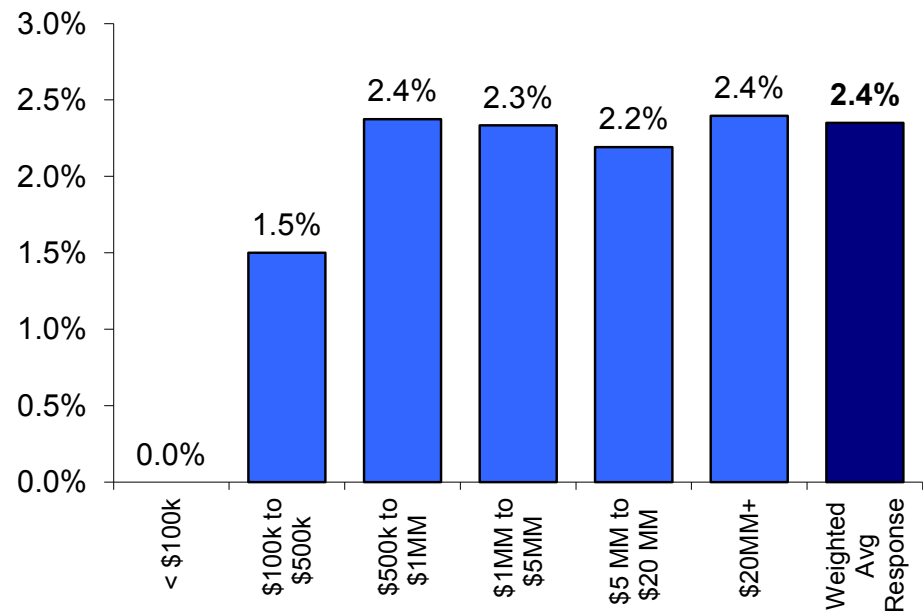


National LTL Base Rate Detail by Spend, Industry, and Response Skew

National LTL - Y/Y Base Rate Expectation by Range

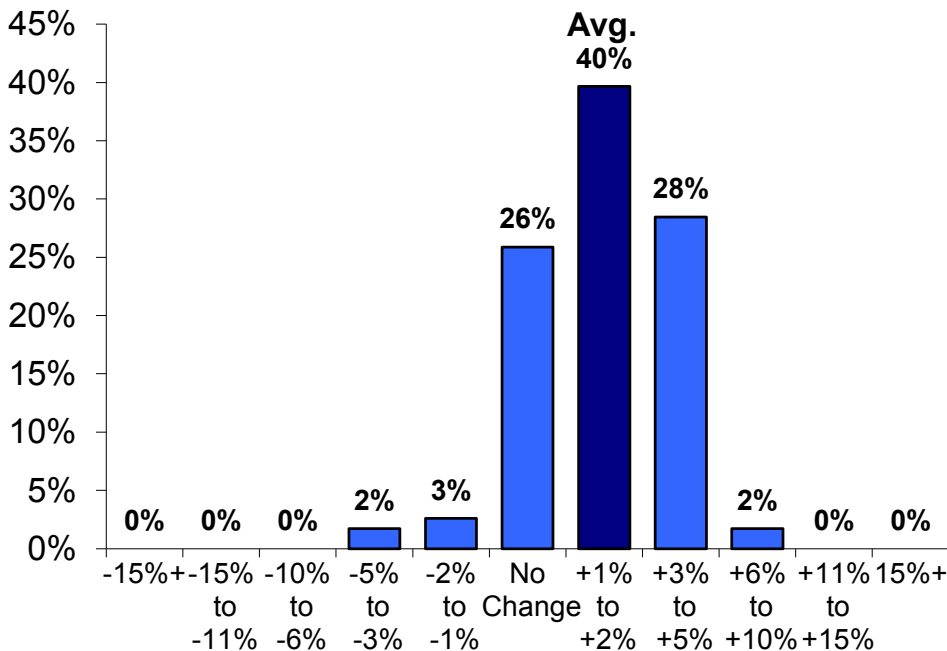


National LTL - Avg Change by Spend

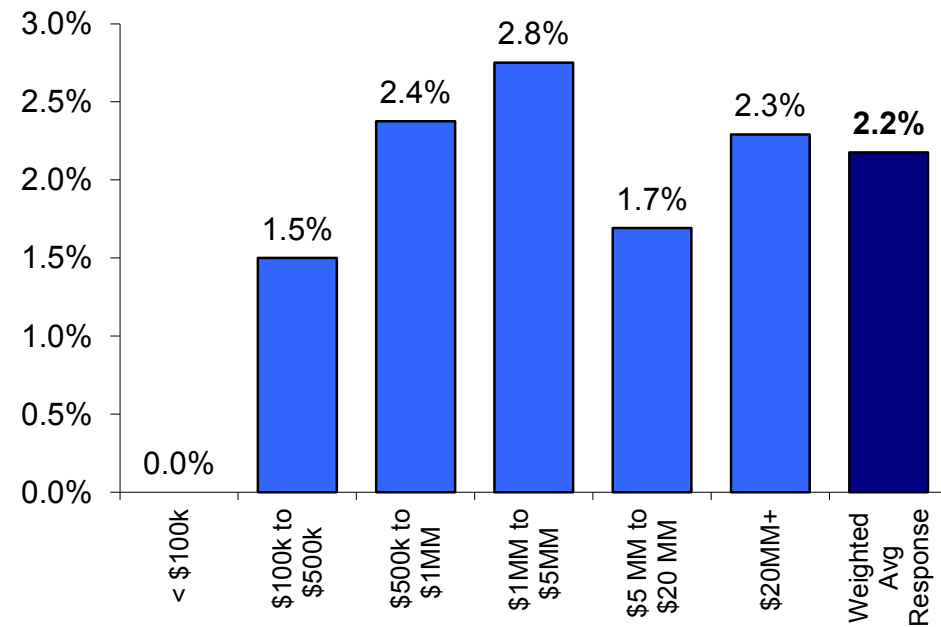


Regional LTL Base Rate Detail by Spend, Industry, and Response Skew

Regional LTL - Y/Y Base Rate Expectation by Range



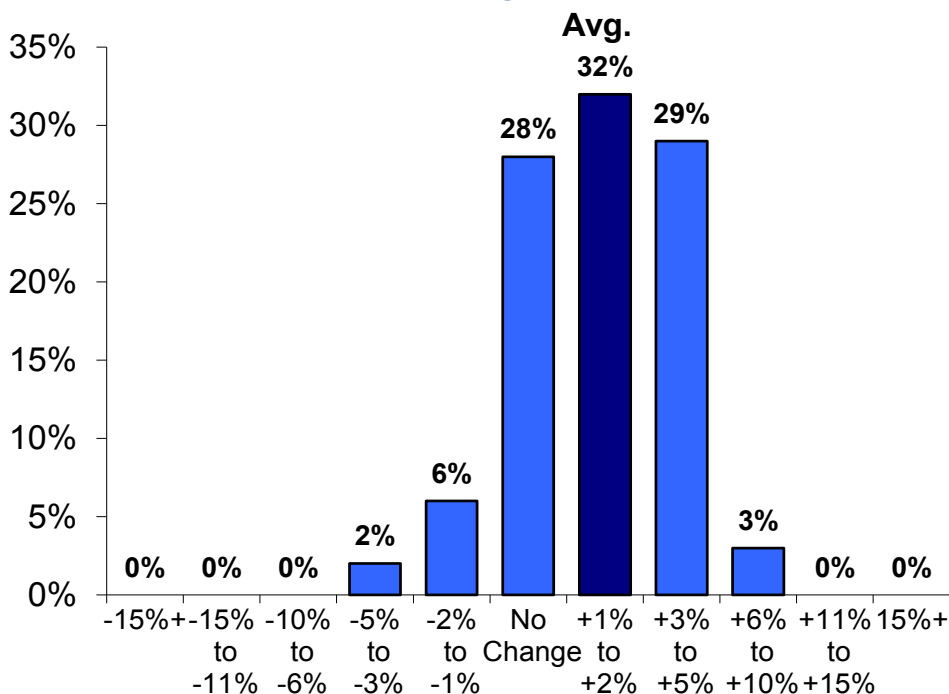
Regional LTL - Avg Change by Spend



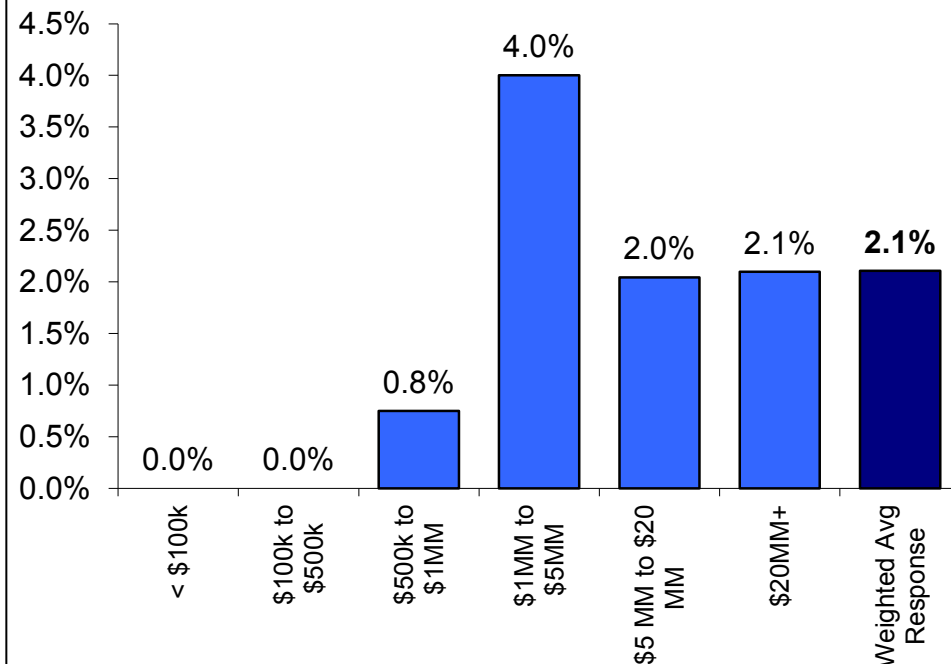
Source: Morgan Stanley Freight Pulse Surveys

Intermodal Base Rate Detail by Spend, Industry, and Response Skew

Intermodal - Y/Y Base Rate Expectation by Range

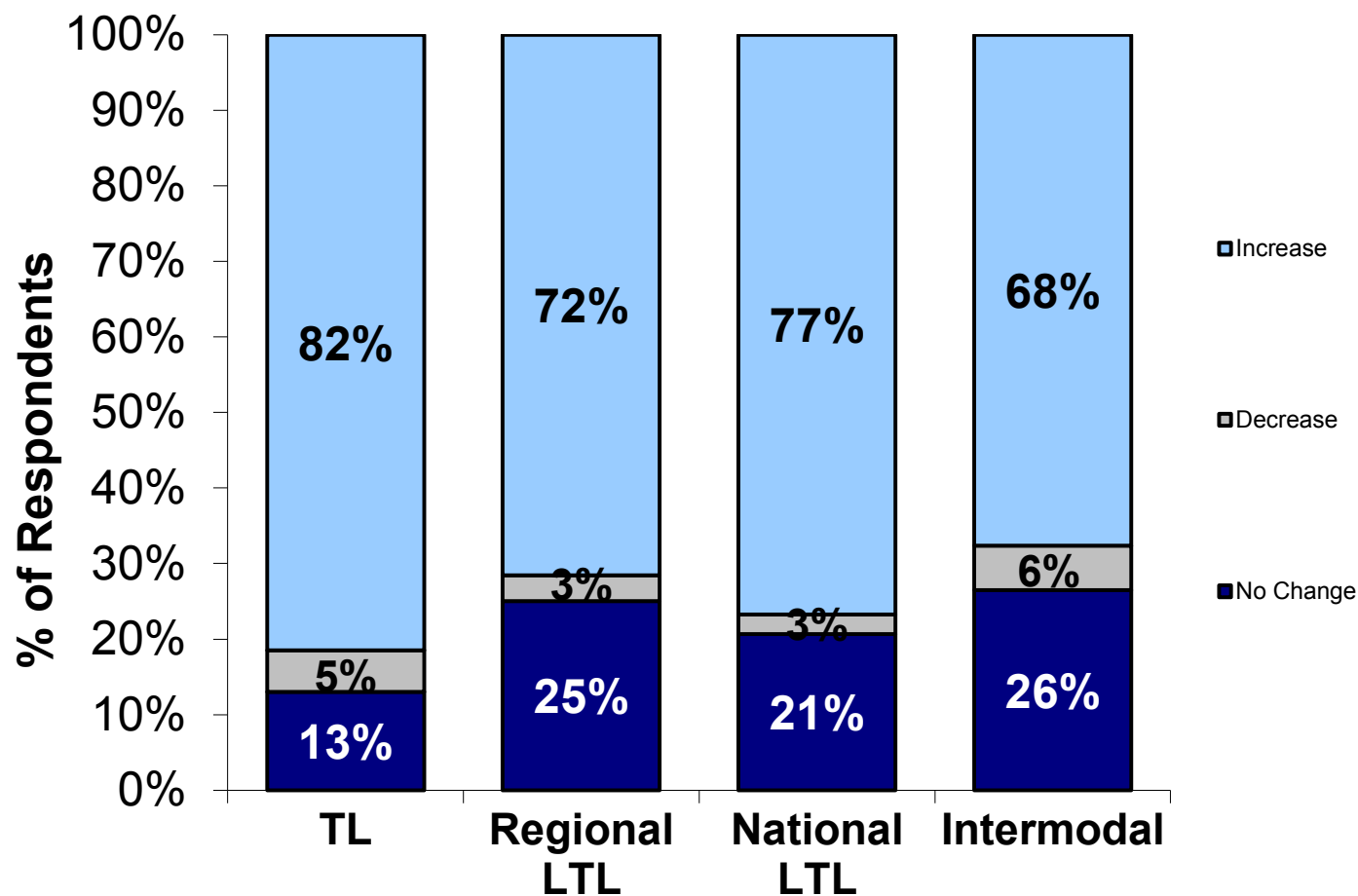


Intermodal - Avg Change by Spend



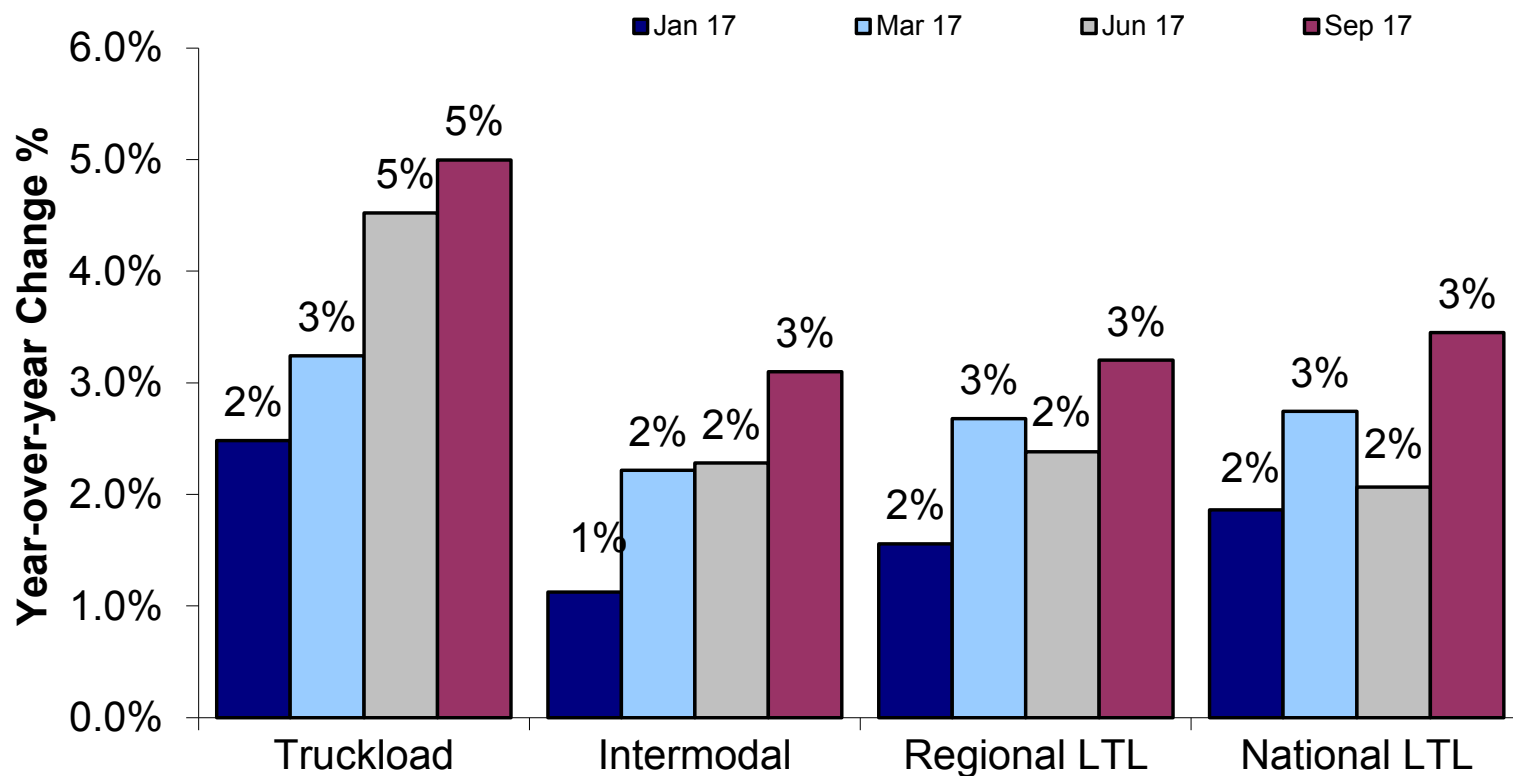
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Shipper Spend Expectations by Mode



Truck Spend: Change vs. Prior Survey

YoY % Change in You Organization's Spend Over the Next 6 Months



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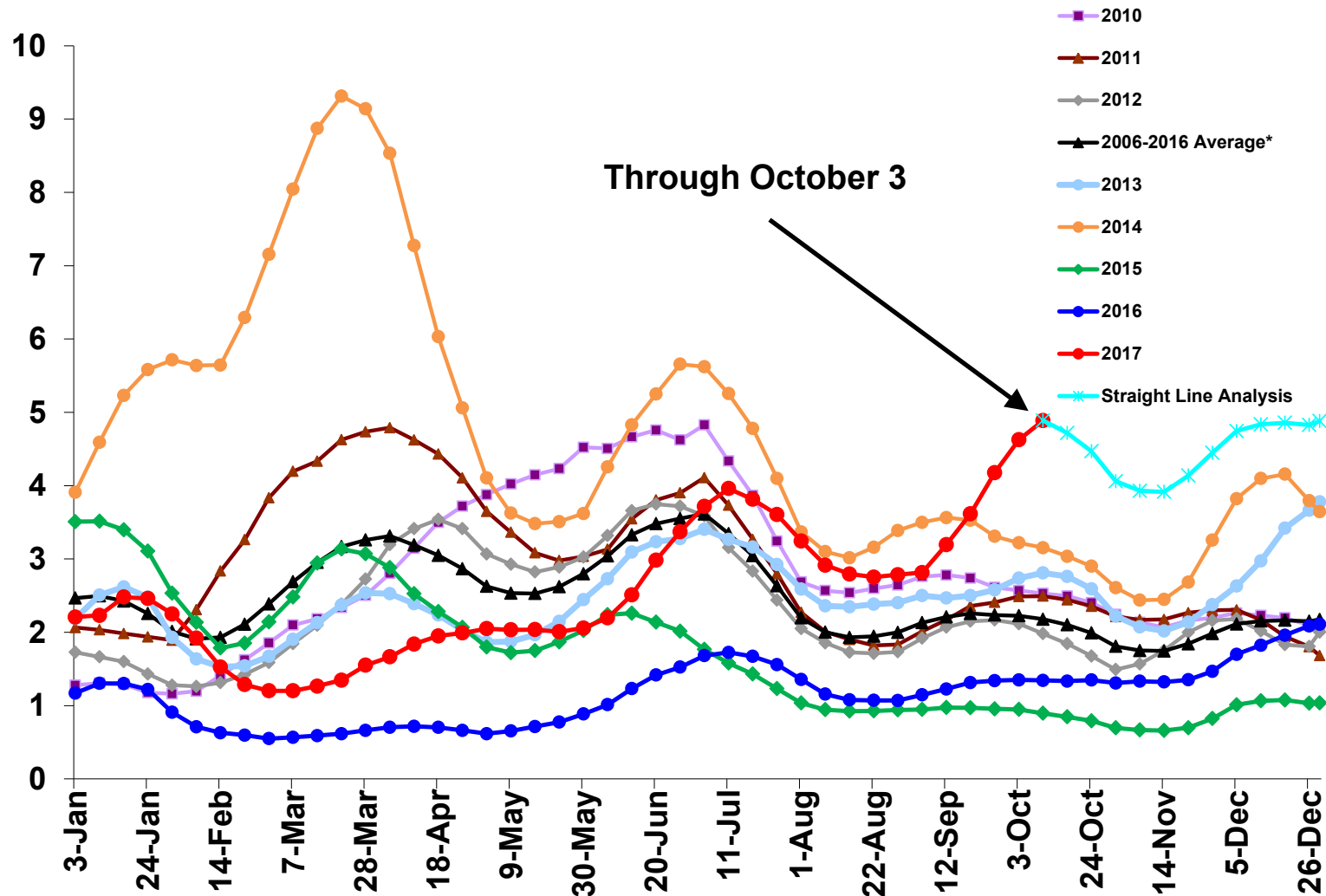
Part 1: Key Truck Trends

1. Capacity Trends
2. Volume Trends
3. Rate Trends
4. Overall Spend Trends

Part 2: Special Topics

1. Truckload Freight Index
2. Fuel Surcharge Concessions
3. Limitations on Truck to Rail Conversion

Morgan Stanley Truckload Freight Index With Straight-Line Forecast

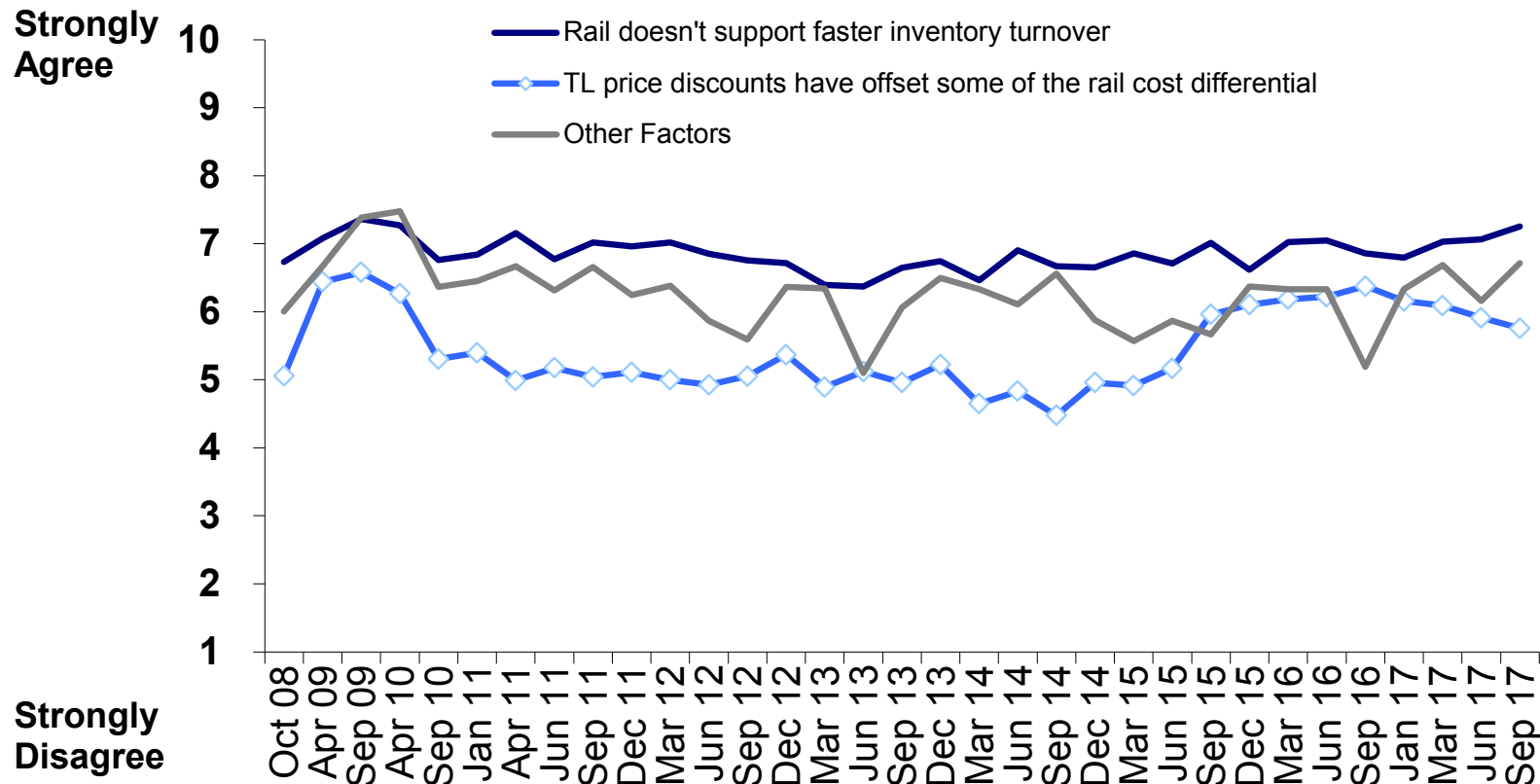


The index measures the demand for Dry-Van Truckload services compared to the number of Dry-Van trucks on the road. The index begins in April 1994. When a given reading is above prior years' level, it means there is more freight demand relative to available capacity. When a given reading is below prior years' level, it means there is less freight demand relative to capacity.

Source: Morgan Stanley Research

Truckload Fuel Surcharge Concession History

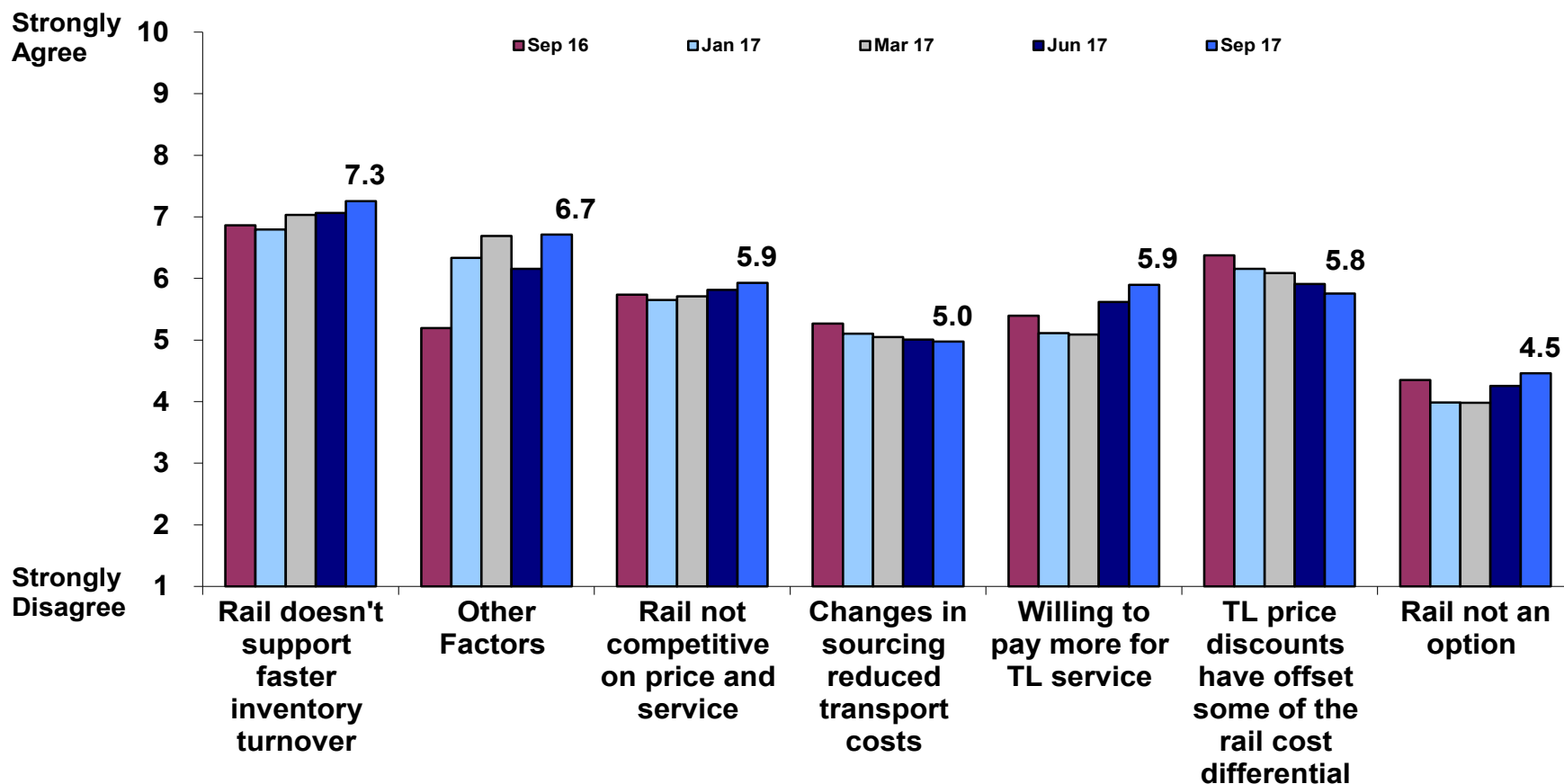
What Factors are Limiting your Organization from Shipping More Volume on the Railroads?



Source: Morgan Stanley Freight Pulse Surveys

Truck to Rail Conversion: Key Obstacles to Overcome

What Factors are Impacting Your Decision to Keep More Volume with Truckload Carriers?



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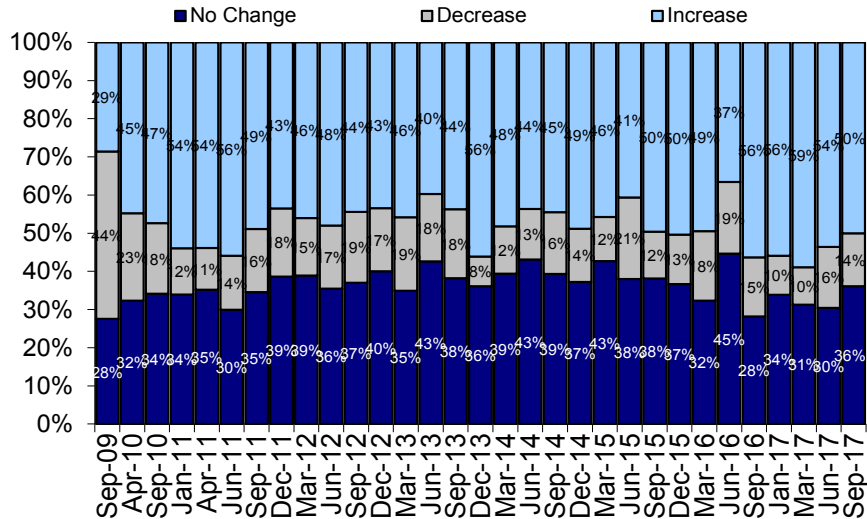
1. Outlook for Parcel Base Rates
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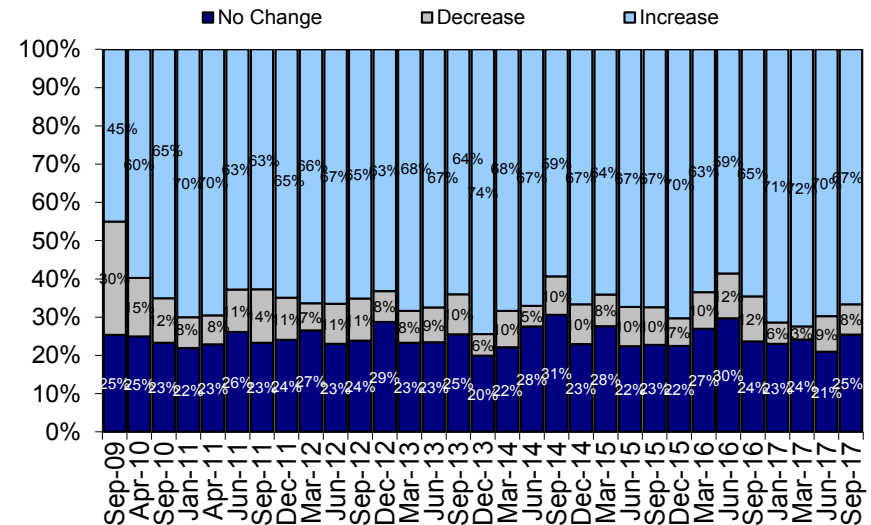
1. Service Reliability Rankings
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Parcel Volume Outlook Over the Next 6 Months

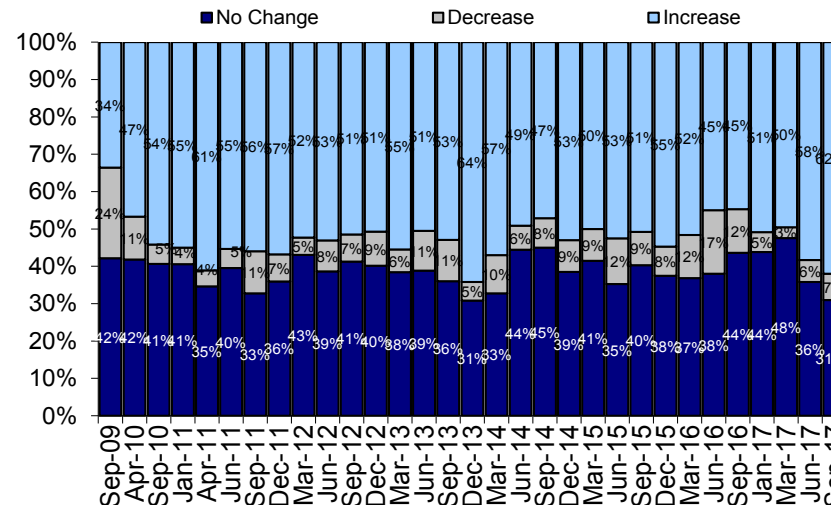
% of Shippers Expecting Air to:



% of Shippers Expecting Ground to:

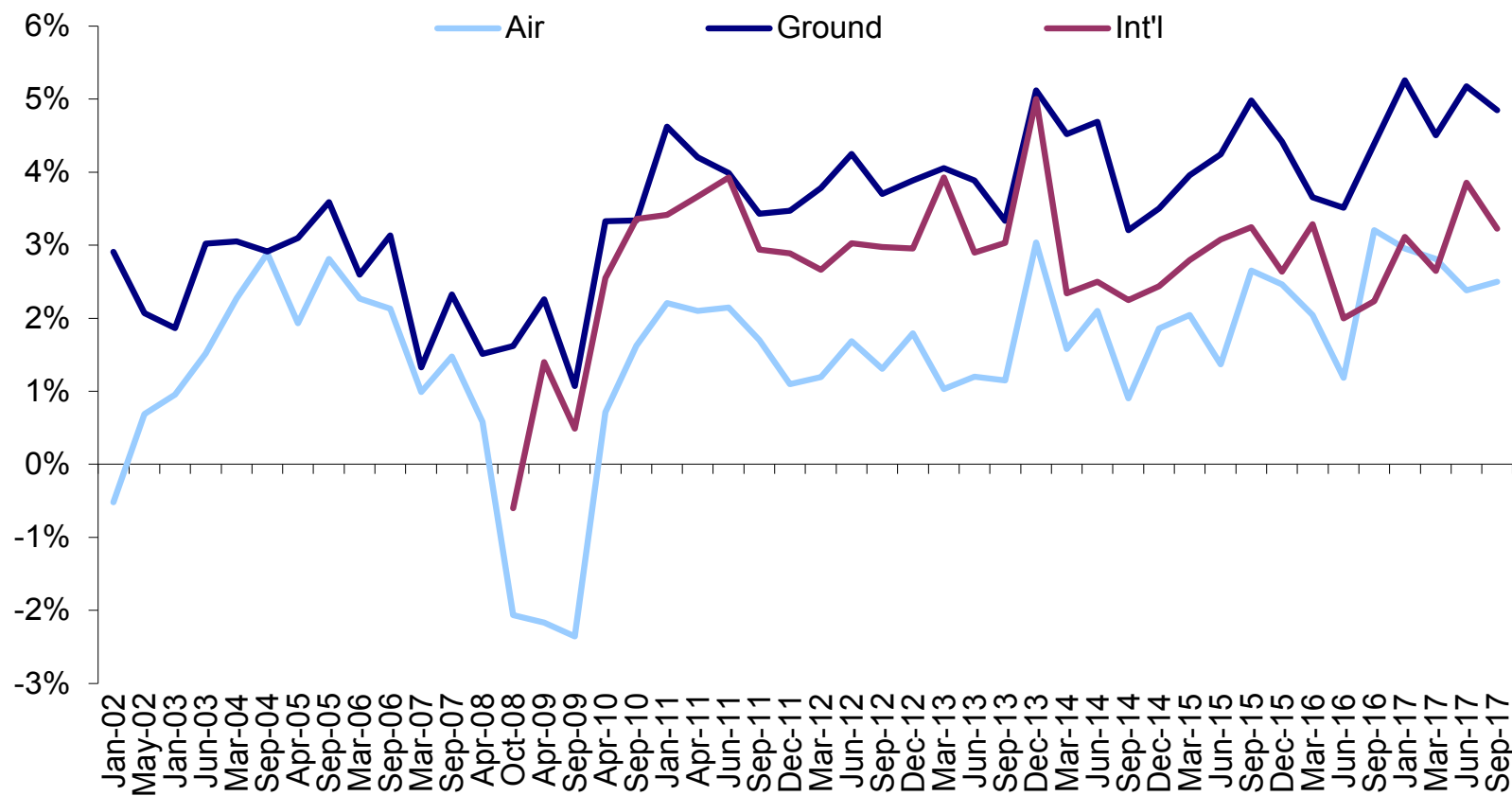


% of Shippers Expecting International to:



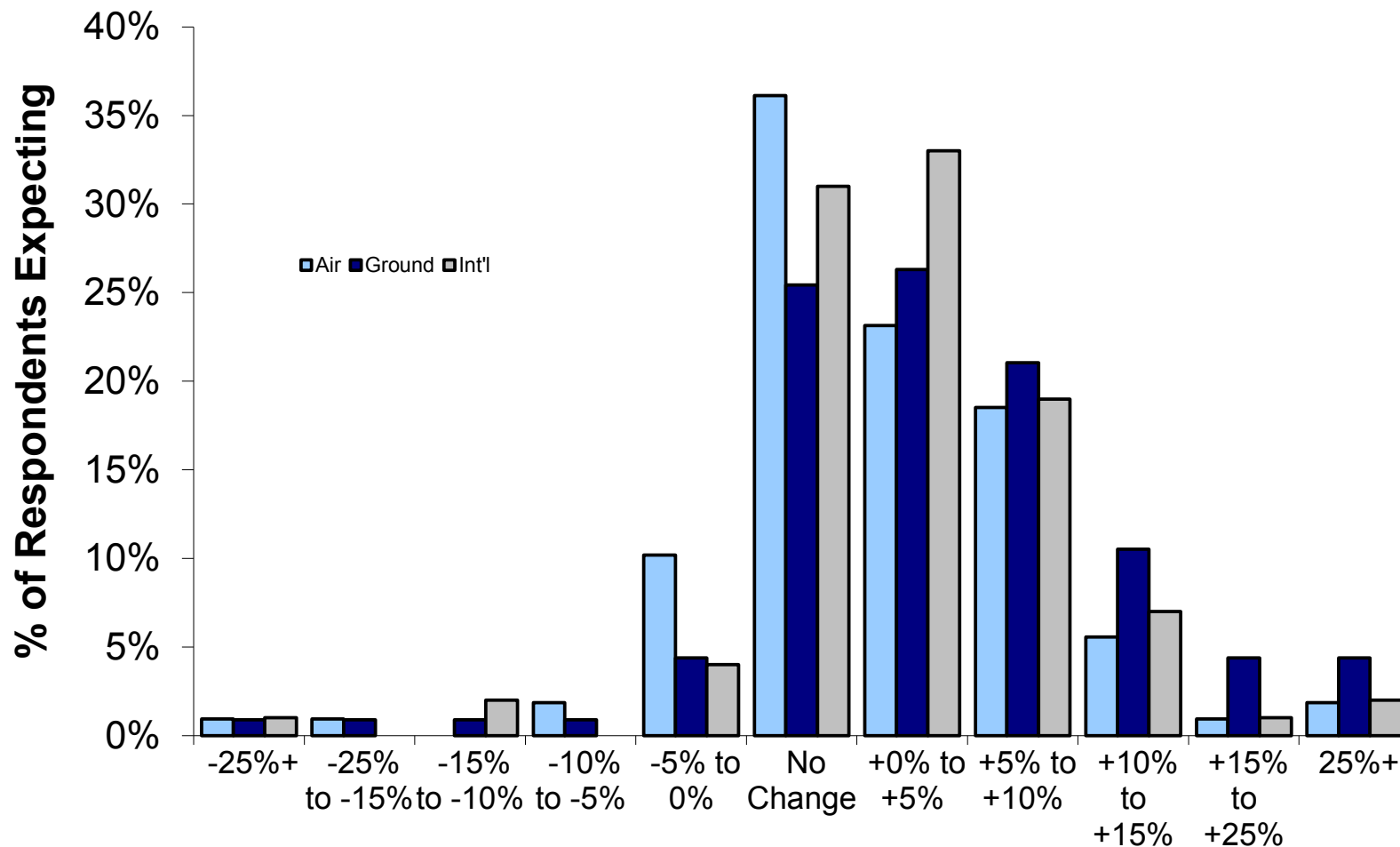
Volume Trends by Product

Volume Growth Expectations “Over the Next 6 Months” vs. Last Year



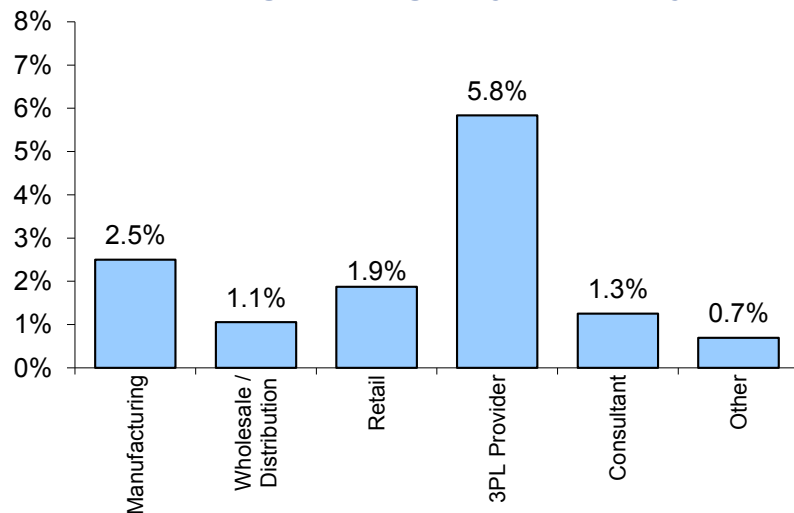
Volume Response Skew – All Shippers

Volume Growth Expectations “Over the Next 6 Months” vs. Same Period Last Year

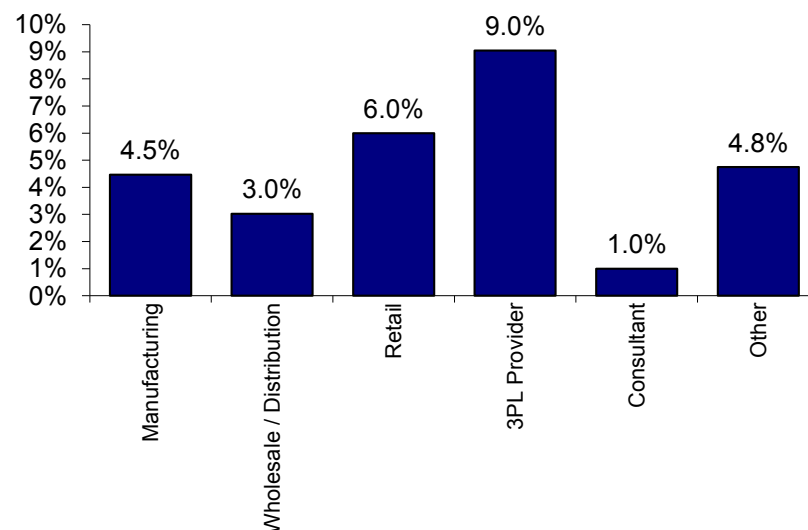


Volume Growth Outlook by Industry

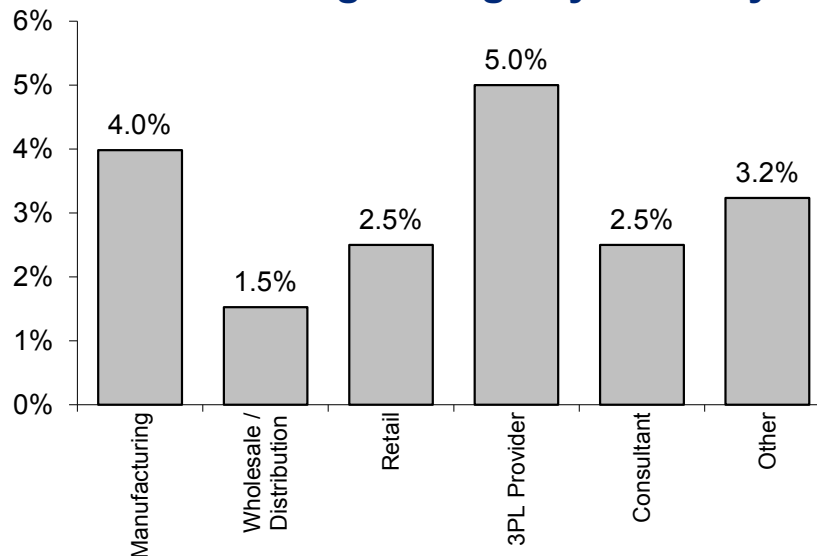
Air - Avg Change by Industry



Ground - Avg Change by Industry

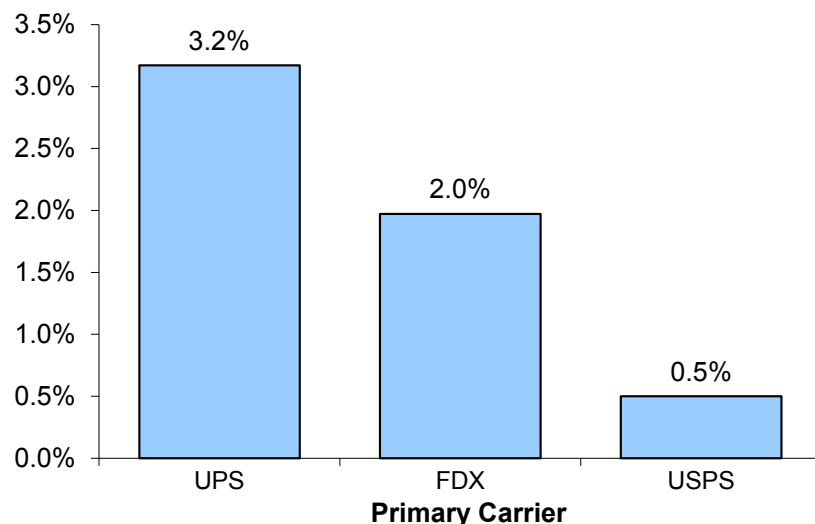


International - Avg Change by Industry

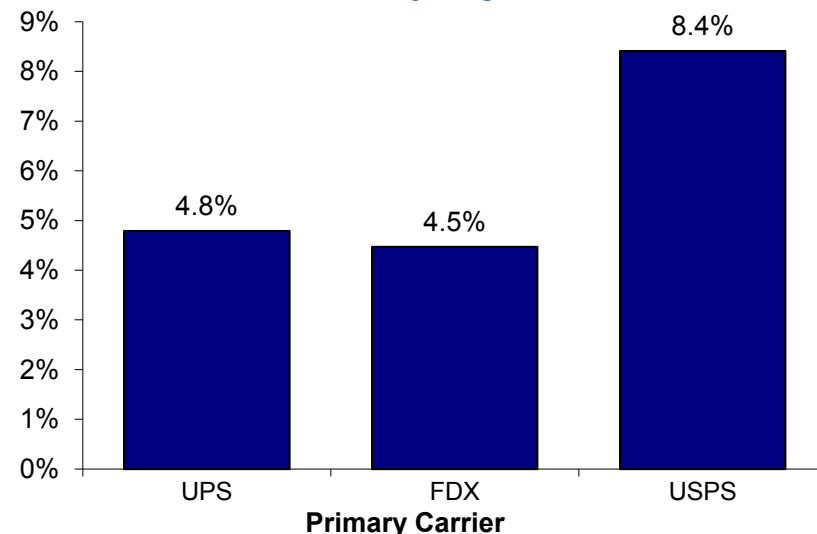


Volume Growth Outlook by Listed Primary Carrier

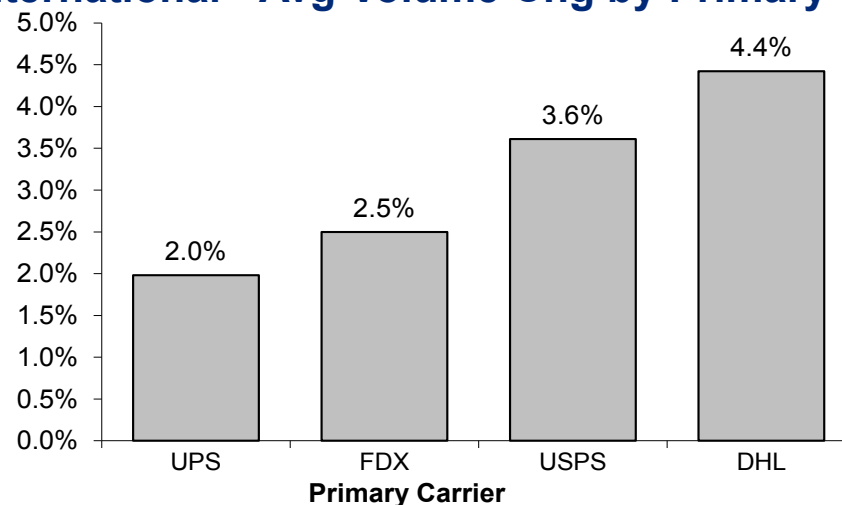
Air - Avg Volume Change by Primary Carrier



Ground - Avg Volume Change by Primary Carrier

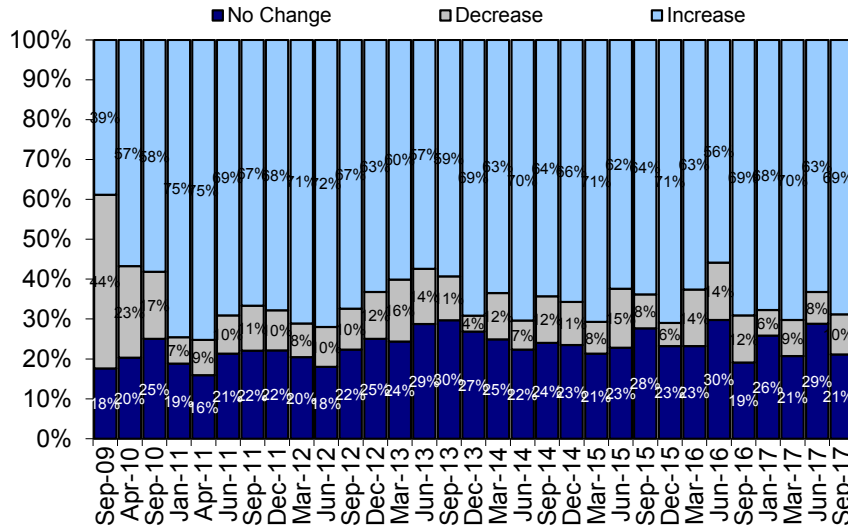


International - Avg Volume Chg by Primary Carrier

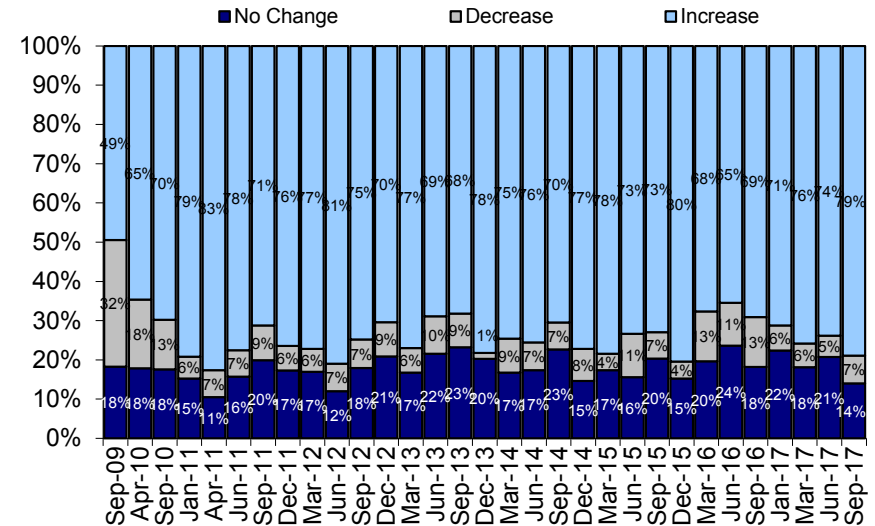


Parcel Spend Outlook Over the Next 6 Months

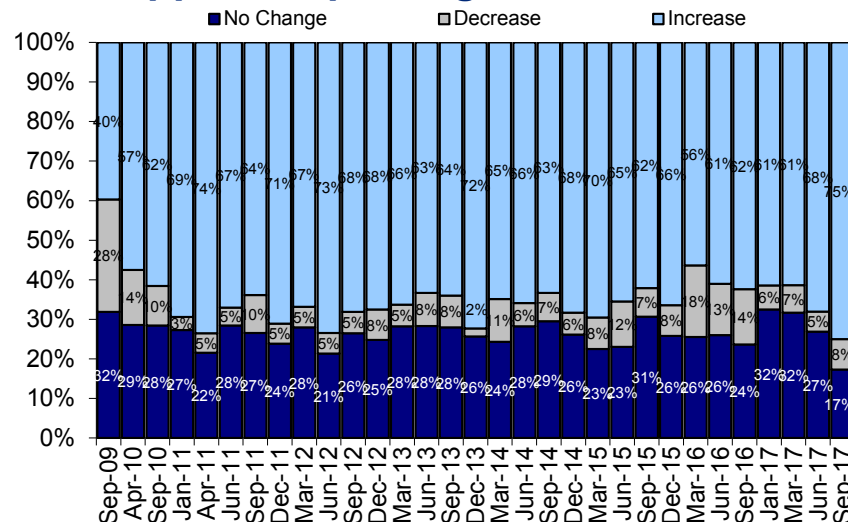
% of Shippers Expecting Air to:



% of Shippers Expecting Ground to:

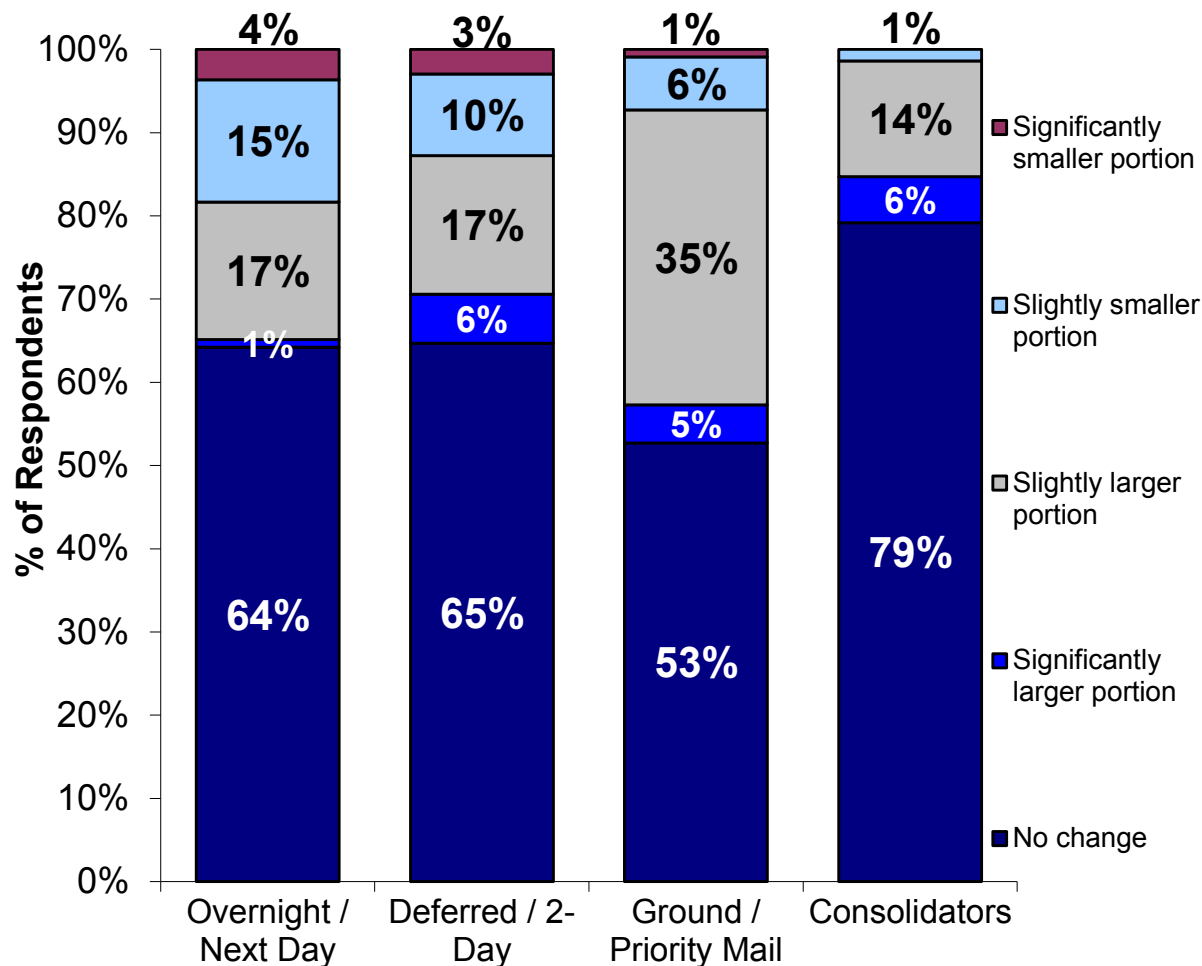


% of Shippers Expecting International to:



Expected Shift in Product Usage: All Shippers

How Will Your Usage of the Following Products Change as a Proportion of your Total Parcel Shipment Budget (on a Year-over-Year Basis) Over the Next 6 Months?

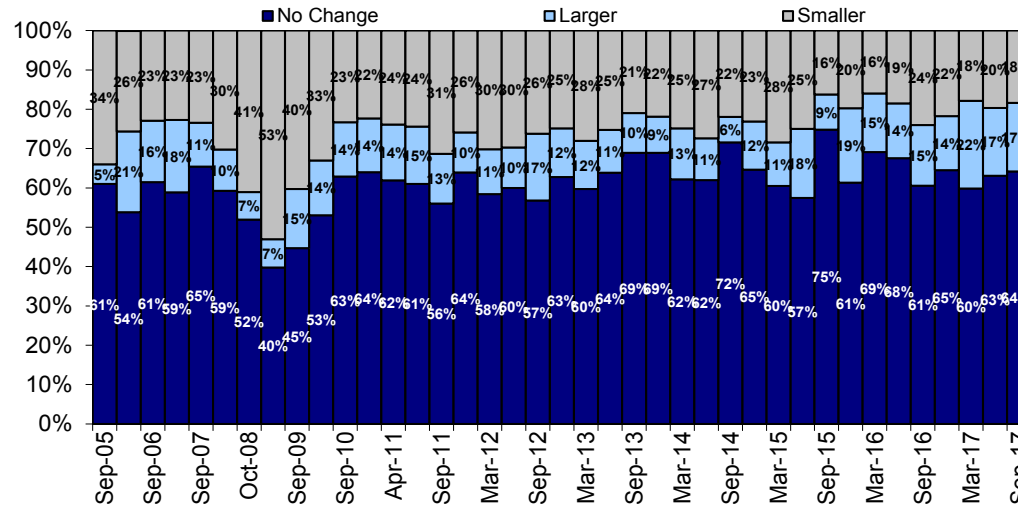


Source: Morgan Stanley
Parcel Survey

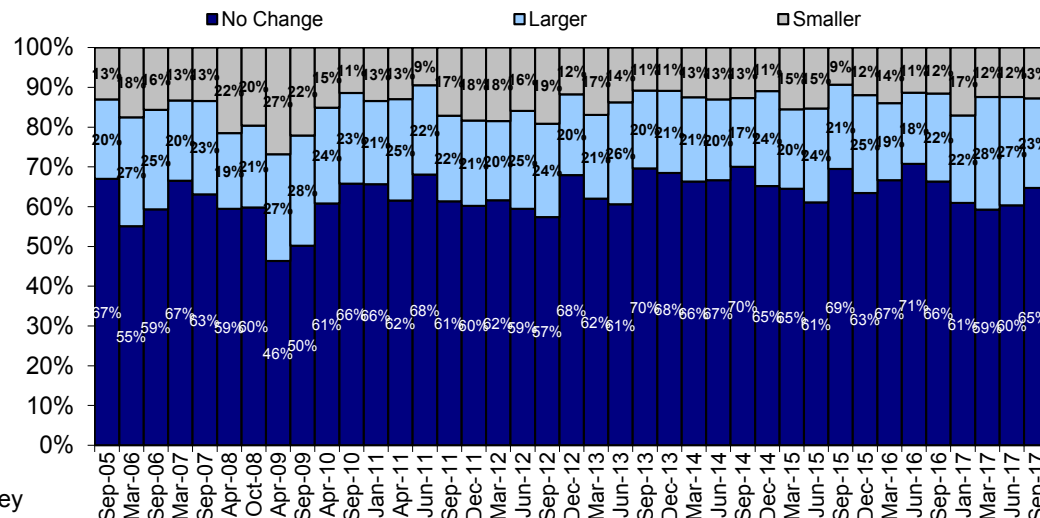
Historical Expected Change in Use of Air Products

How Will Your Usage of the Following Products Change as a Proportion of your Total Parcel Shipment Budget (on a Year-over-Year Basis) Over the Next 6 Months?

Overnight / Next Day



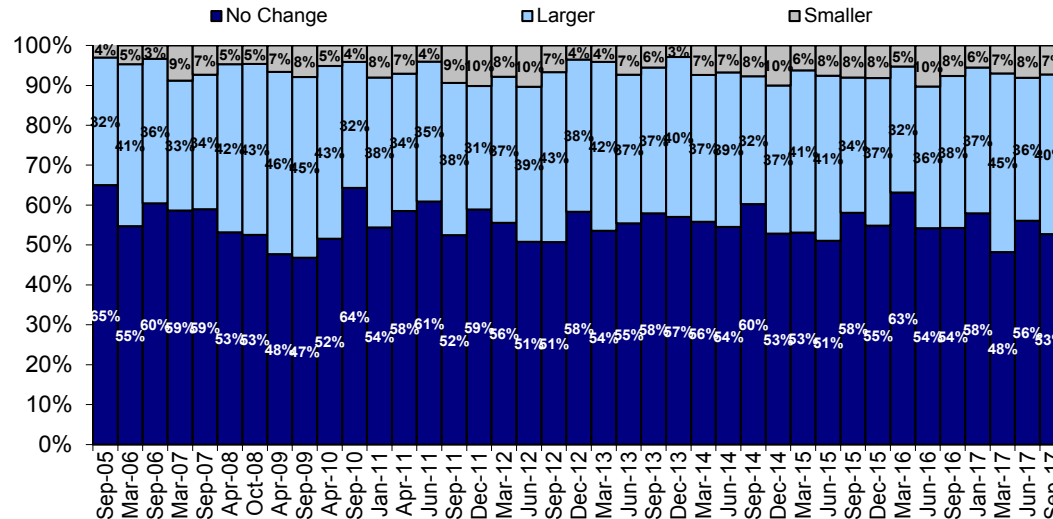
Deferred / 2-Day



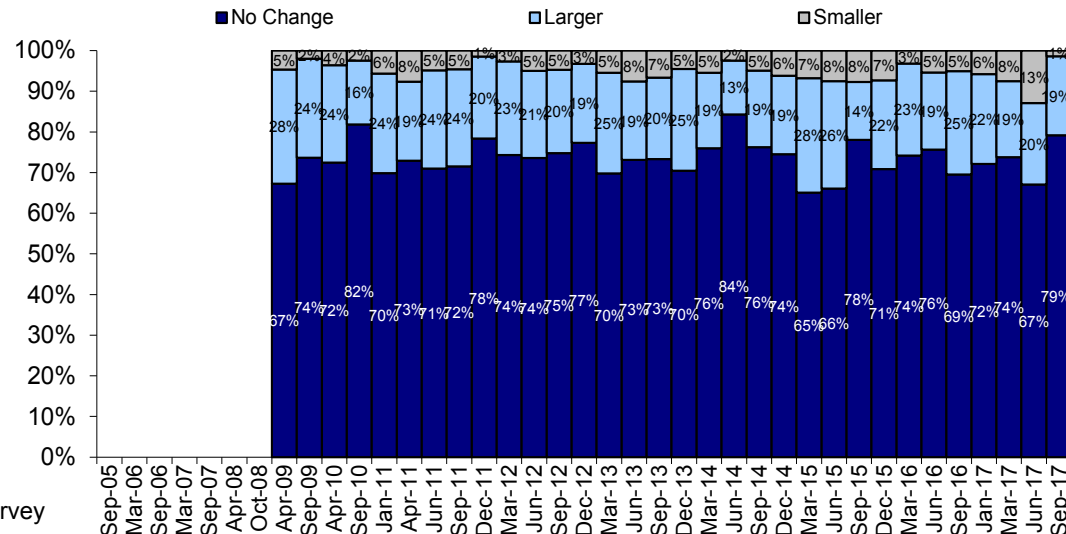
Historical Expected Change in Use of Ground and Consolidators

How Will Your Usage of the Following Products Change as a Proportion of your Total Parcel Shipment Budget (on a Year-over-Year Basis) Over the Next 6 Months?

Ground

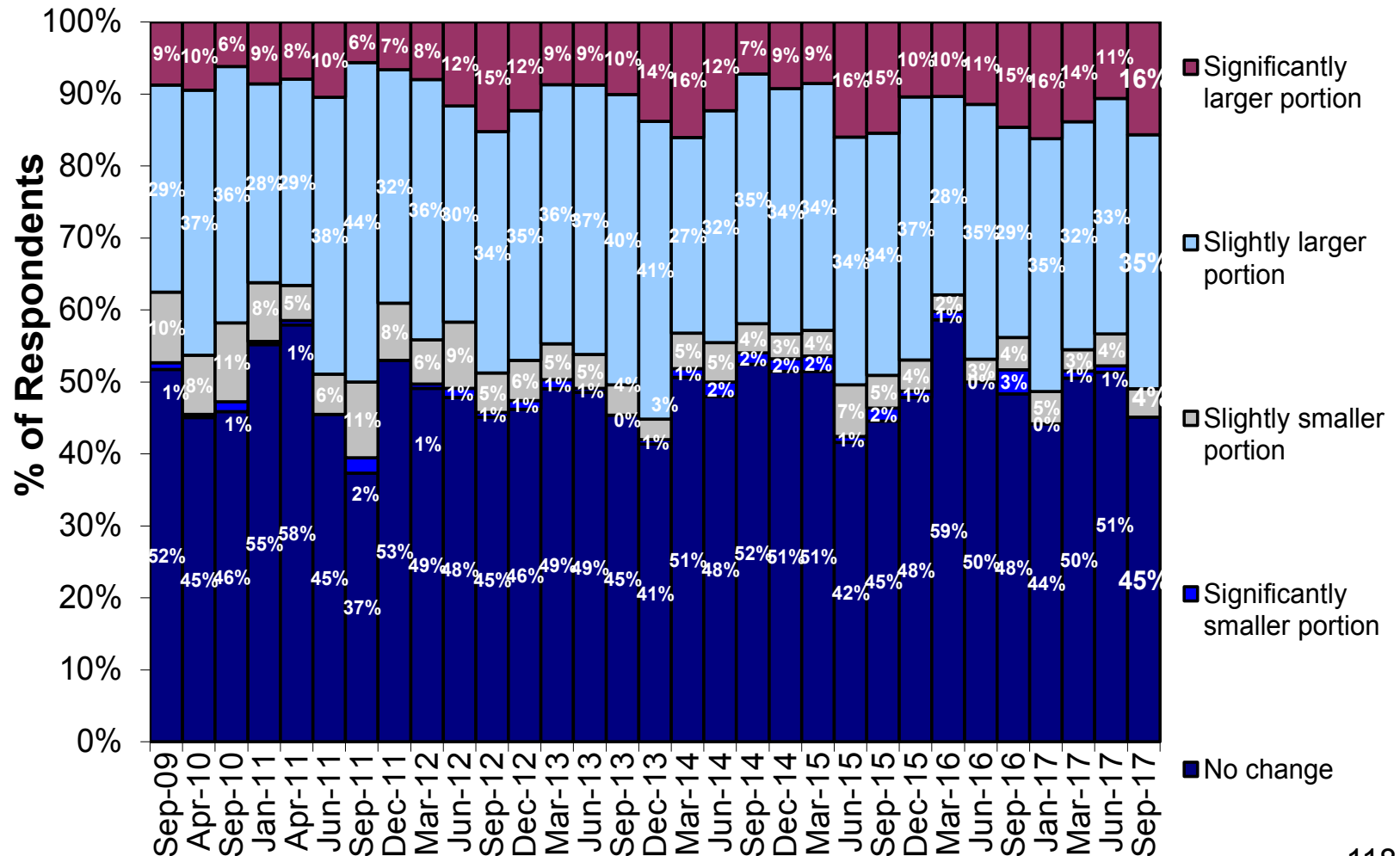


Consolidators



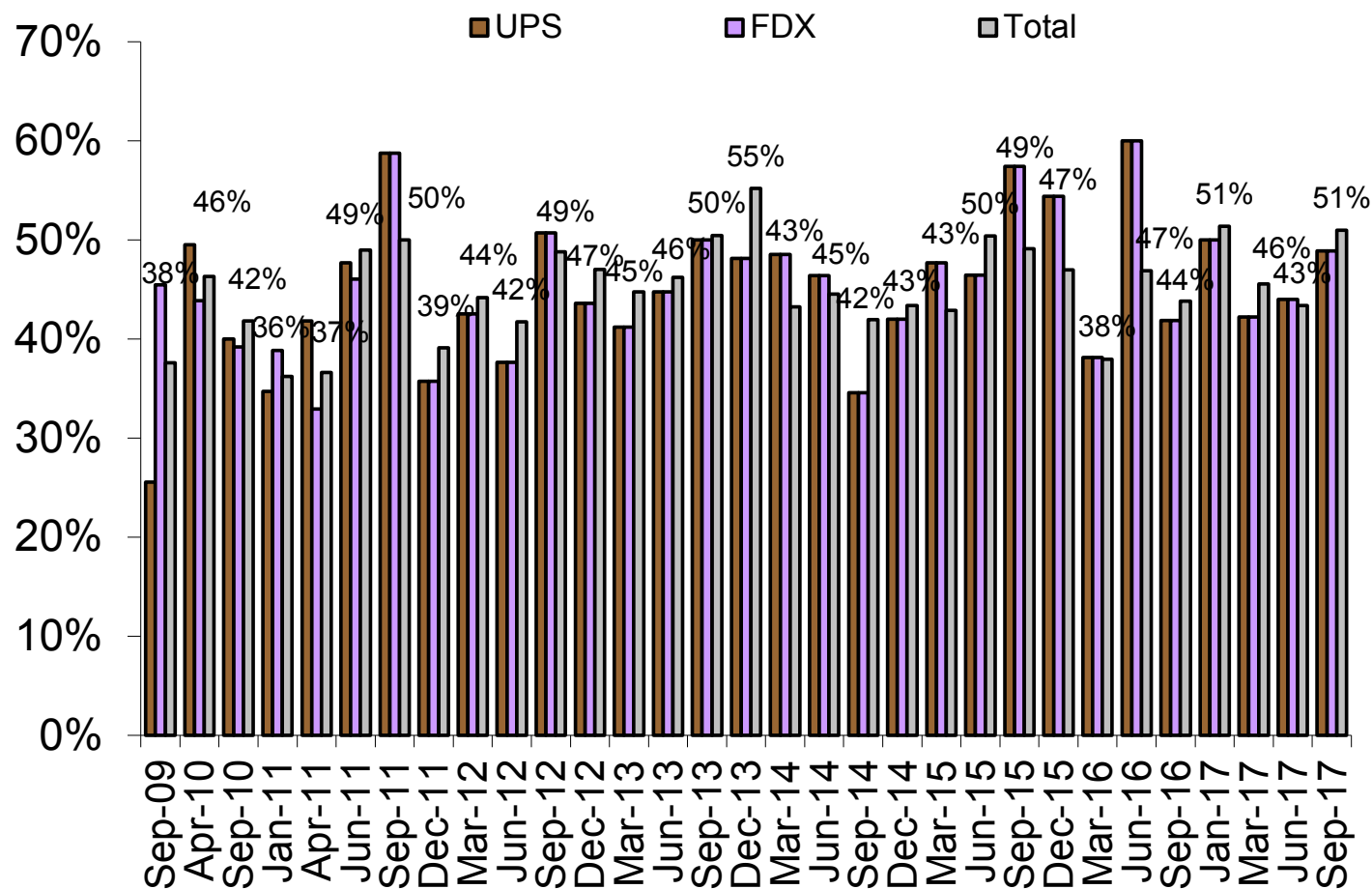
Expected Trends in B2C

YoY Change in B2C as % of Total



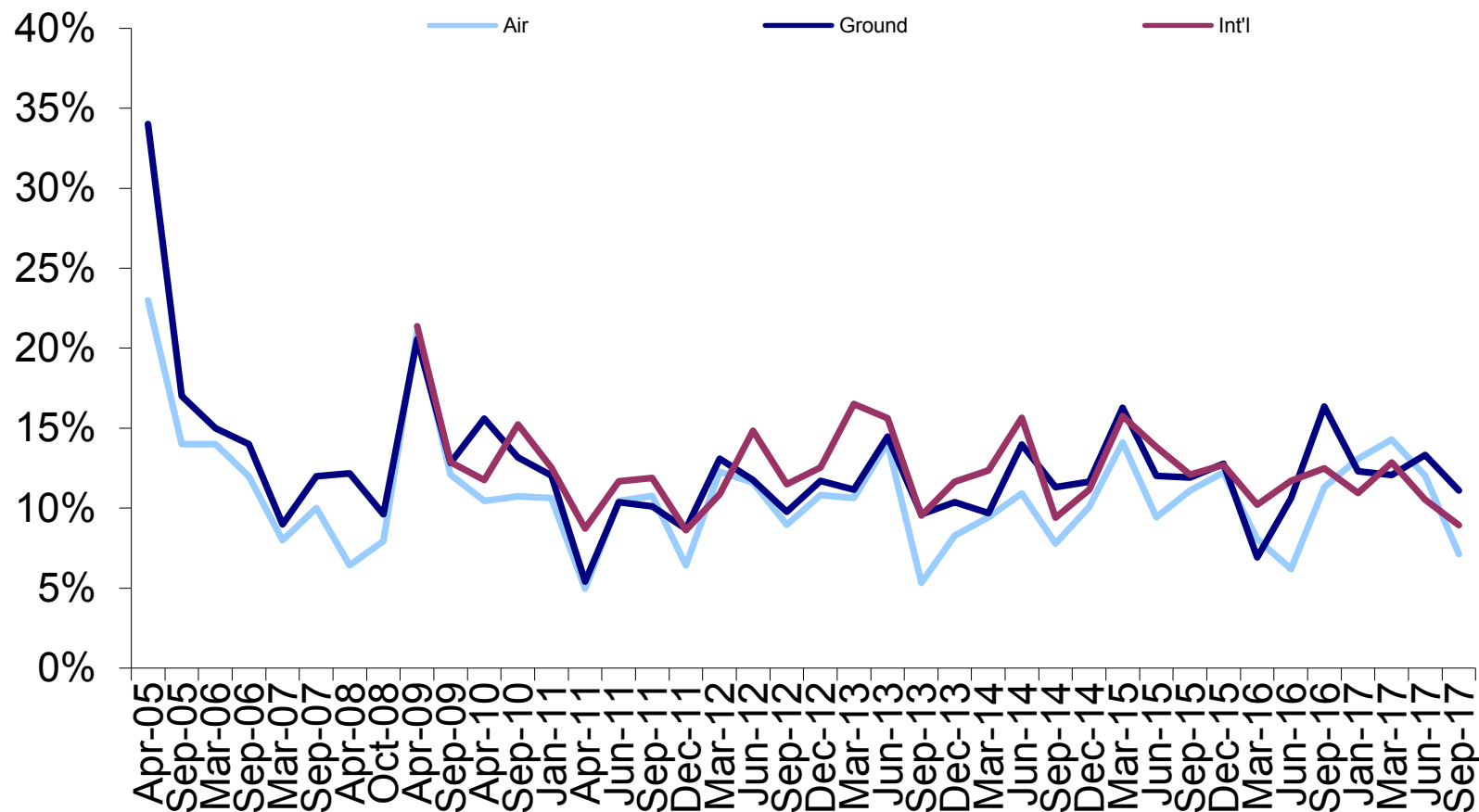
Expected Trends in B2C

% of Respondents Indicating Increase in B2C Shipping as % of Total



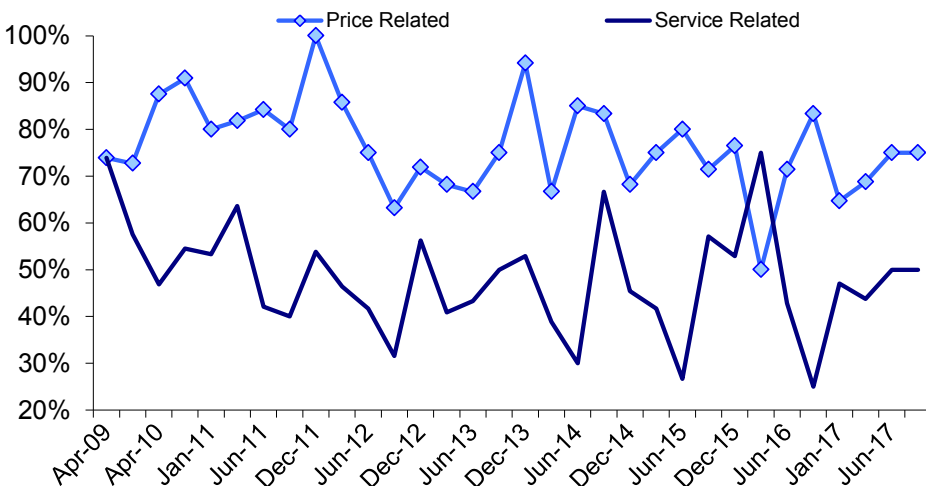
% of Respondents Switching Primary Carriers Over Time

% of Shippers Switching Primary Carriers Over the Past 6 Months

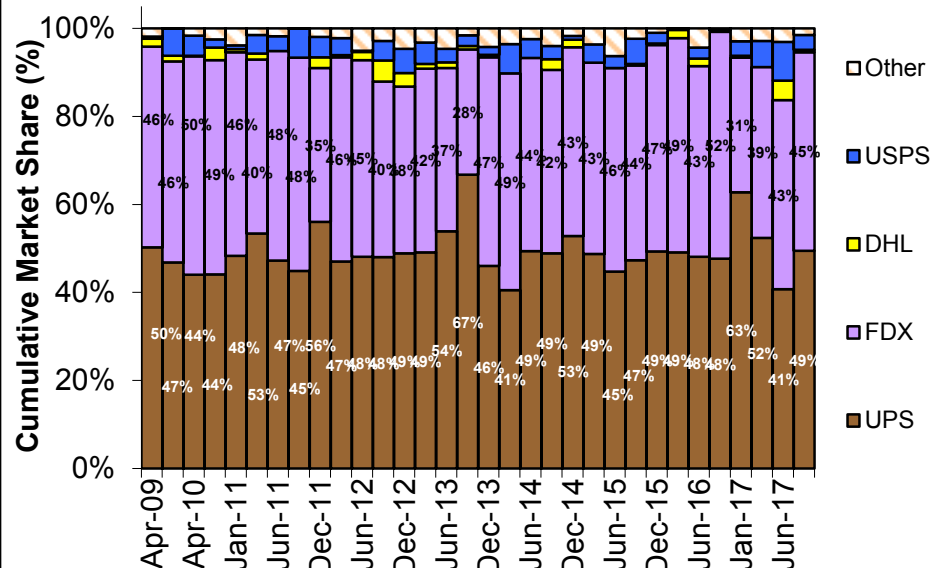


Air Switching: Reasons for Switch and Primary Carrier

Air: Reason for Switching Primary Carriers

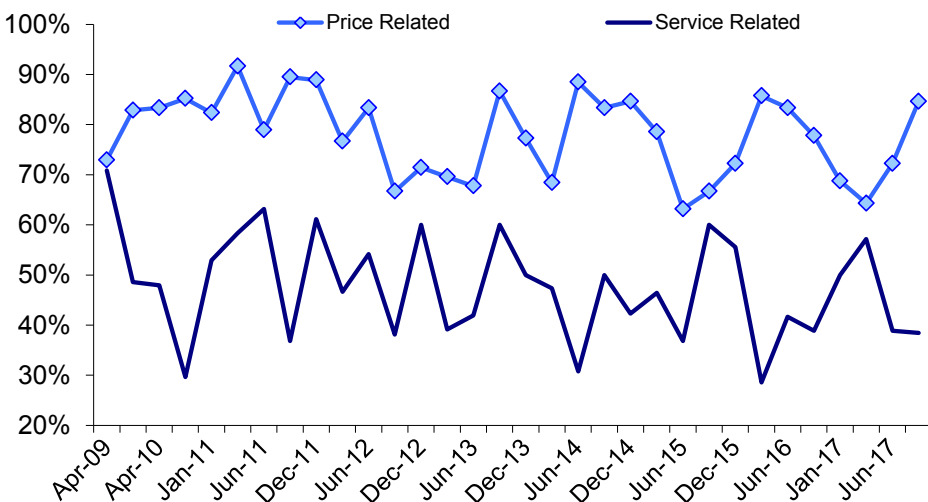


Air: Dollar-weighted Market Share

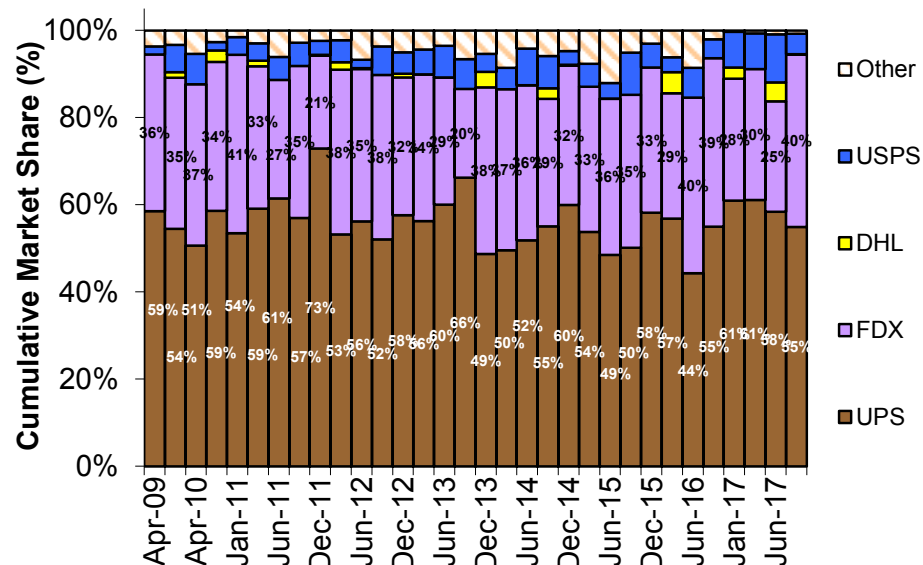


Ground Switching: Reasons for Switch and Primary Carrier

Ground: Reason for Switching Primary Carriers

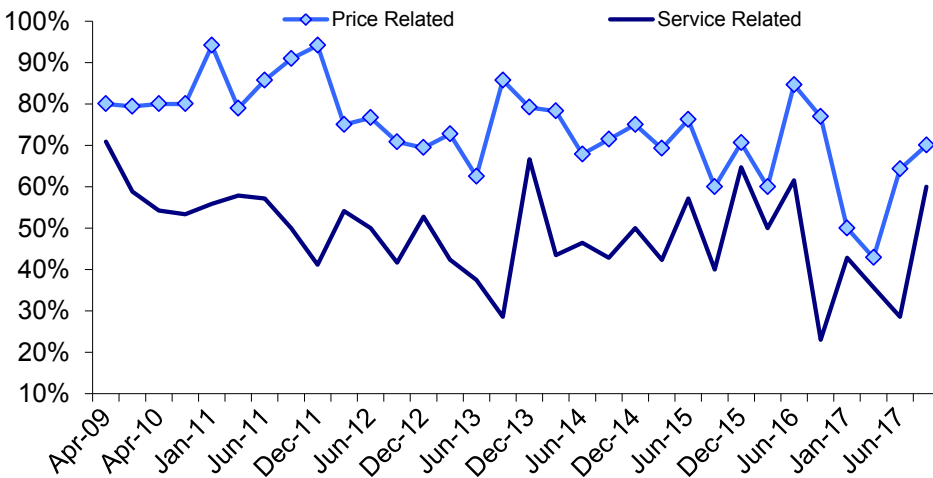


Ground: Dollar-weighted Market Share

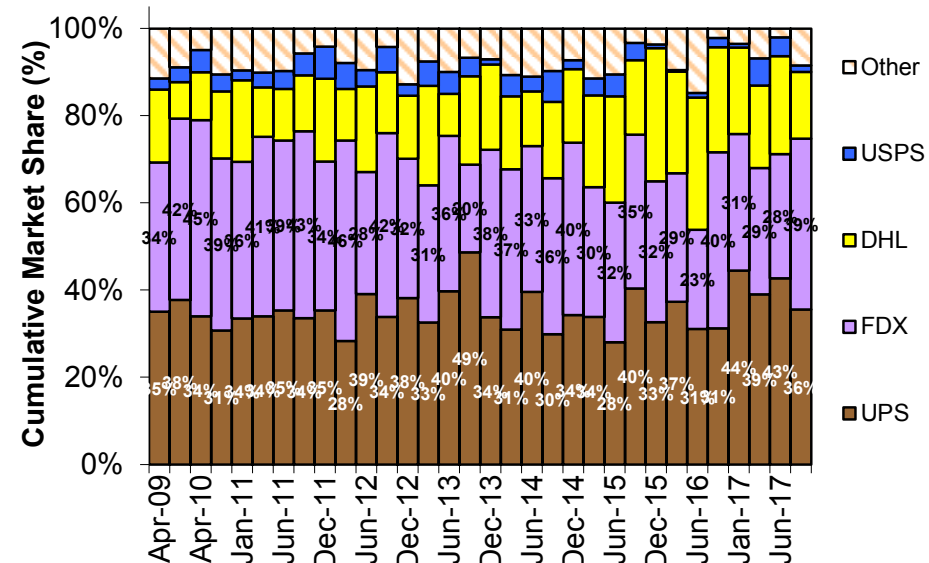


International Switching: Reasons for Switch and Primary Carrier

International: Reason for Switching Primary Carriers



International: Dollar-weighted Market Share



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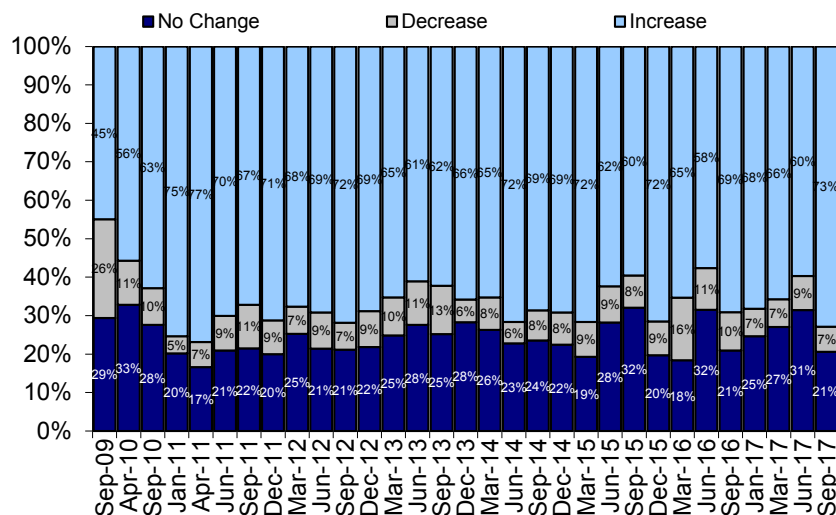
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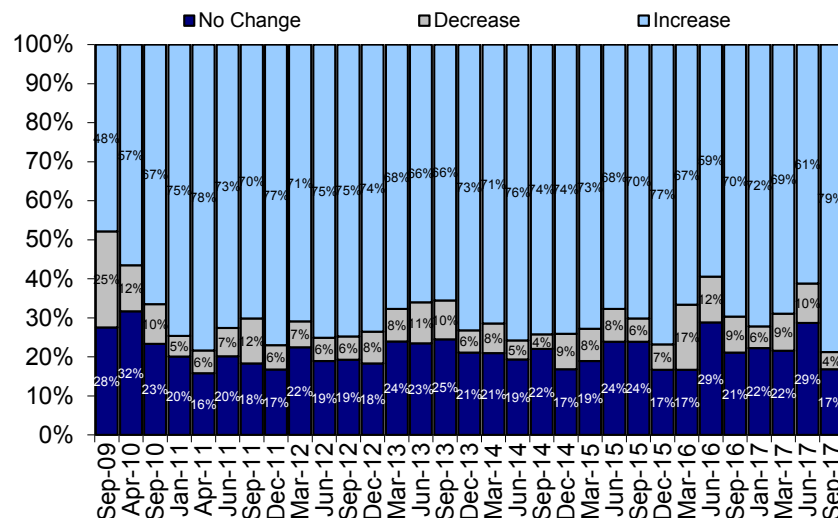
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Parcel Pricing Outlook Over the Next 6 Months

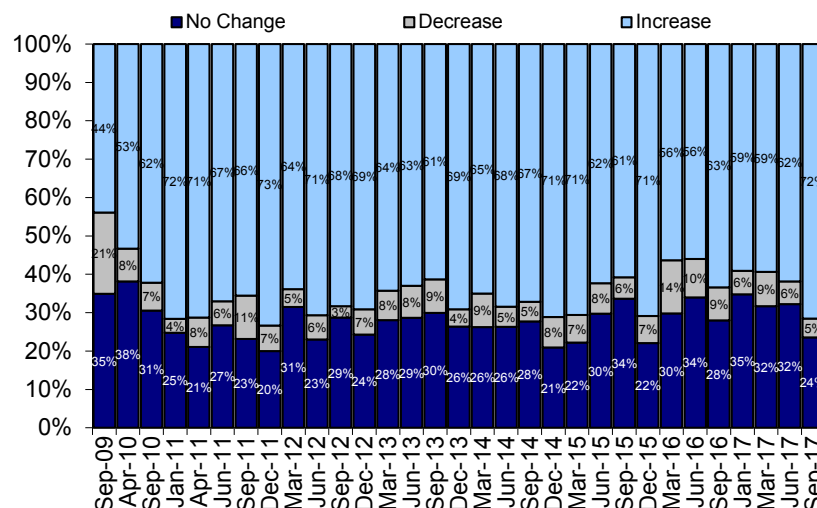
% of Shippers Expecting Air to:



% of Shippers Expecting Ground to:



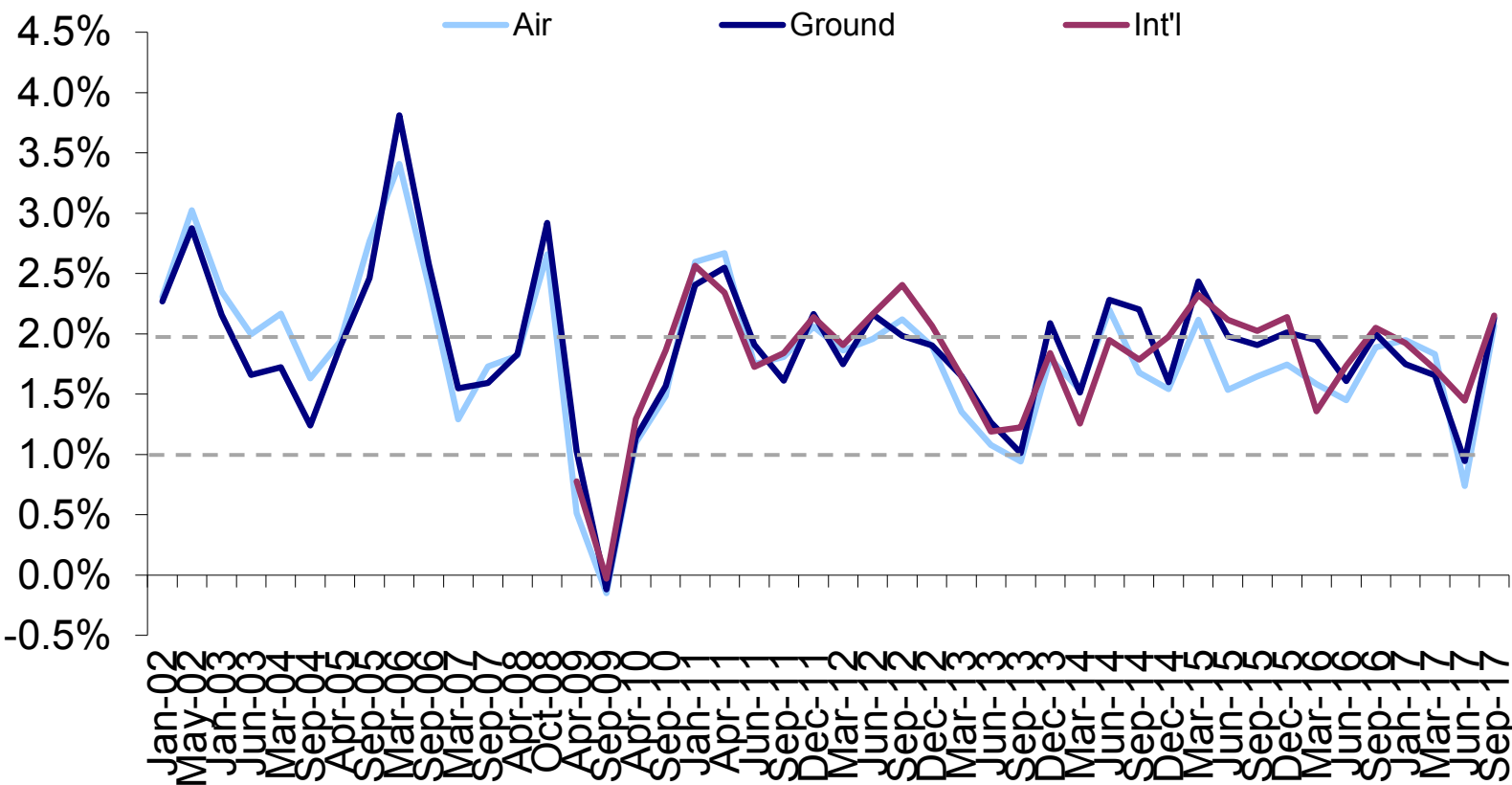
% of Shippers Expecting International to:



Source: Morgan Stanley Parcel Survey

Pricing Trends by Product: Large vs. Small Shipper

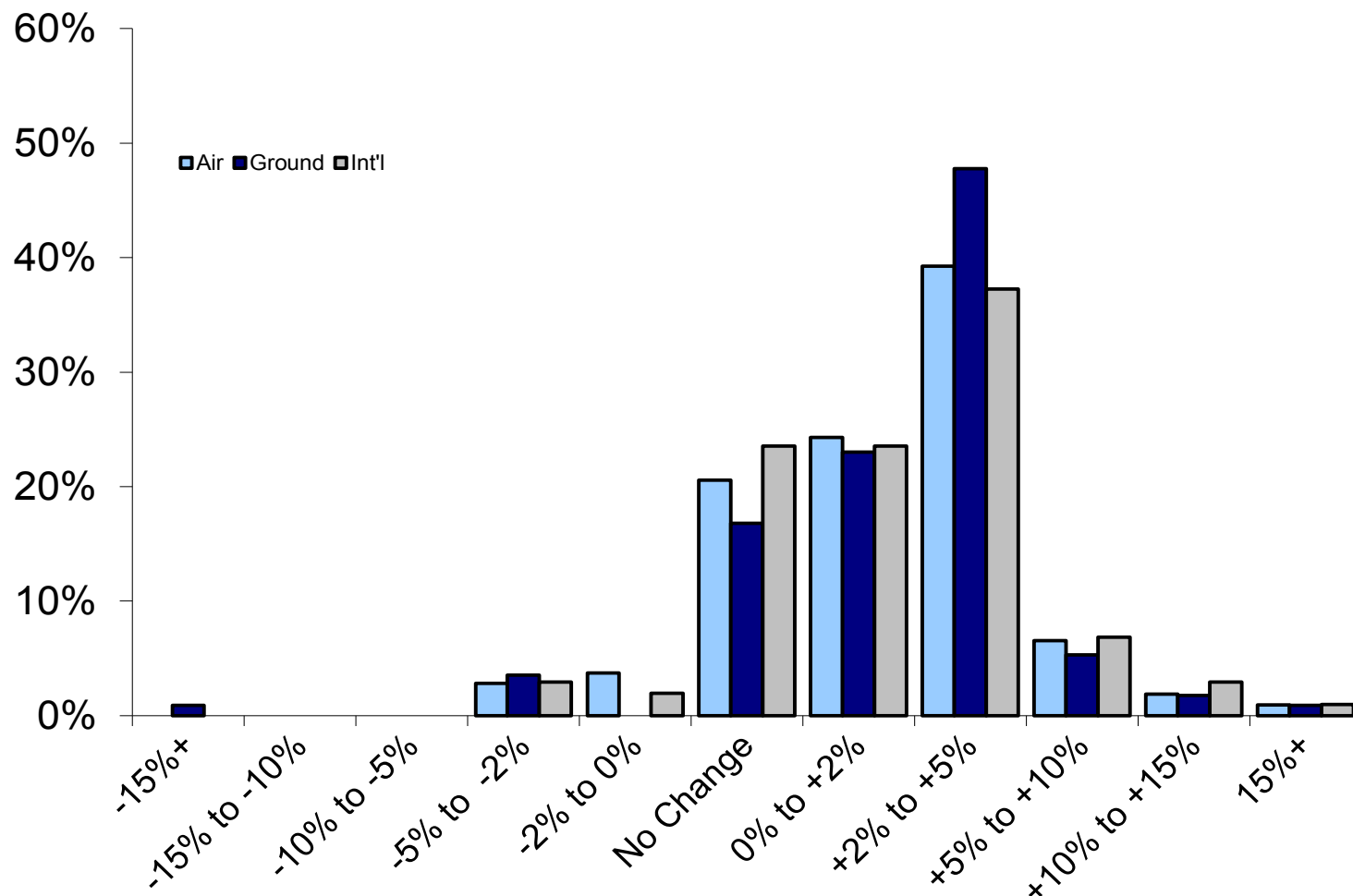
Average Base Rate Expectations "Over the Next 6 Months" vs. Last Year



Source: Morgan Stanley Parcel Survey

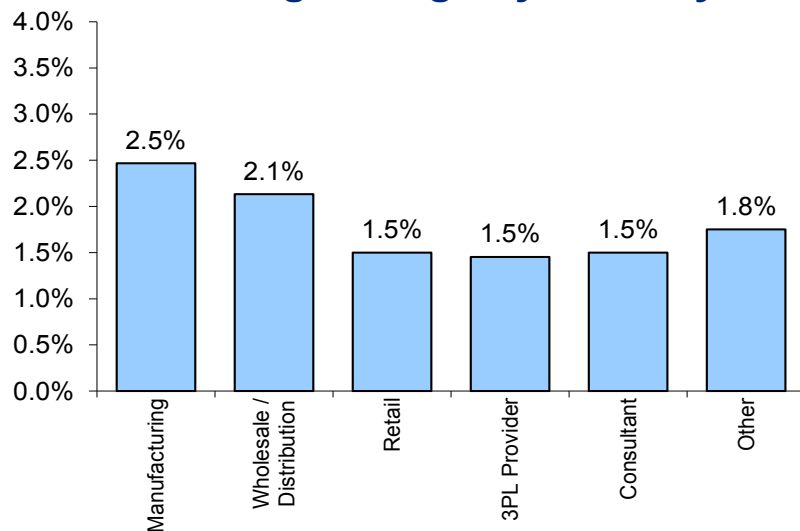
Base Rate Response Skew – All Shippers

Base Rate Growth Expectations “Over the Next 6 Months” vs. Same Period Last Year

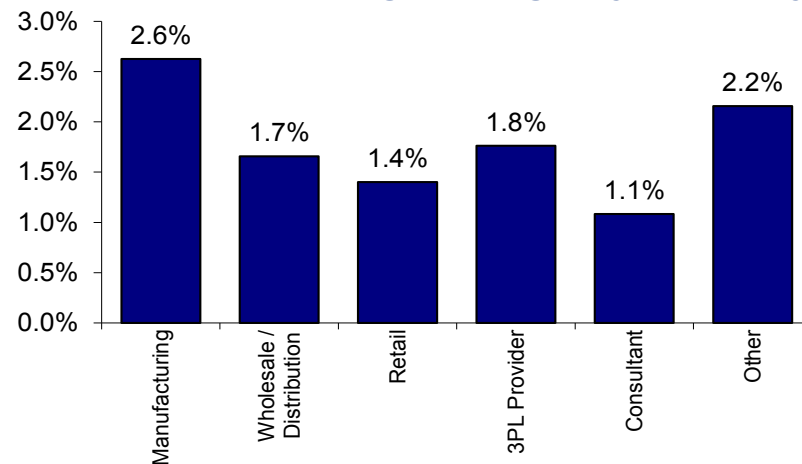


Pricing Outlook by Industry

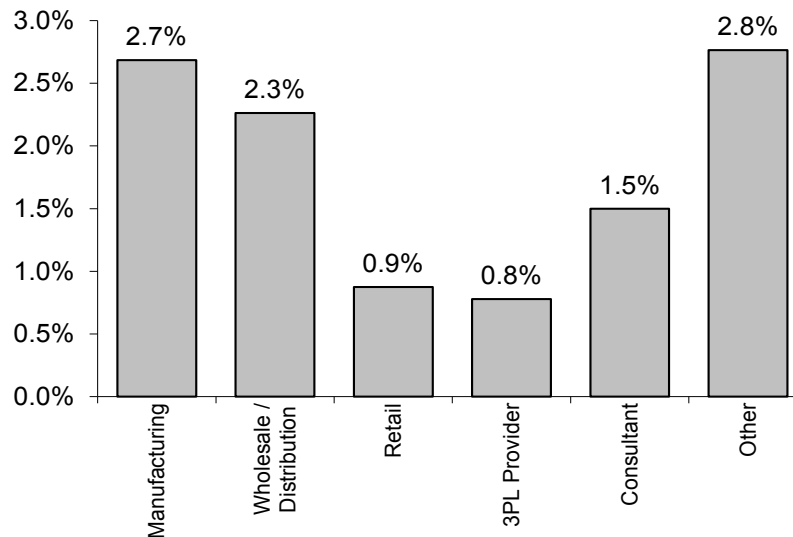
Air - Avg Change by Industry



Ground - Avg Change by Industry

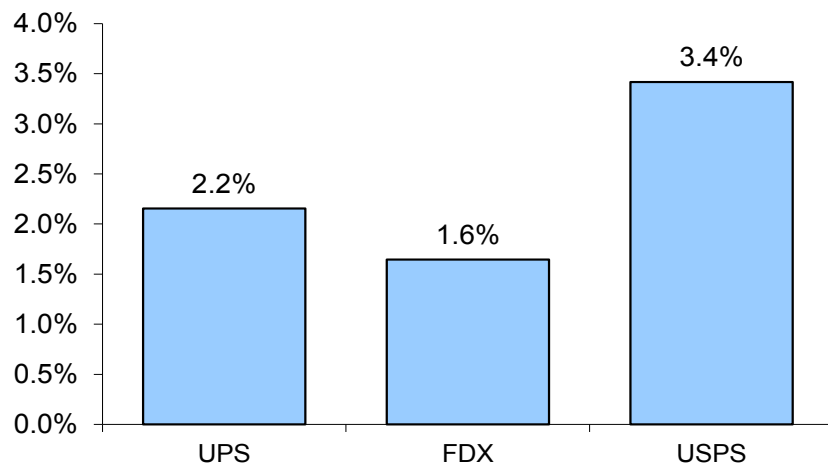


International - Avg Change by Industry



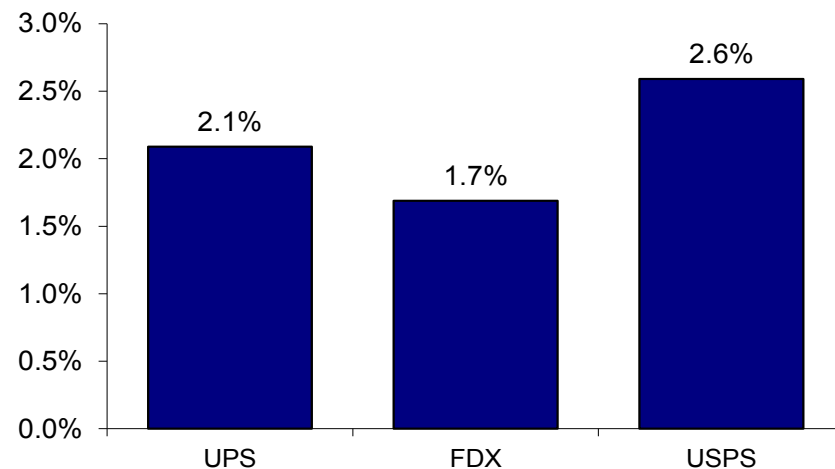
Pricing Outlook by Listed Primary Carrier

Air - Avg Change by Carrier



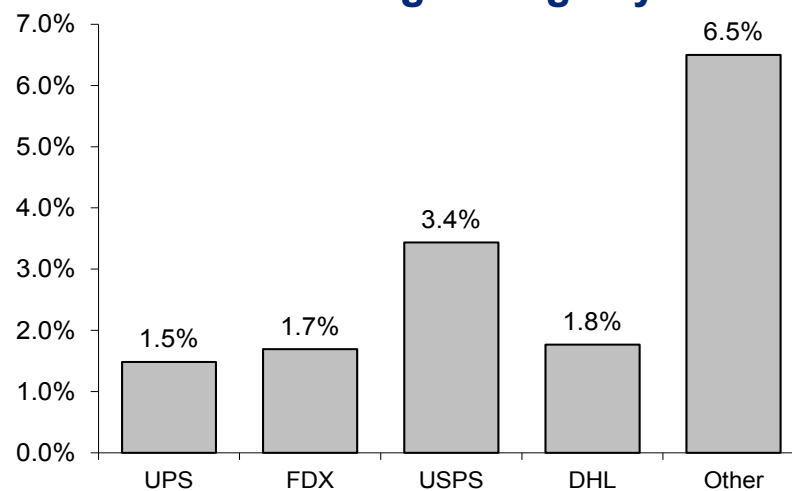
Primary Carrier

Ground - Avg Change by Carrier



Primary Carrier

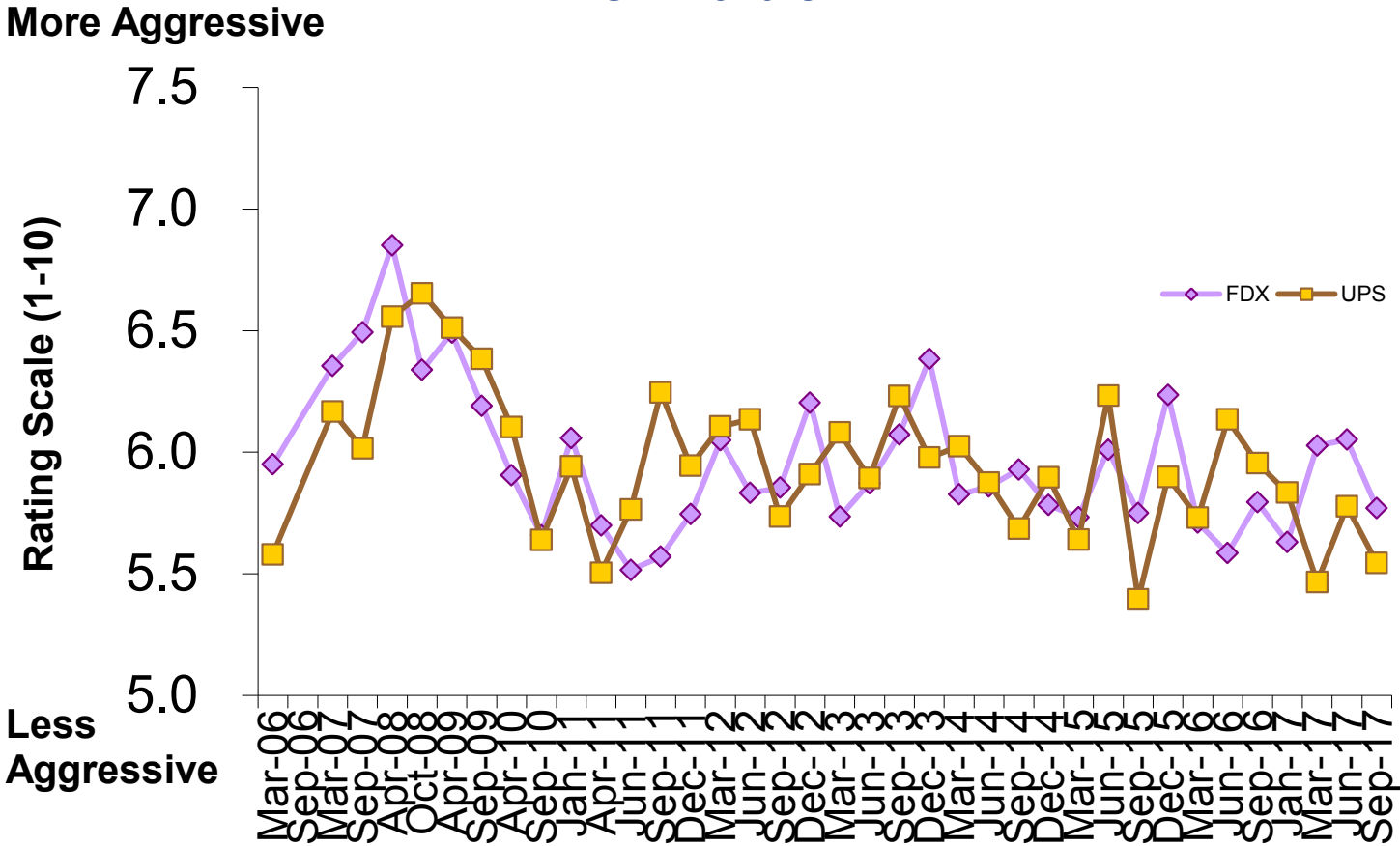
International - Avg Change by Carrier



Primary Carrier

Level of Aggressiveness in Trying to Win New Business

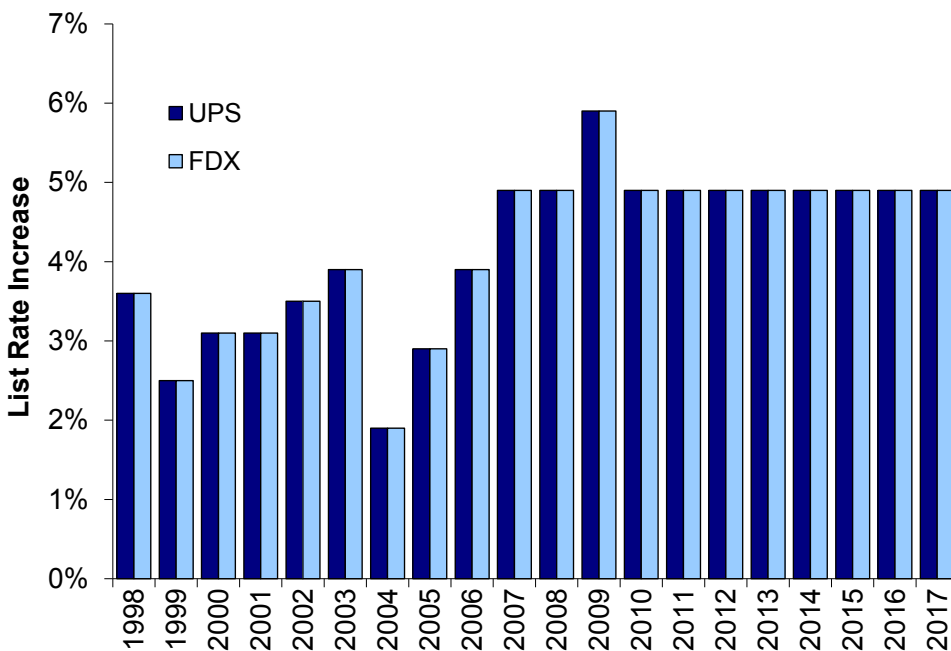
Parcel Shippers' Rankings of Carriers' "Aggressiveness" in Trying to Win Business Over Past Six Months



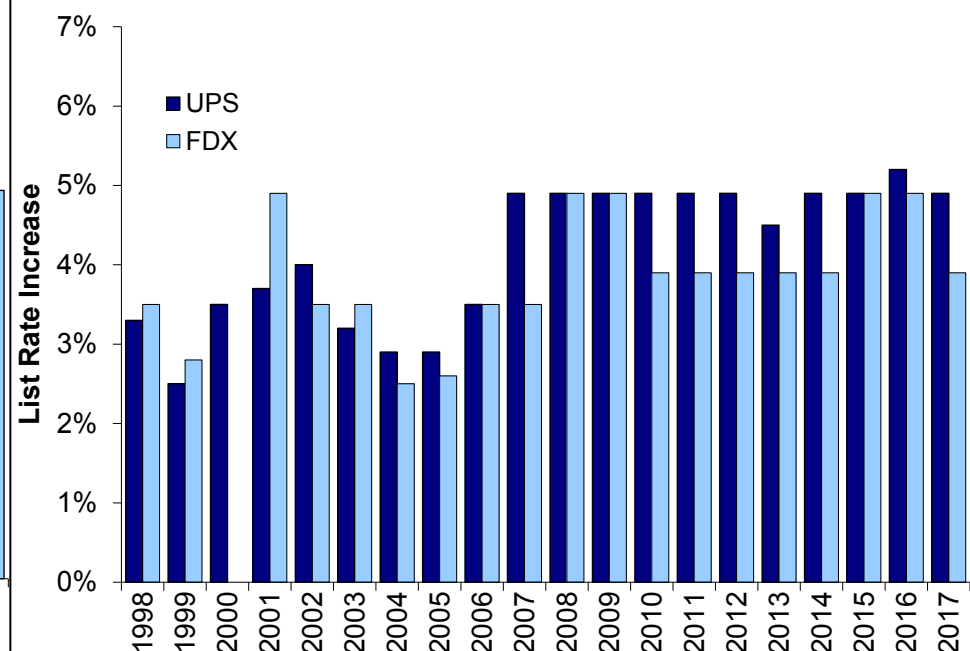
Source: Morgan Stanley Parcel Survey

List Rate Increases

Ground List Rate Increase

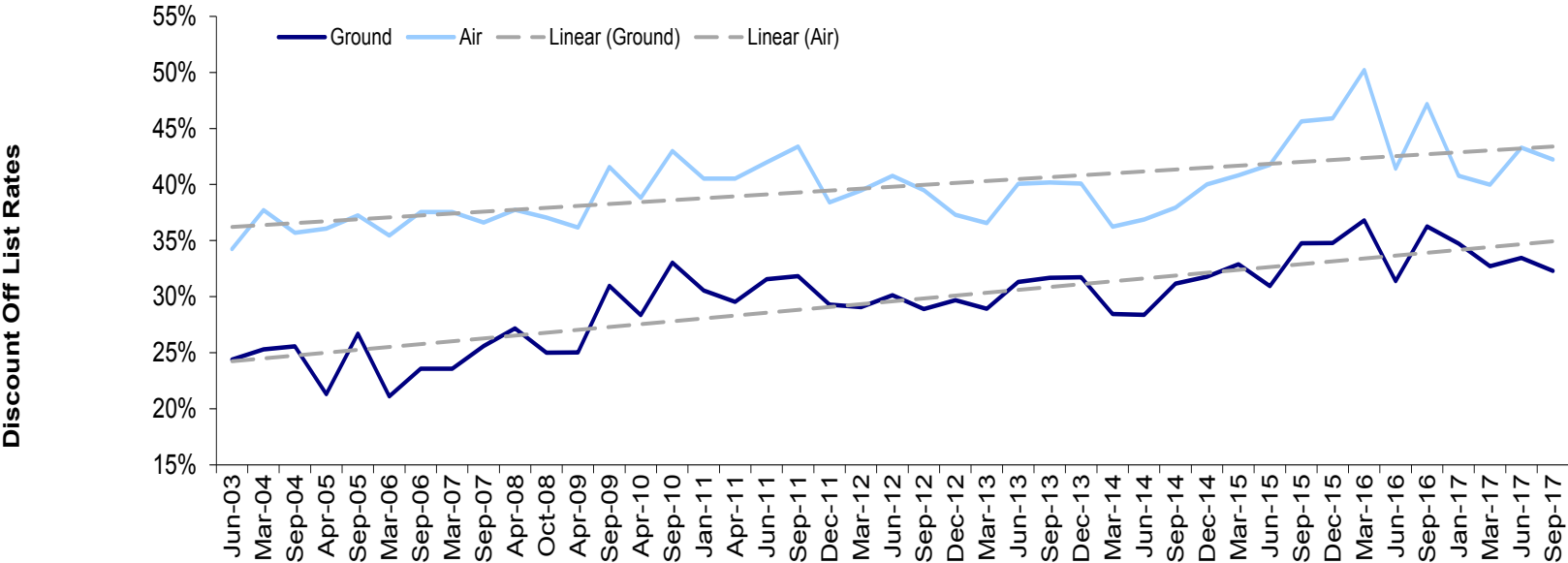


Air List Rate Increase



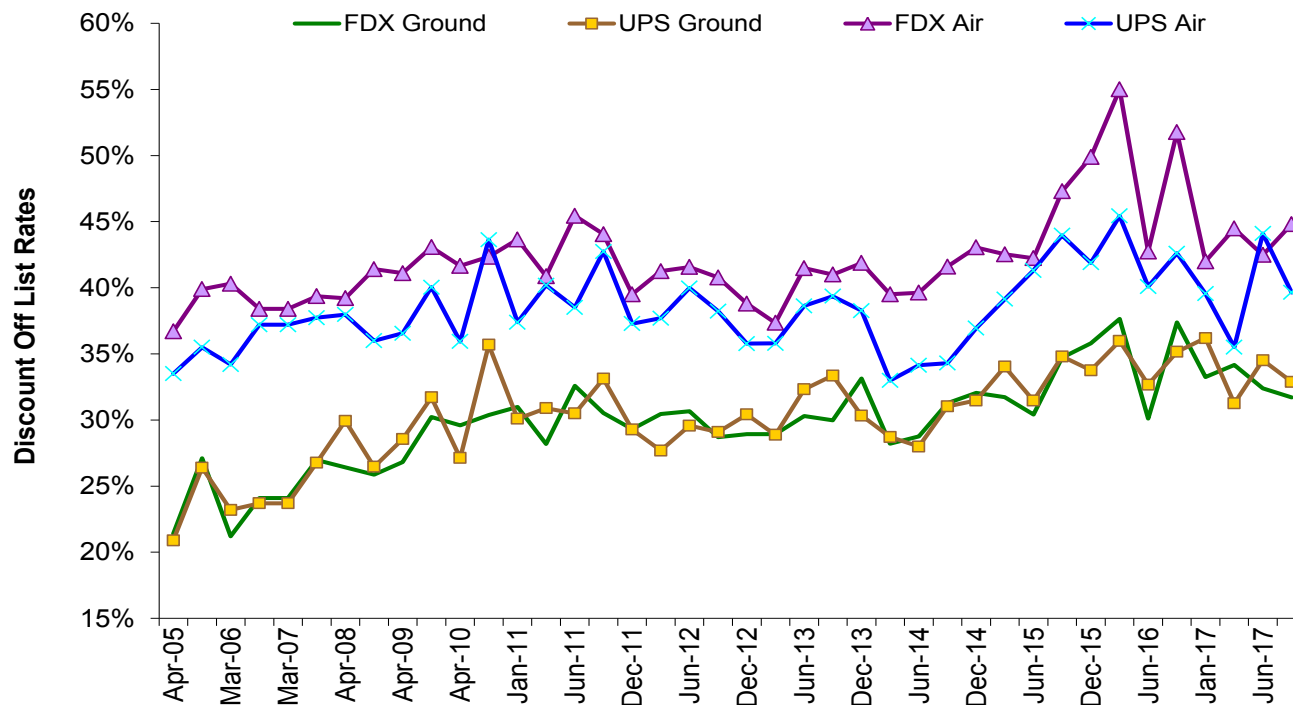
Percentage Discount Off of List Rates

Average List Rate Discount



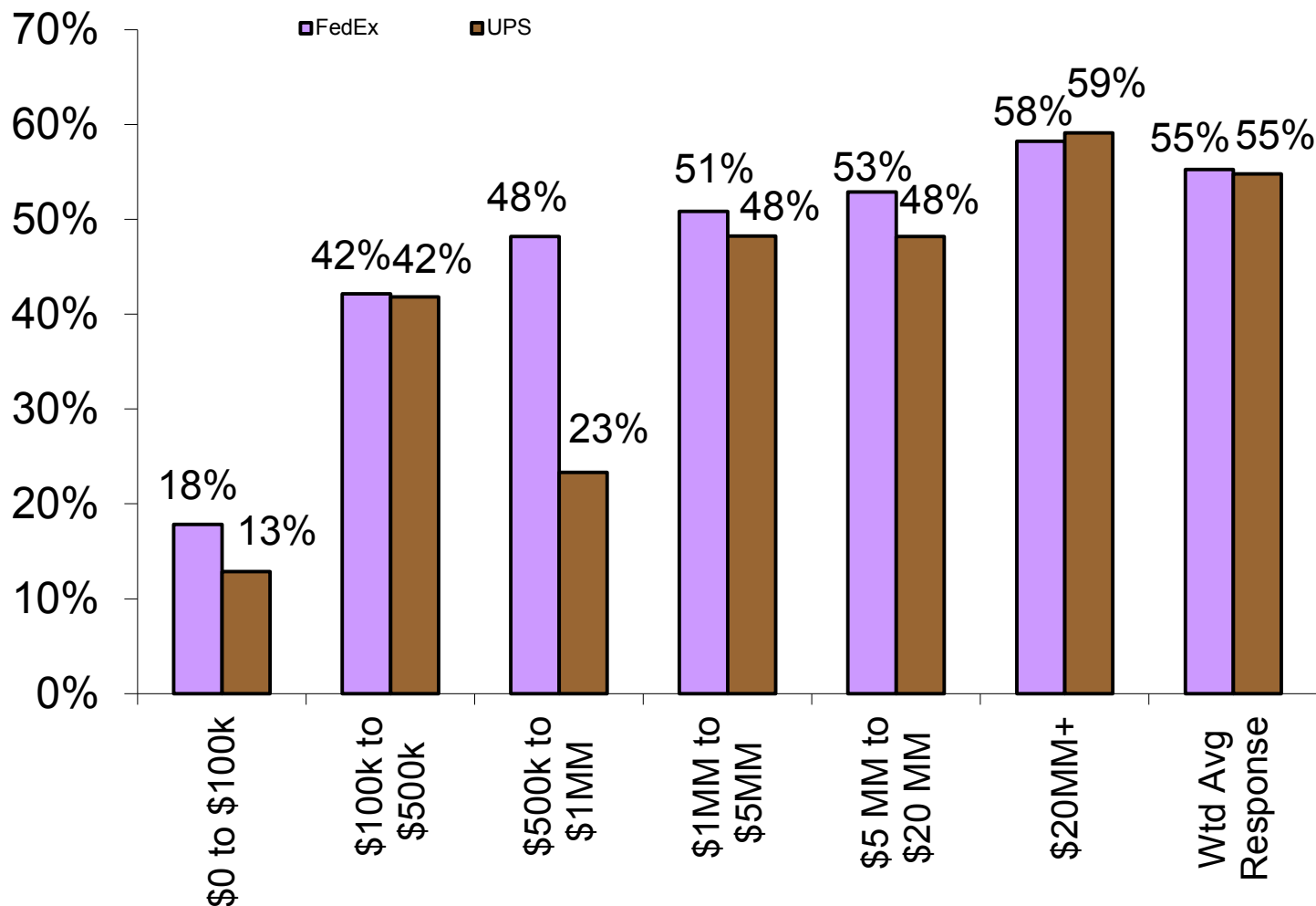
Percentage Discount Off of List Rates

Average Discount by Carrier and Product



Air List Rate Discount by Spend

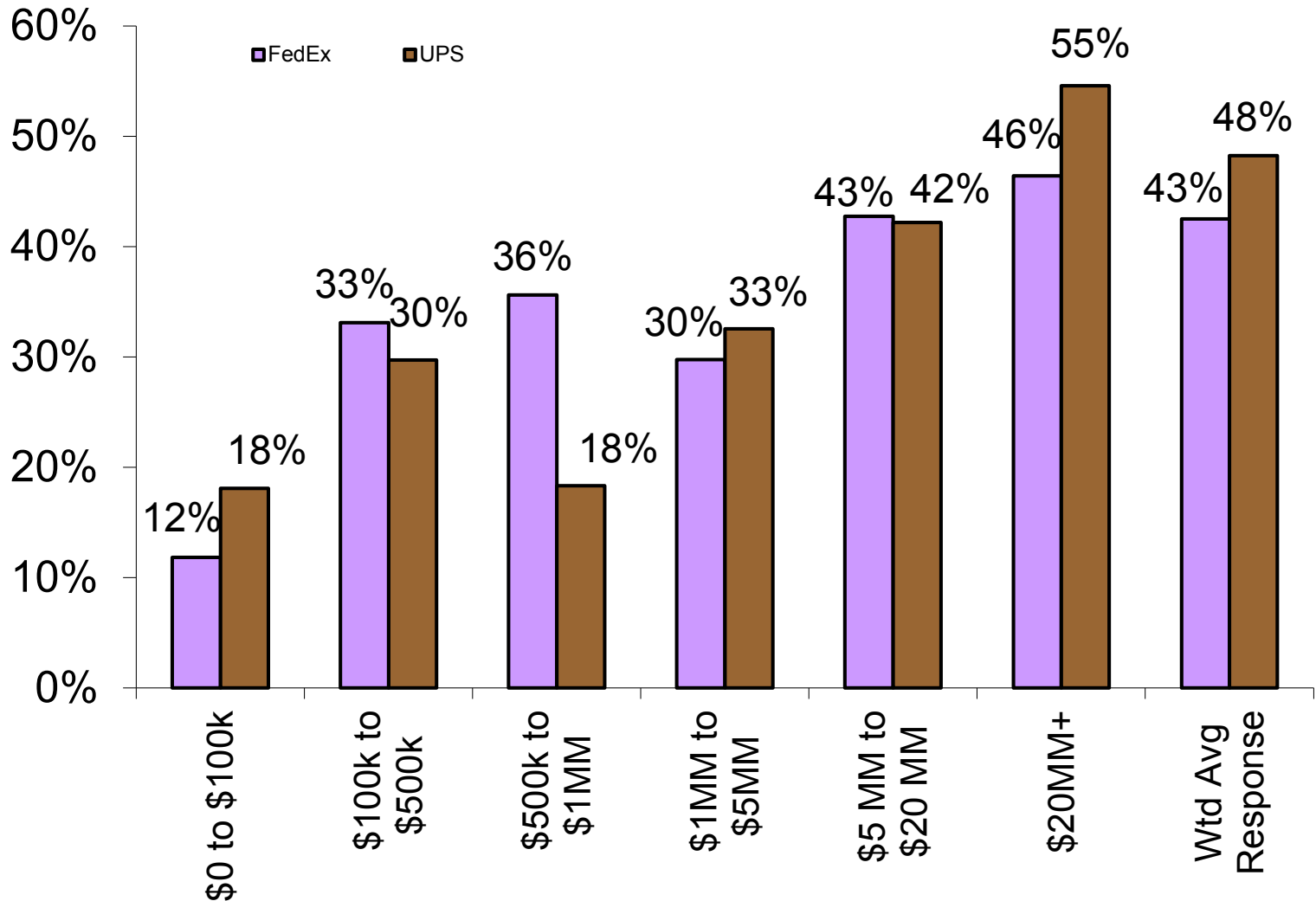
What is Your % Discount Off of Listed Parcel Rates for Air Express?



Source: Morgan Stanley Parcel Survey

Ground List Rate Discount by Spend

What is Your % Discount Off of Listed Parcel Rates for Ground?



Source: Morgan Stanley Parcel Survey

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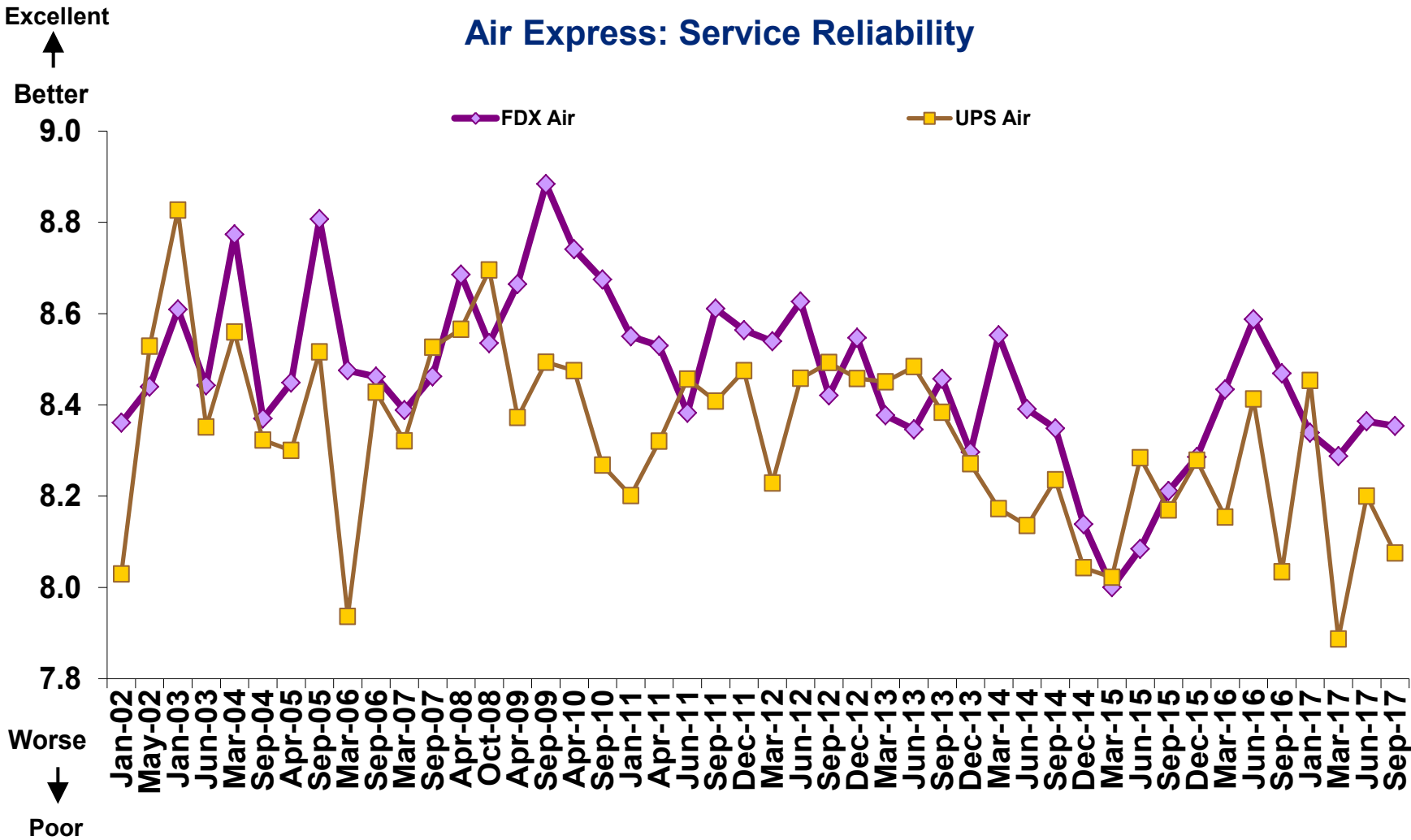
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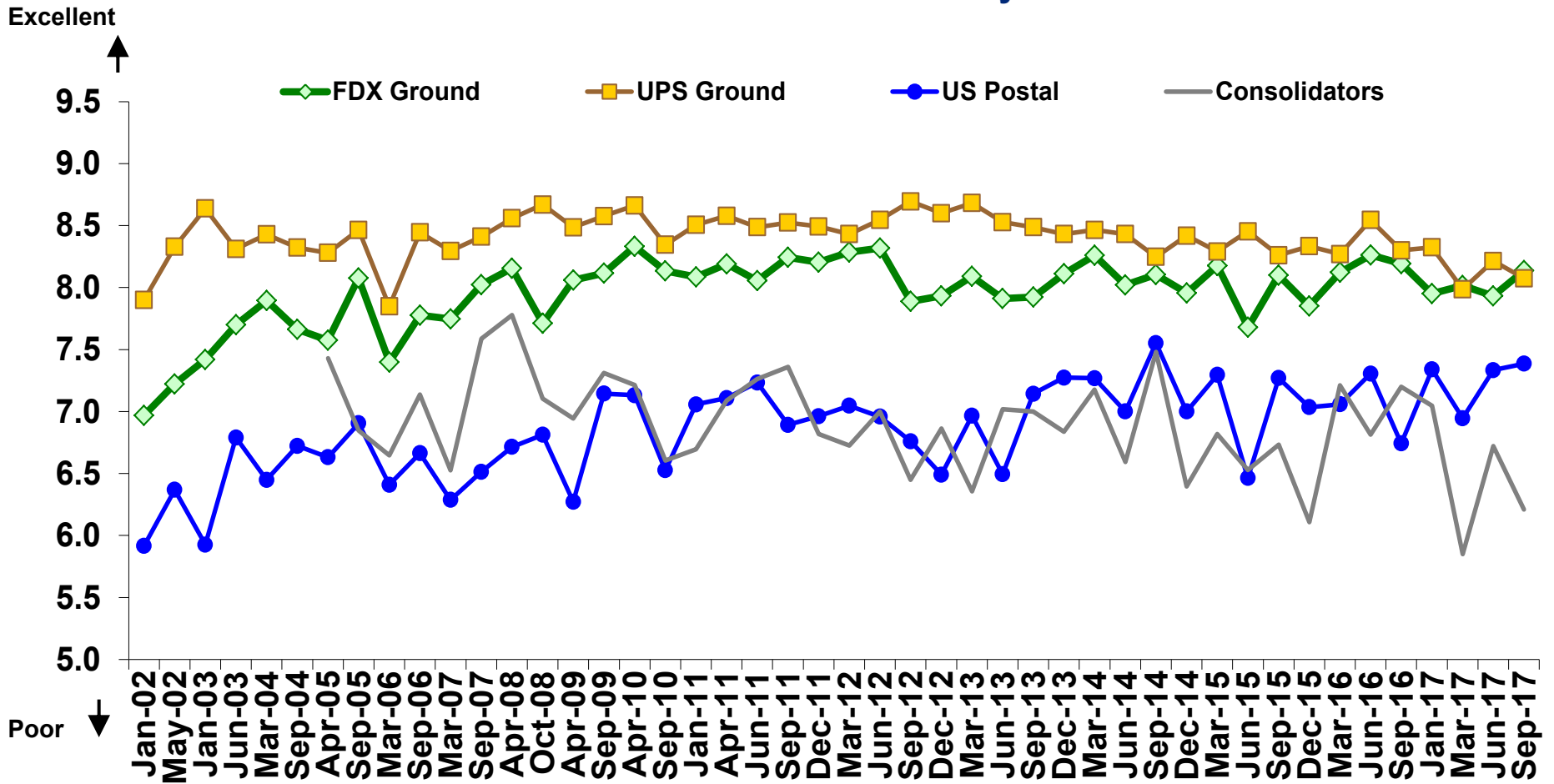
Service Reliability Rankings: Historical Trends



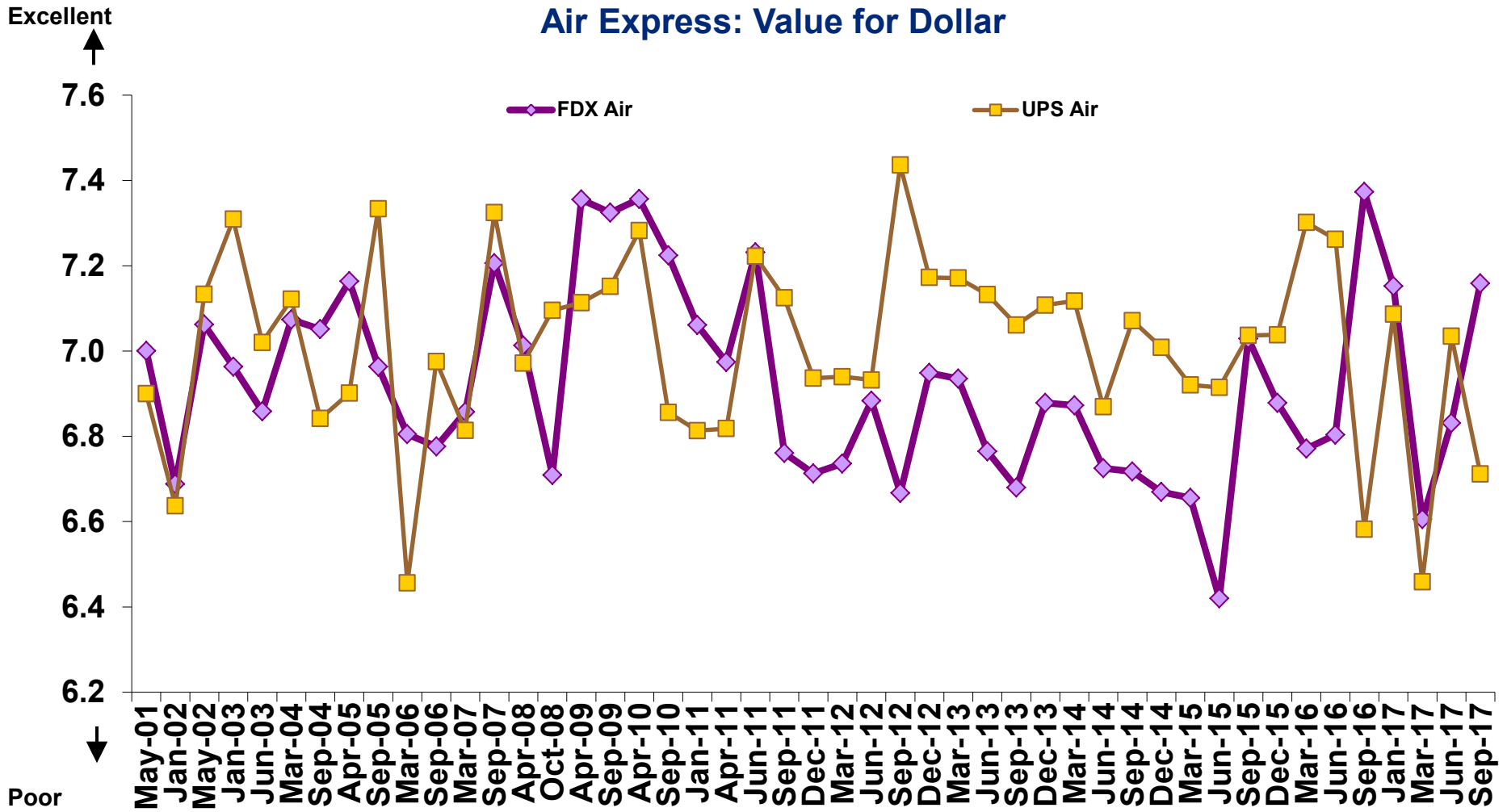
Source: Morgan Stanley Parcel Survey

Service Reliability Rankings: Historical Trends

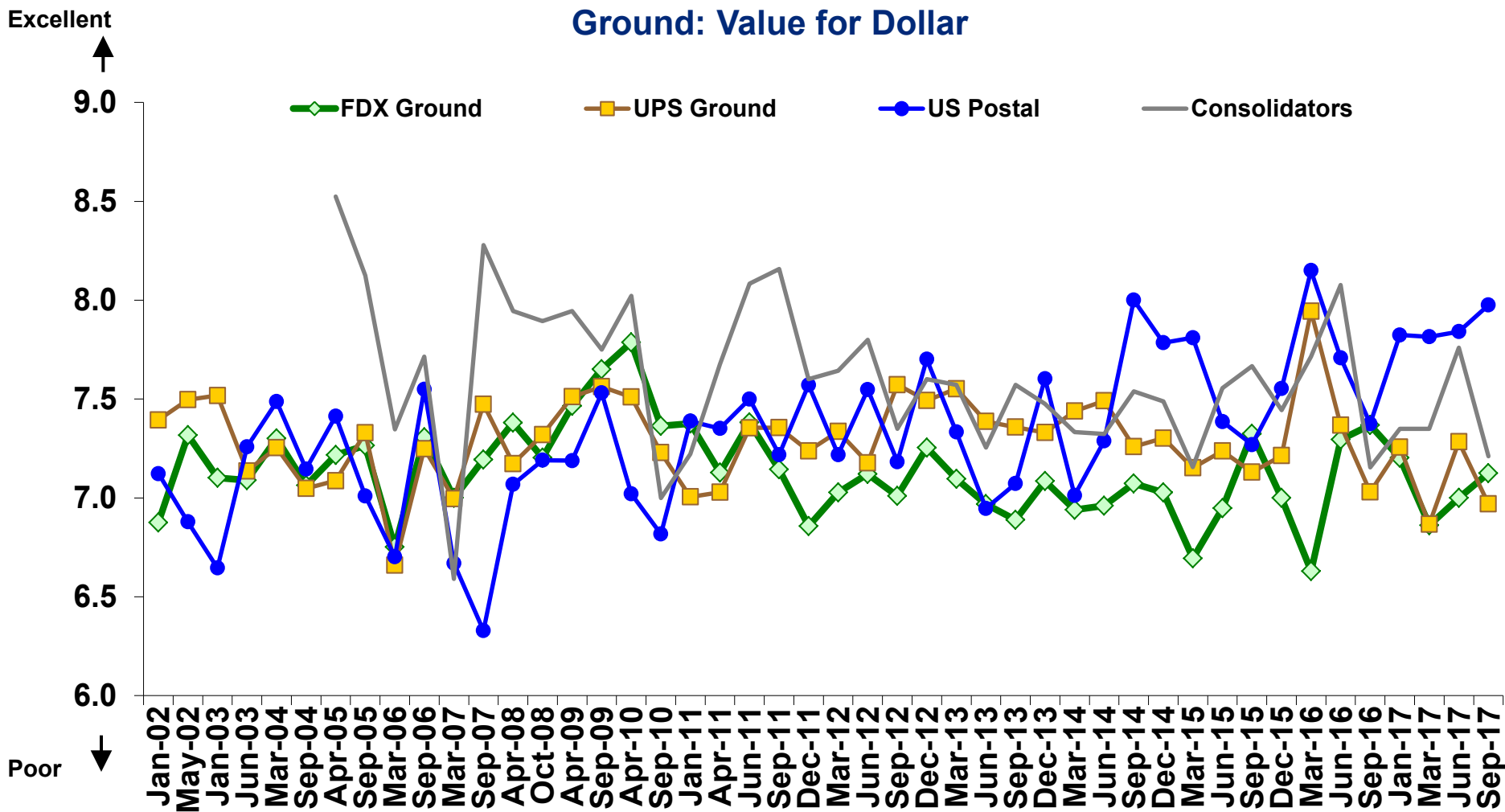
Ground: Service Reliability



Value for Dollar Rankings: Historical Trends



Value for Dollar Rankings: Historical Trends



Source: Morgan Stanley Parcel Survey

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•(as of September 30, 2017)

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Stock Rating Category	Coverage Universe		Investment Banking Clients (IBC)		
	Count	% of Total	Count	% of Total IBC	% of Rating Category
Overweight/Buy	1162	36%	304	40%	26%
Equal-weight/Hold	1420	44%	363	48%	26%
Not-Rated/Hold	58	2%	6	1%	10%
Underweight/Sell	612	19%	91	12%	15%
Total	3,252		764		

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Ravi Shanker		
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C.H. Robinson Worldwide Inc. (CHRW.O)	U (06/09/2013)	\$76.05
Canadian National Railway Co. (CNR.TO)	O (02/23/2016)	C\$101.39
Canadian Pacific Railway Ltd. (CP.TO)	O (06/03/2016)	C\$207.78
CSX Corporation (CSX.O)	U (10/02/2017)	\$52.35
Echo Global Logistics Inc (ECHO.O)	E (08/07/2017)	\$19.40
Expeditors International of Washington I (EXPD.O)	E (02/25/2015)	\$60.27
FedEx Corporation (FDX.N)	E (06/20/2013)	\$221.61
Genesee & Wyoming Inc. (GWR.N)	E (02/23/2016)	\$73.32
Heartland Express Inc. (HTLD.O)	U (05/06/2011)	\$24.00
Hub Group Inc (HUBG.O)	E (07/16/2012)	\$40.95
J.B. Hunt Transport Services Inc. (JBHT.O)	E (05/06/2011)	\$106.87
Kansas City Southern (KSU.N)	E (02/23/2016)	\$107.41
Knight-Swift Transportation Holdings Inc (KNX.N)		\$40.00
Landstar System Inc (LSTR.O)	U (02/23/2016)	\$99.85
Norfolk Southern Corp. (NSC.N)	U (06/03/2016)	\$131.12
Old Dominion Freight Line Inc (ODFL.O)	O (10/06/2011)	\$107.99
Saia, Inc. (SAIA.O)	U (02/23/2016)	\$59.75
Schneider National Inc. (SNDN.N)	O (05/01/2017)	\$24.80
Union Pacific Corp. (UNP.N)	E (10/02/2017)	\$114.02
United Parcel Service (UPS.N)	U (02/23/2016)	\$118.20
Werner Enterprises (WERN.O)	O (02/23/2016)	\$35.60
XPO Logistics, Inc. (XPO.N)	O (11/16/2015)	\$66.22

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