Morgan Stanley

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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General Freight and Macro Highlights

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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%

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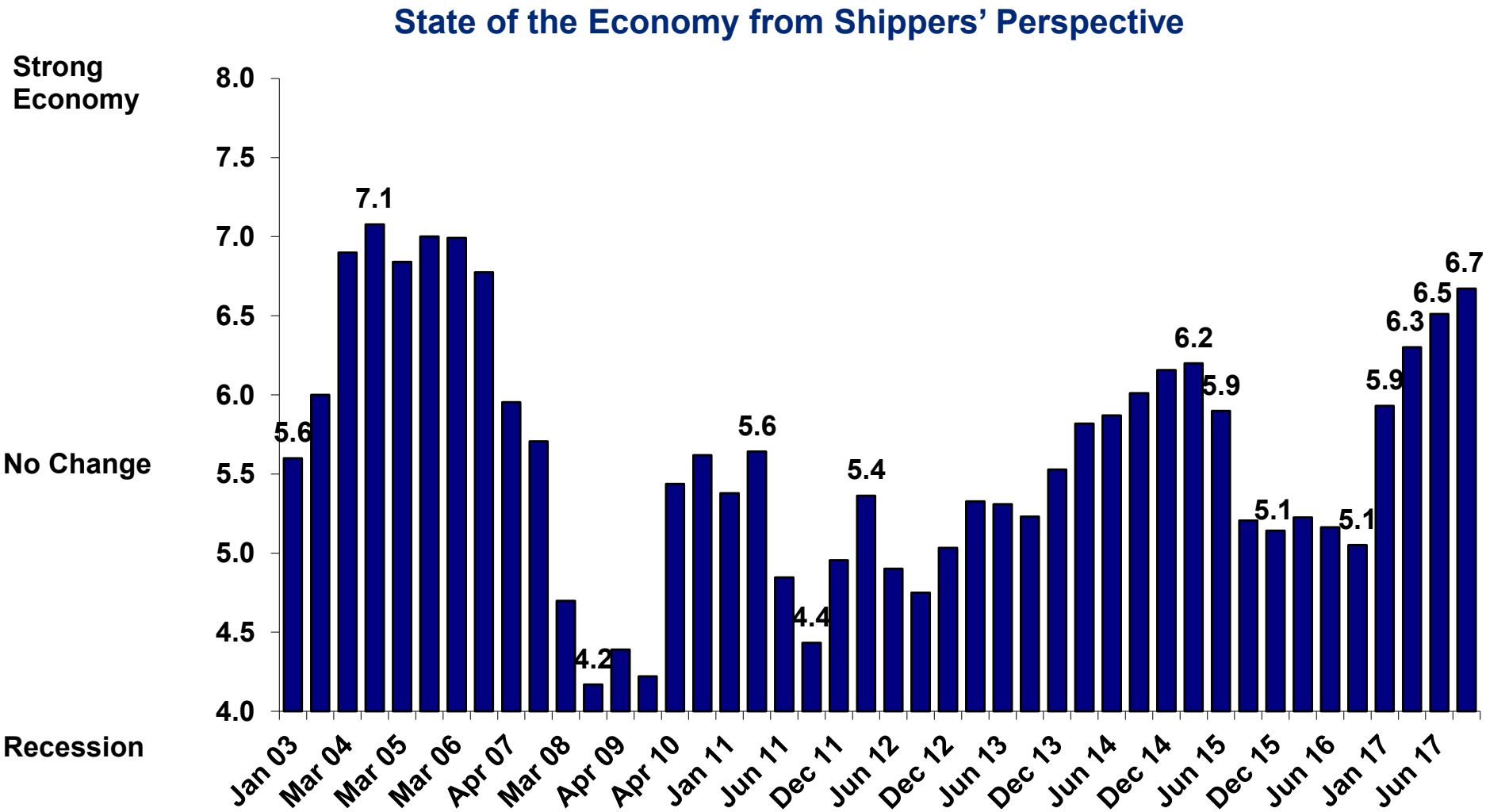
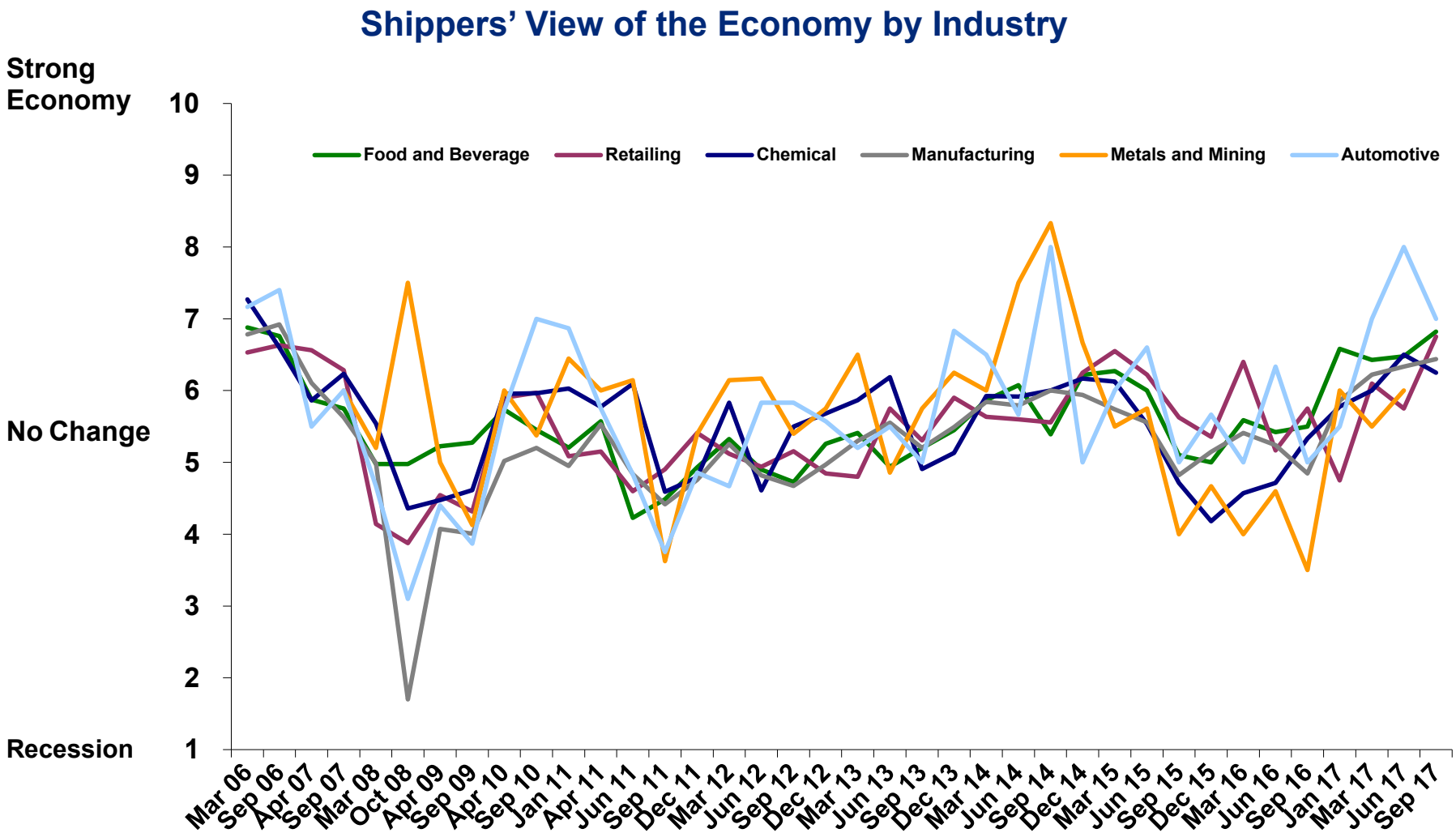
1. Shippers' Economic Outlook Continues to Improve Though Still Shy of 2004-07 Levels



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

Source: Morgan Stanley Freight Pulse Surveys

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

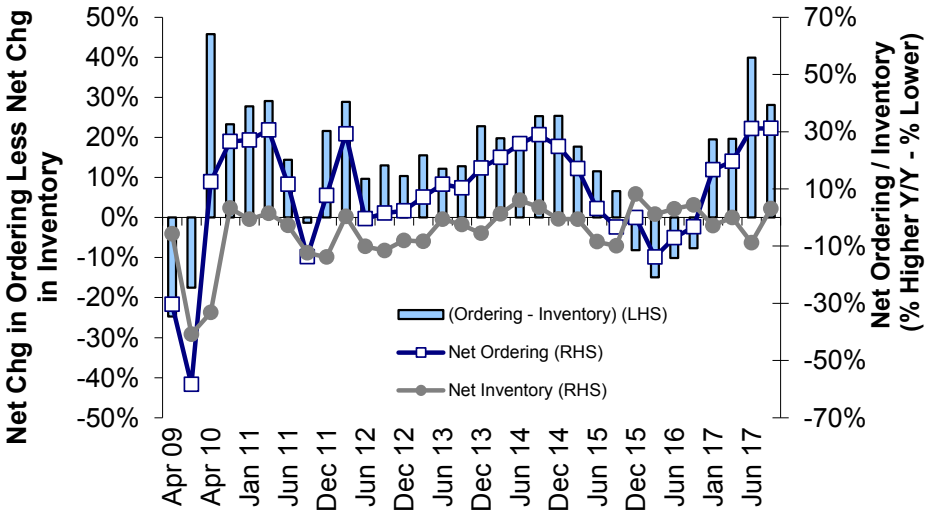


Ravi Shanker, (212) 761-6350, Ravi.Shanker@morganstanley.com

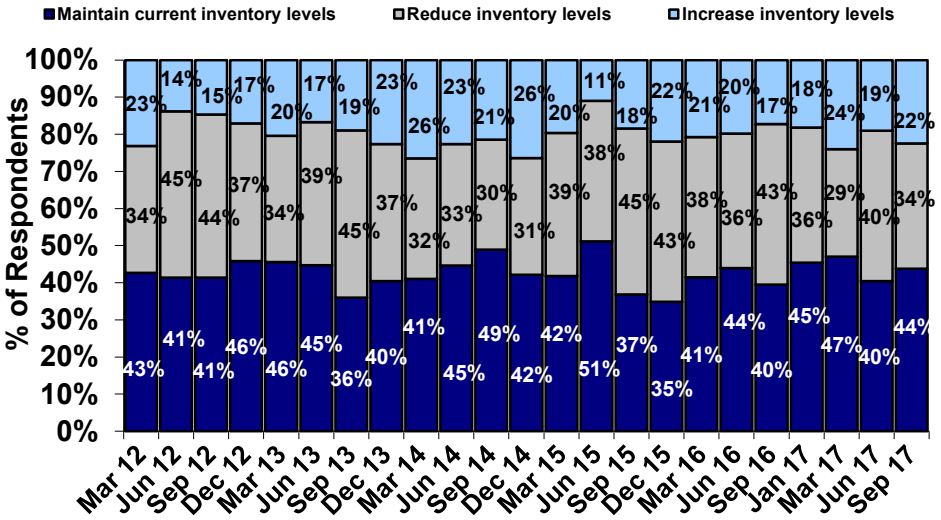
Source: Morgan Stanley Freight Pulse Surveys; Note: We did not have any Metals and Mining Respondents in FP47

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

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



Shippers' Inventory Plans



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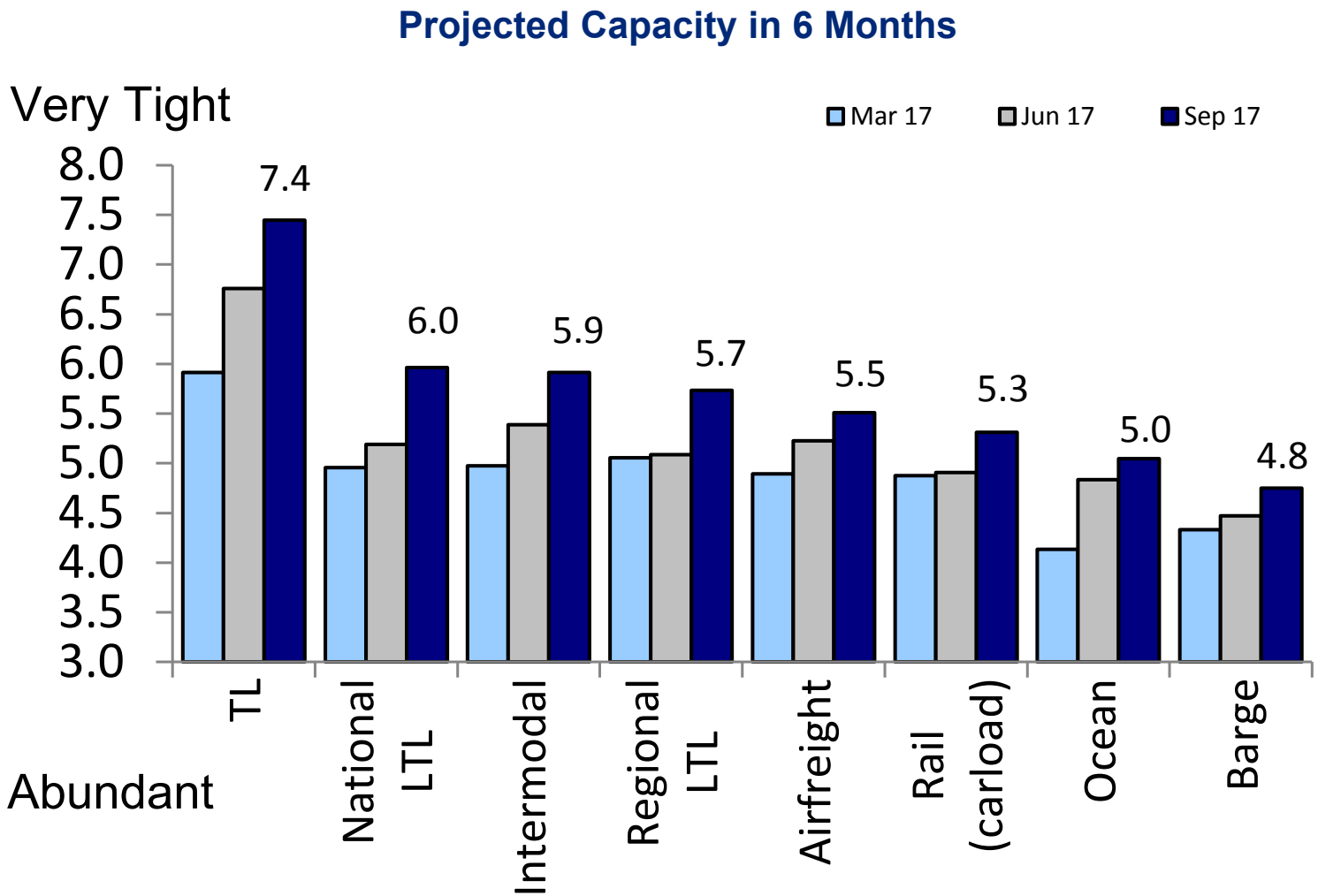
Source: Morgan Stanley Freight Pulse Surveys

4. Respondents Expect Tighter Capacity Across All Modes

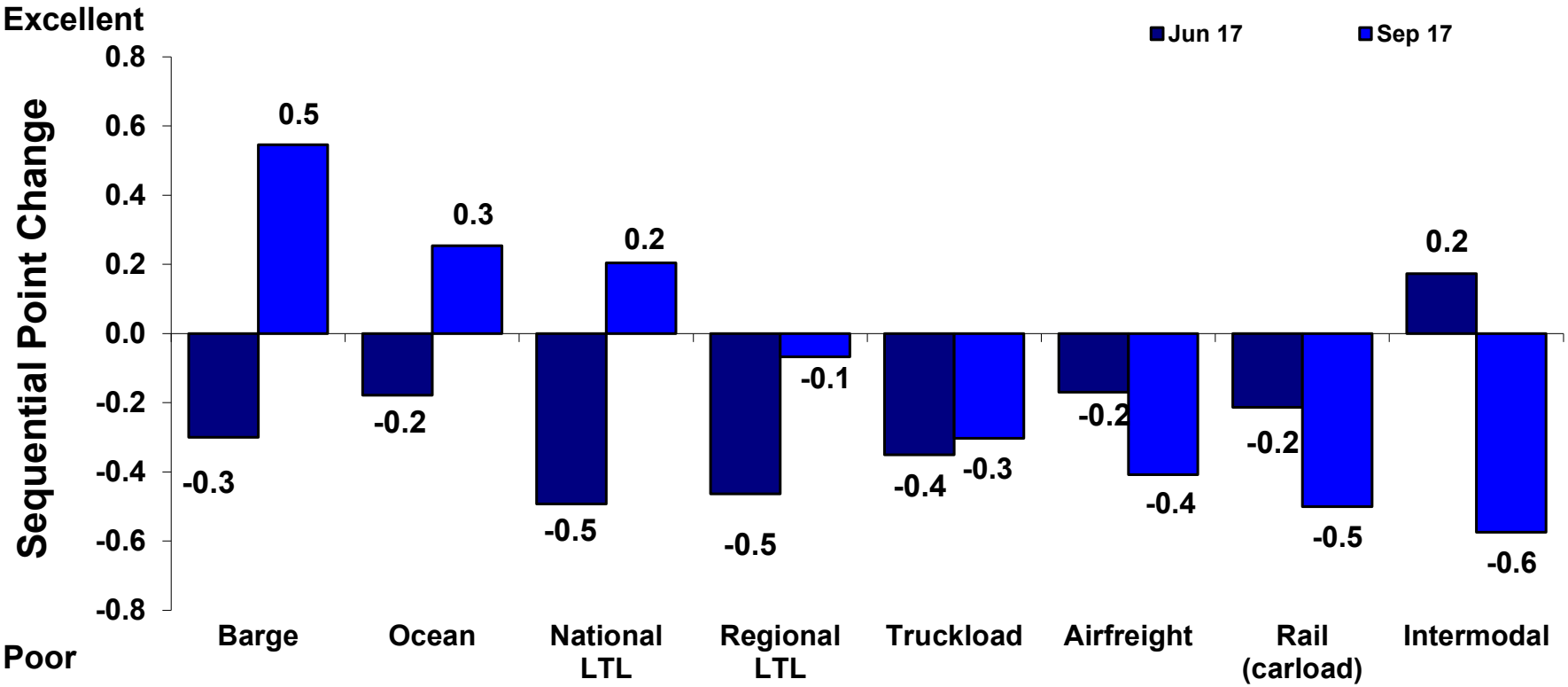


Ravi Shanker, (212) 761-6350, Ravi.Shanker@morganstanley.com

Source: Morgan Stanley Freight Pulse Surveys

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?



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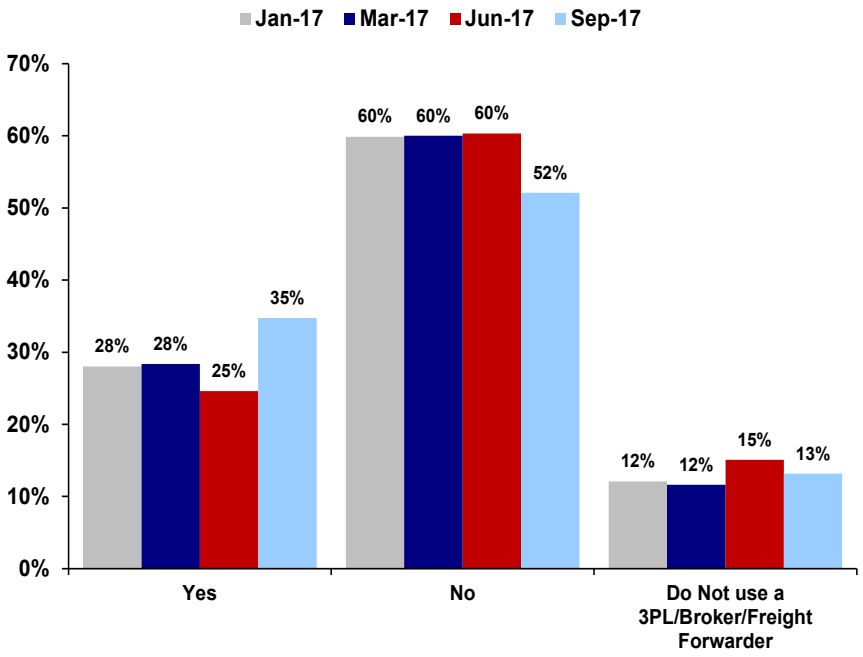
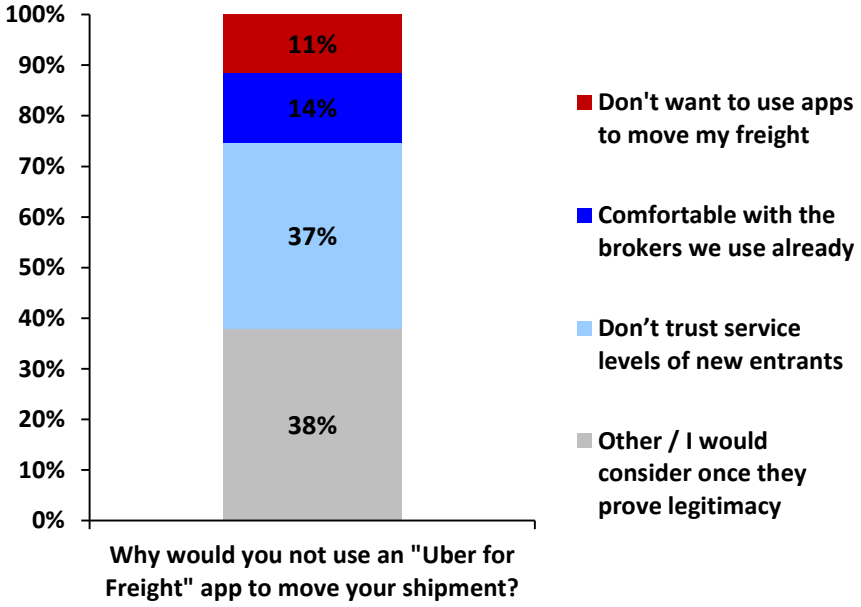
Source: Morgan Stanley Freight Pulse Surveys

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?



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Source: Morgan Stanley Freight Pulse Surveys

Railroad Highlights

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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

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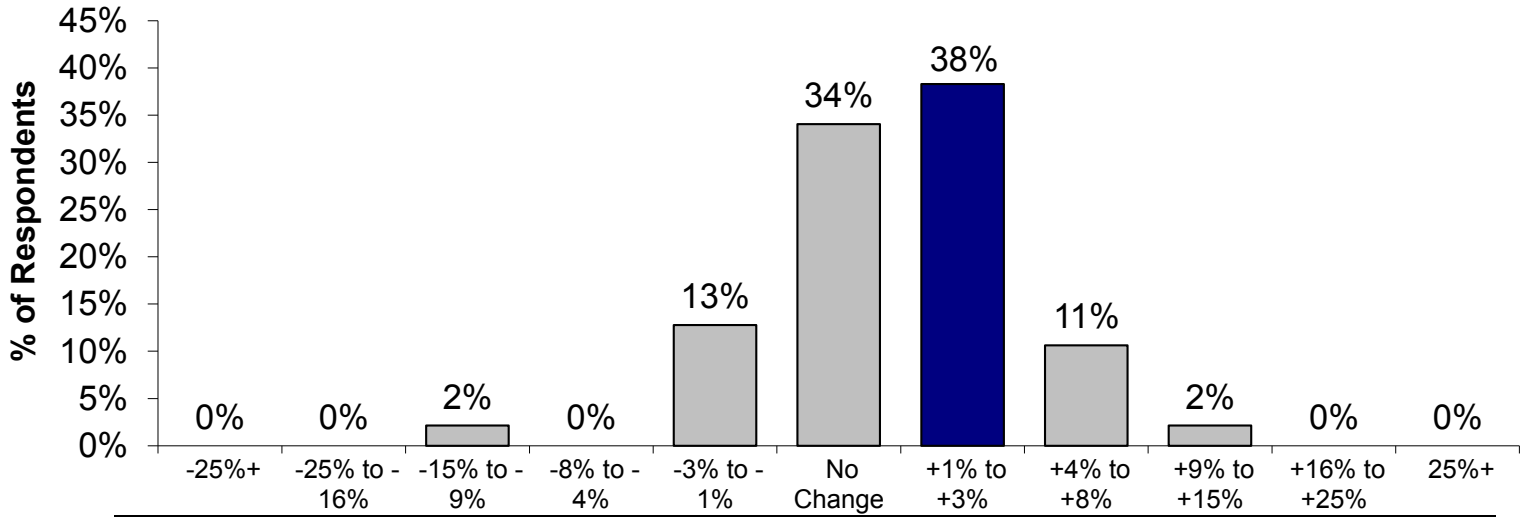
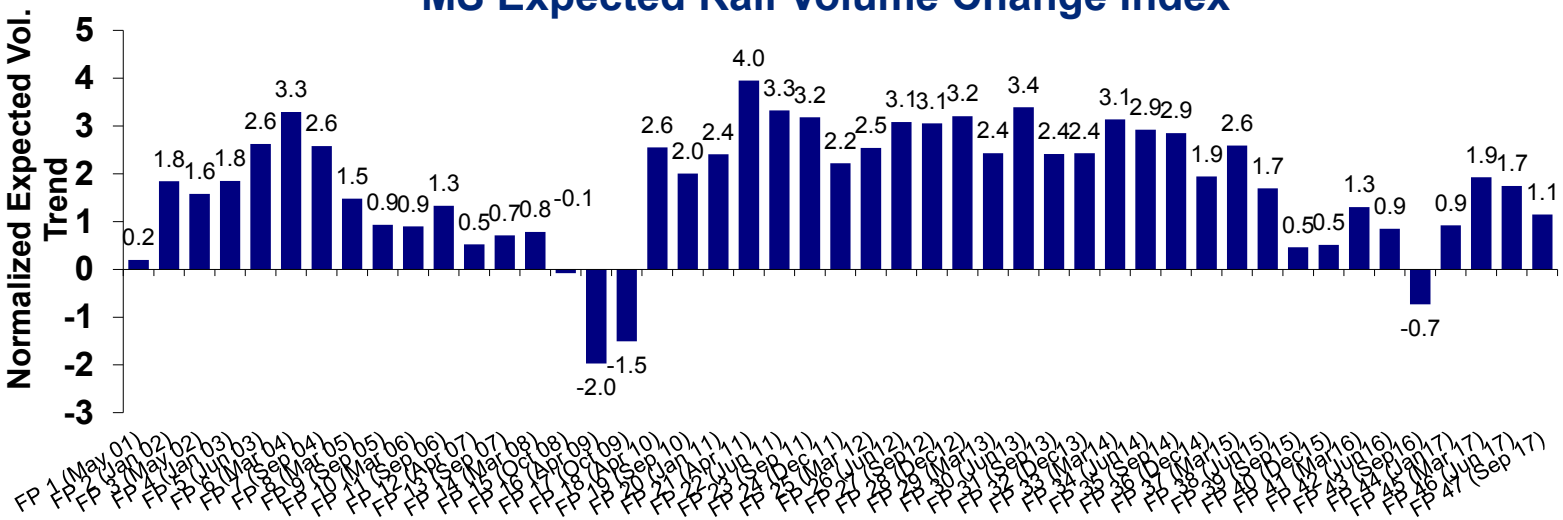
1. +1-3% YoY Expected Change in Rail Volume; Volume Index Continues to Decline

YoY Volume Growth Expectations for Next 6 Mo. by Range



MS Expected Rail Volume Change Index

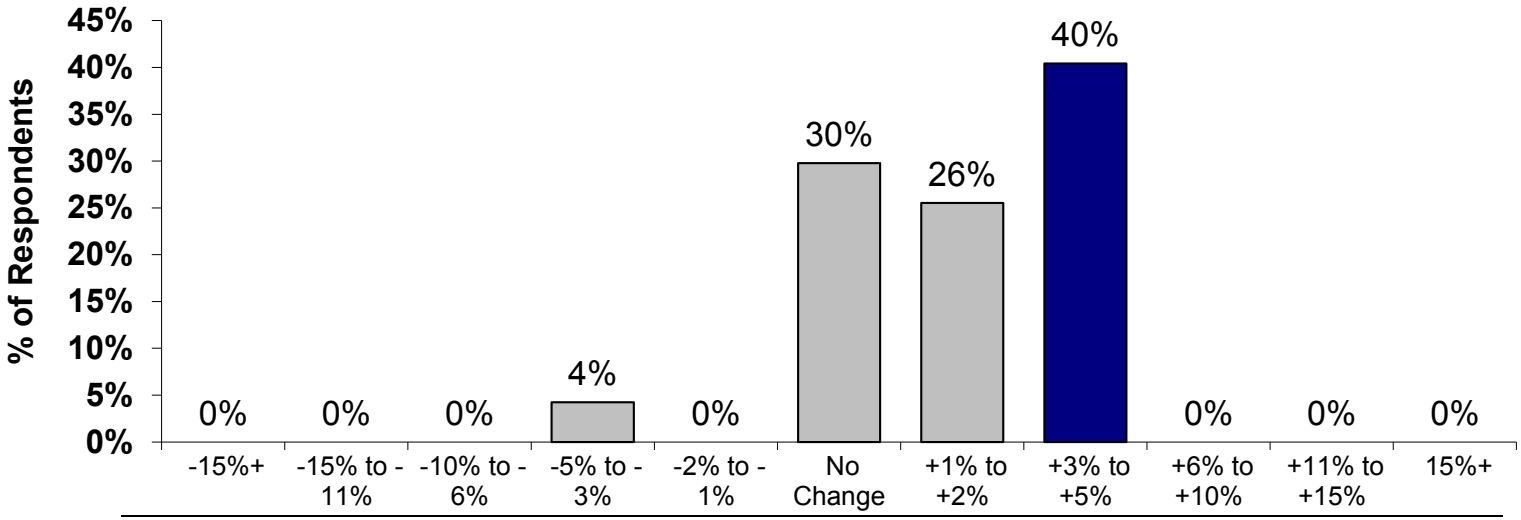


Ravi Shanker, (212) 761-6350, Ravi.Shanker@morganstanley.com

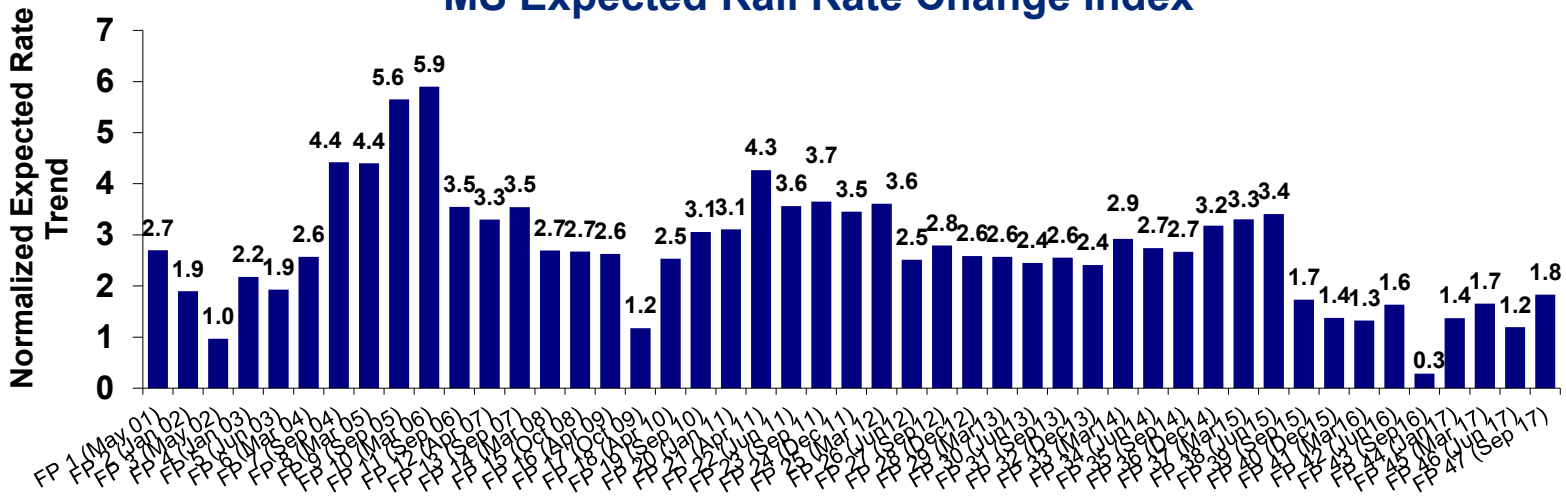
Source: Morgan Stanley Freight Pulse Surveys; Note: Mix of rail respondents is skewed toward manufacturing & intermodal and not coal, despite the fact that coal is key to overall rail industry trends

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



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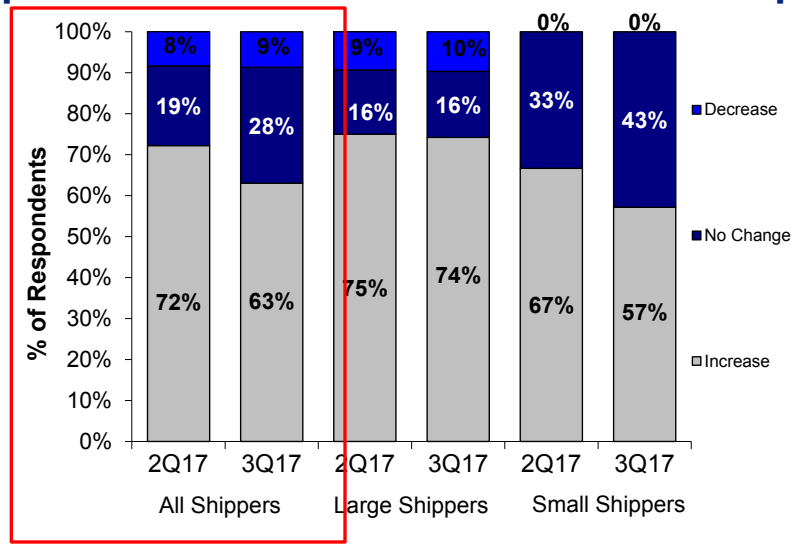
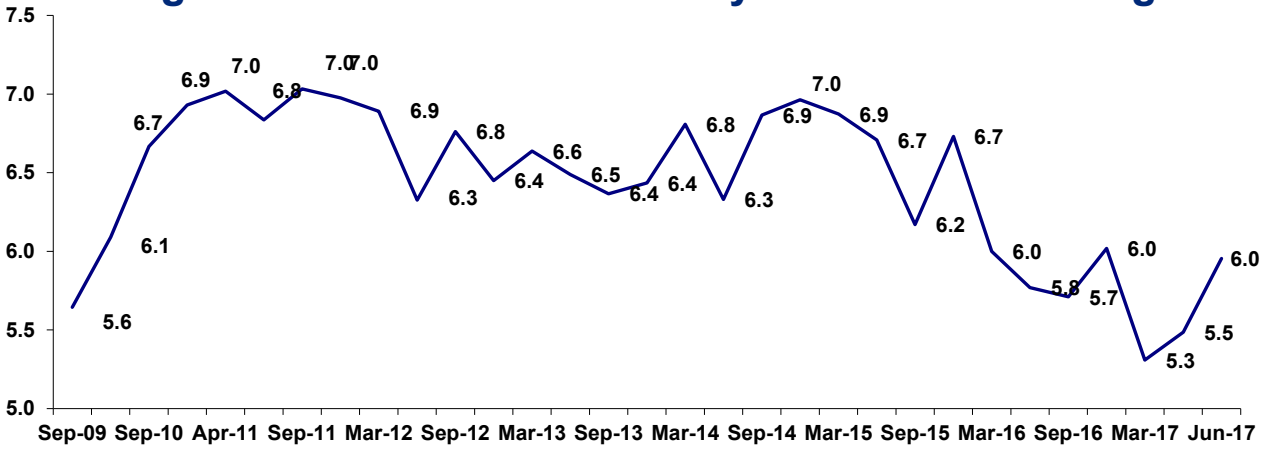
Source: Morgan Stanley Freight Pulse Surveys; Note: Mix of rail respondents is skewed toward manufacturing & intermodal and not coal, despite the fact that coal is key to overall rail industry trends

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



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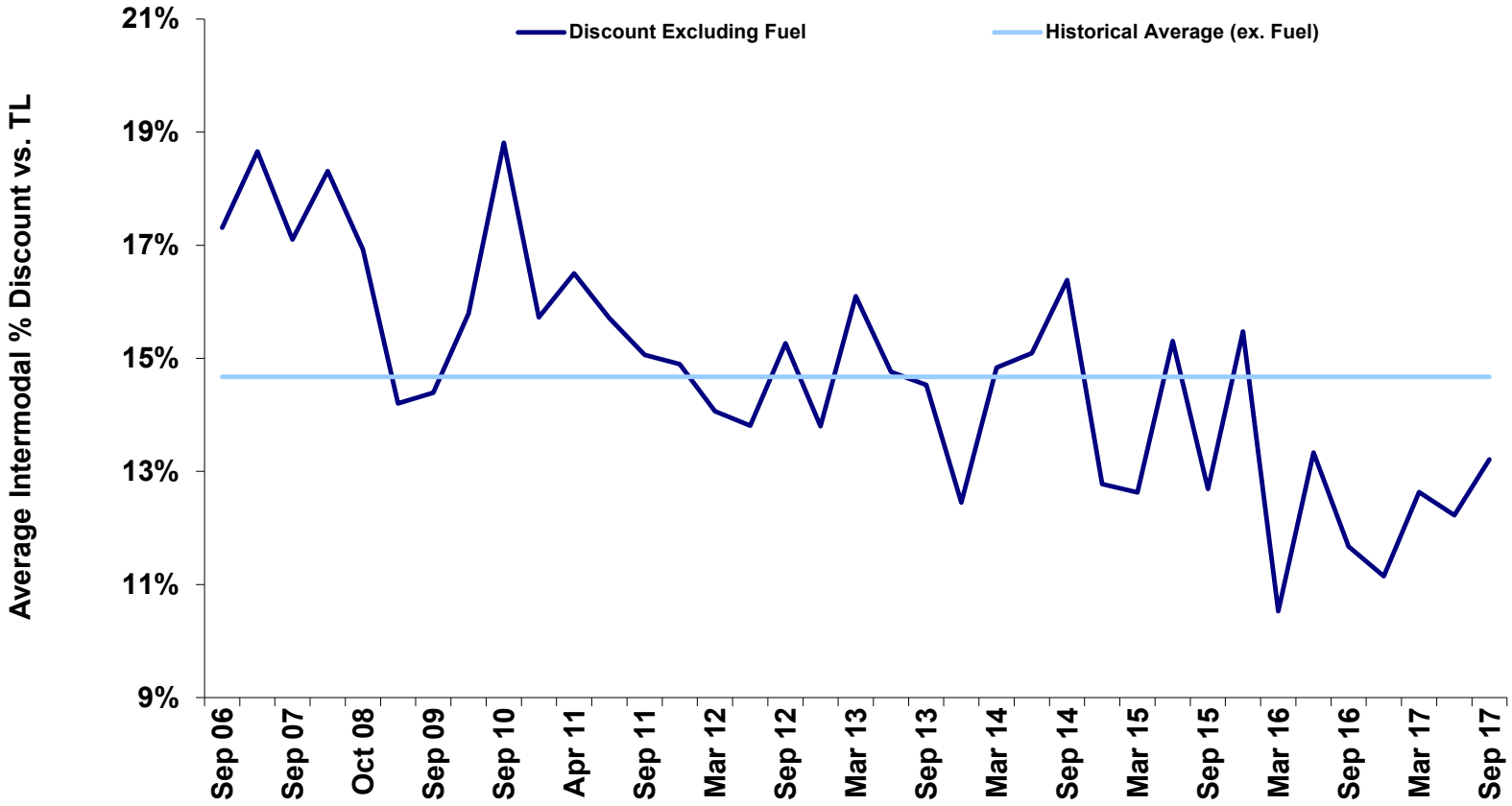
Source: Morgan Stanley Freight Pulse Surveys; Note: Mix of rail respondents is skewed toward manufacturing & intermodal and not coal, despite the fact that coal is key to overall rail industry trends

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?



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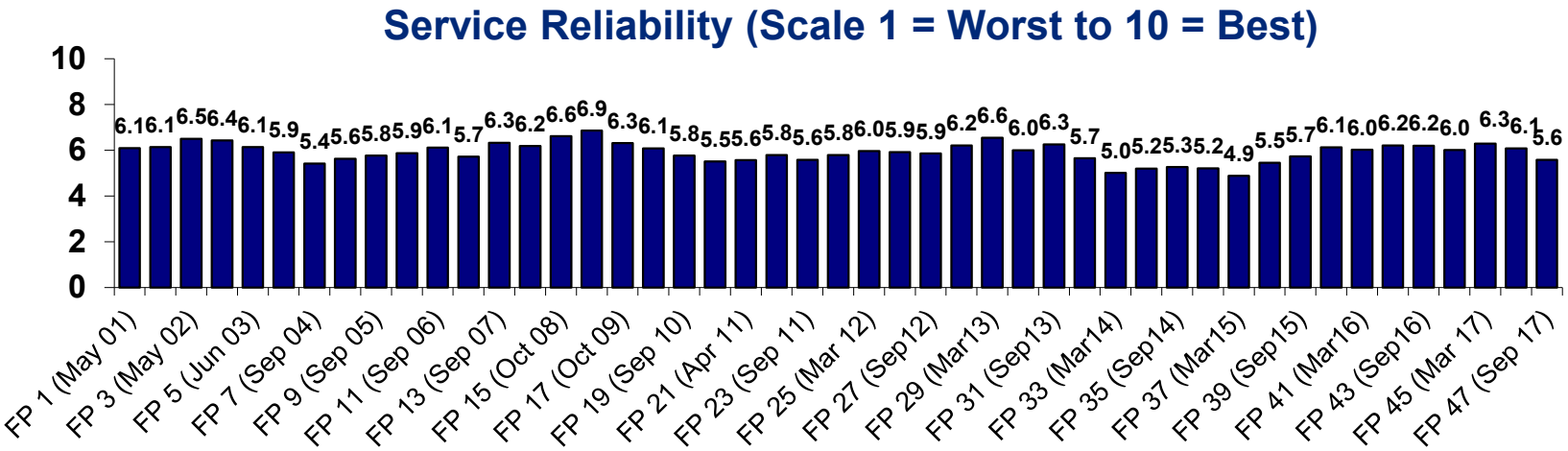
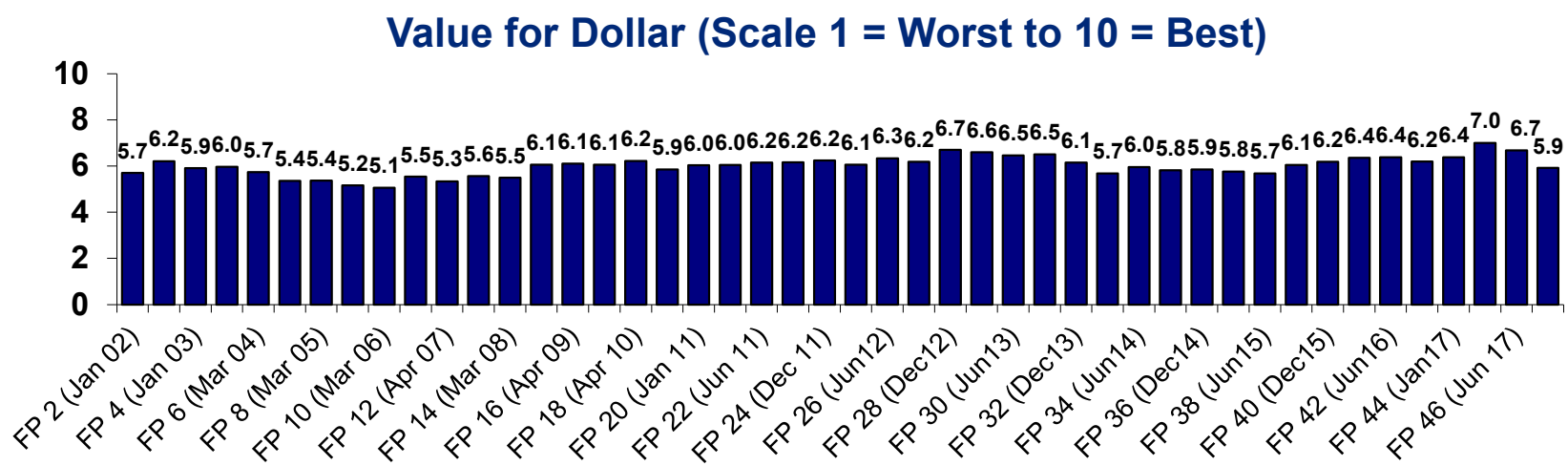
Source: Morgan Stanley Freight Pulse Surveys

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





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Source: Morgan Stanley Freight Pulse Surveys; Note: Mix of rail respondents is skewed toward manufacturing & intermodal and not coal, despite the fact that coal is key to overall rail industry trends

Trucking Highlights

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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

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

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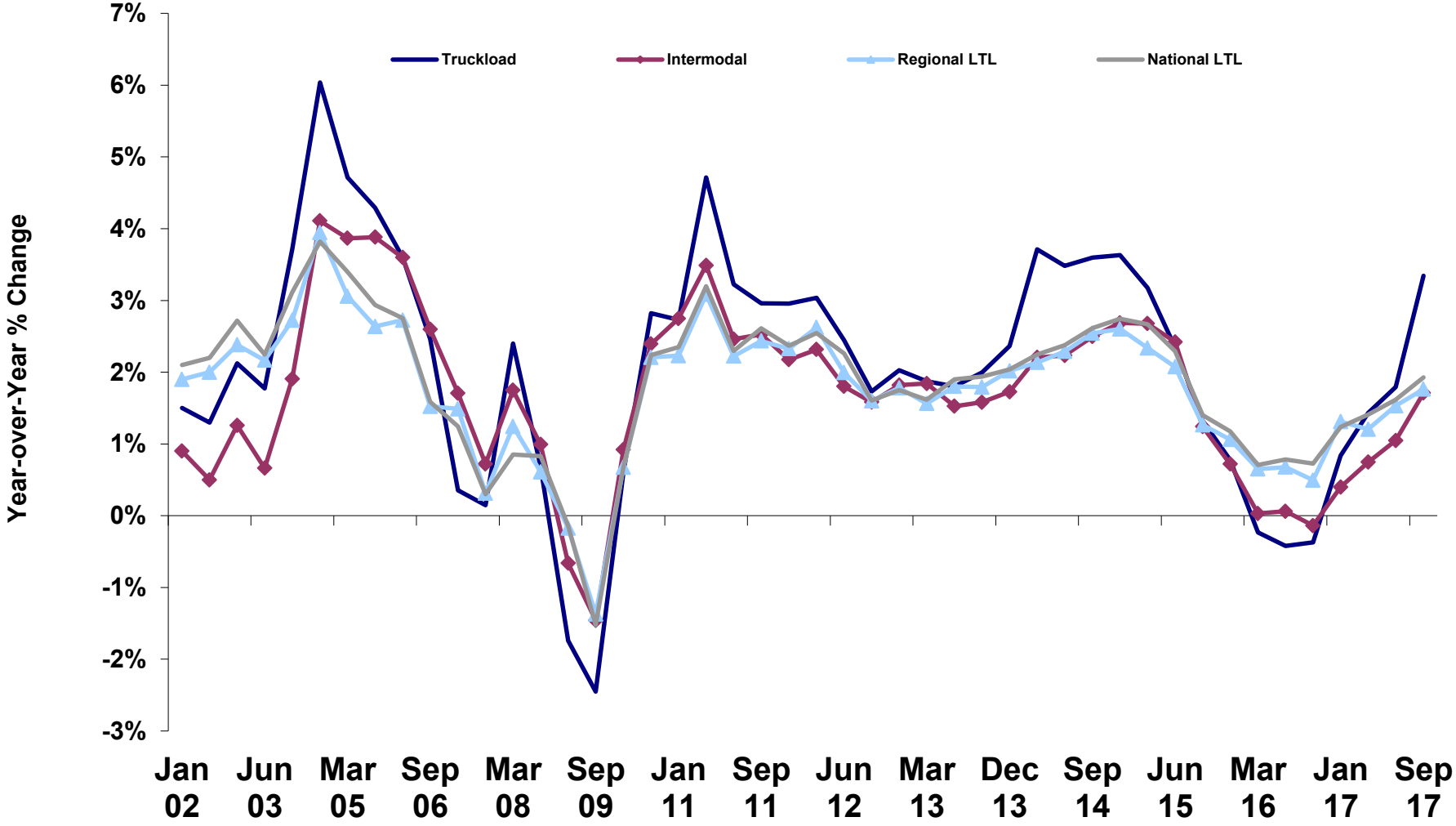
Source: Morgan Stanley Freight Pulse Surveys

2. TL Base Rate Expectations Jump to 2014 Levels

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



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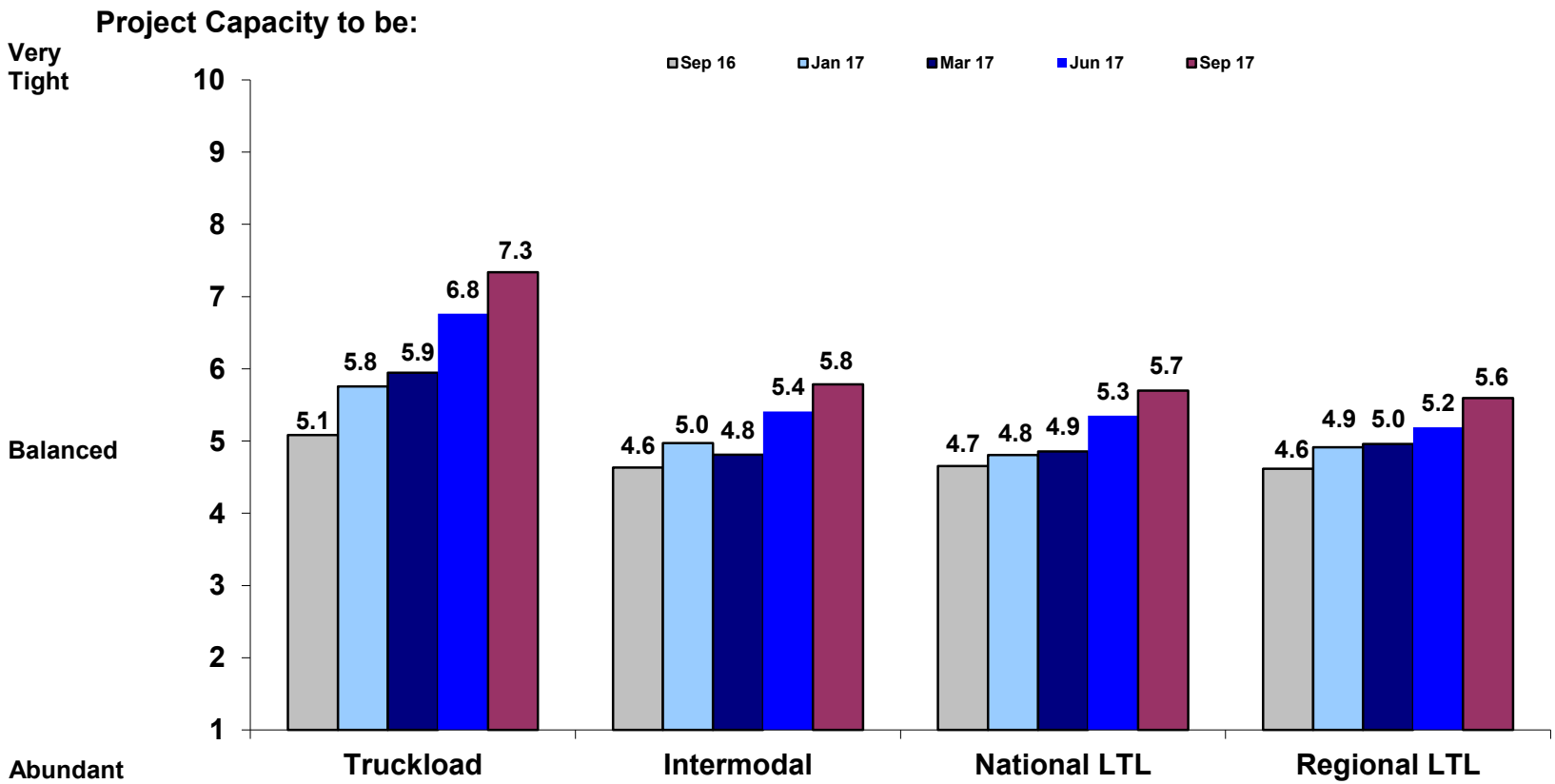
Source: Morgan Stanley Freight Pulse Surveys

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

What are your Expectations for Capacity in 6 Months?



Source: Morgan Stanley Freight Pulse Surveys

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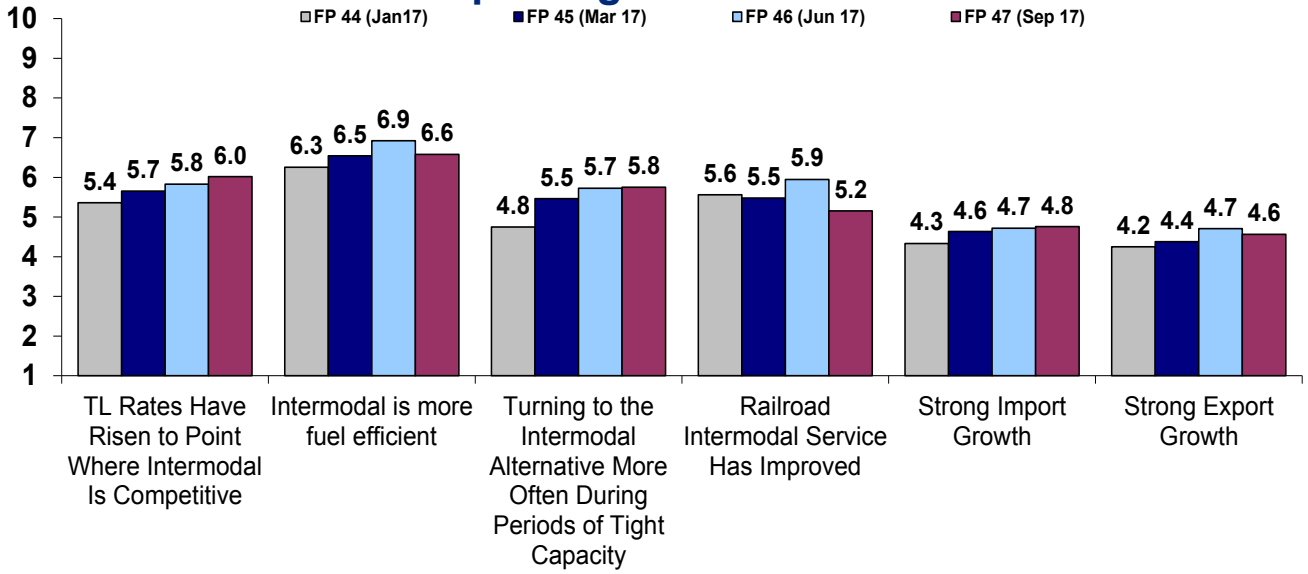
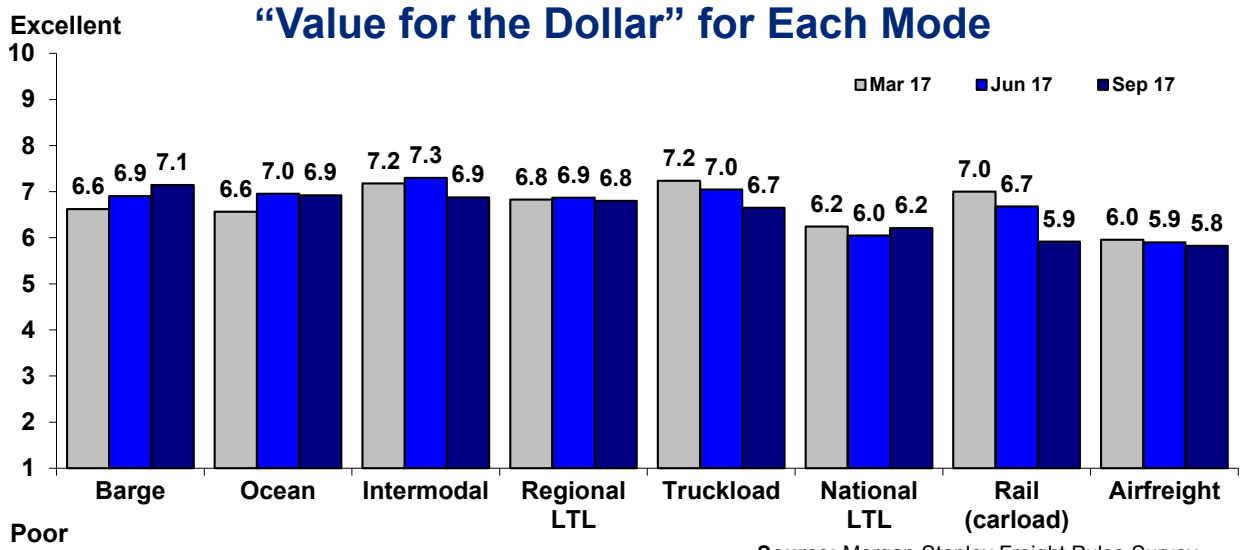
4. Fuel Efficiency Continues to be the Most Important Driver to Intermodal Growth; TL Rate Increases Fast Approaching

What Factors are Impacting Your Use of Intermodal Most?



"Value for the Dollar" for Each Mode



Source: Morgan Stanley Freight Pulse Survey

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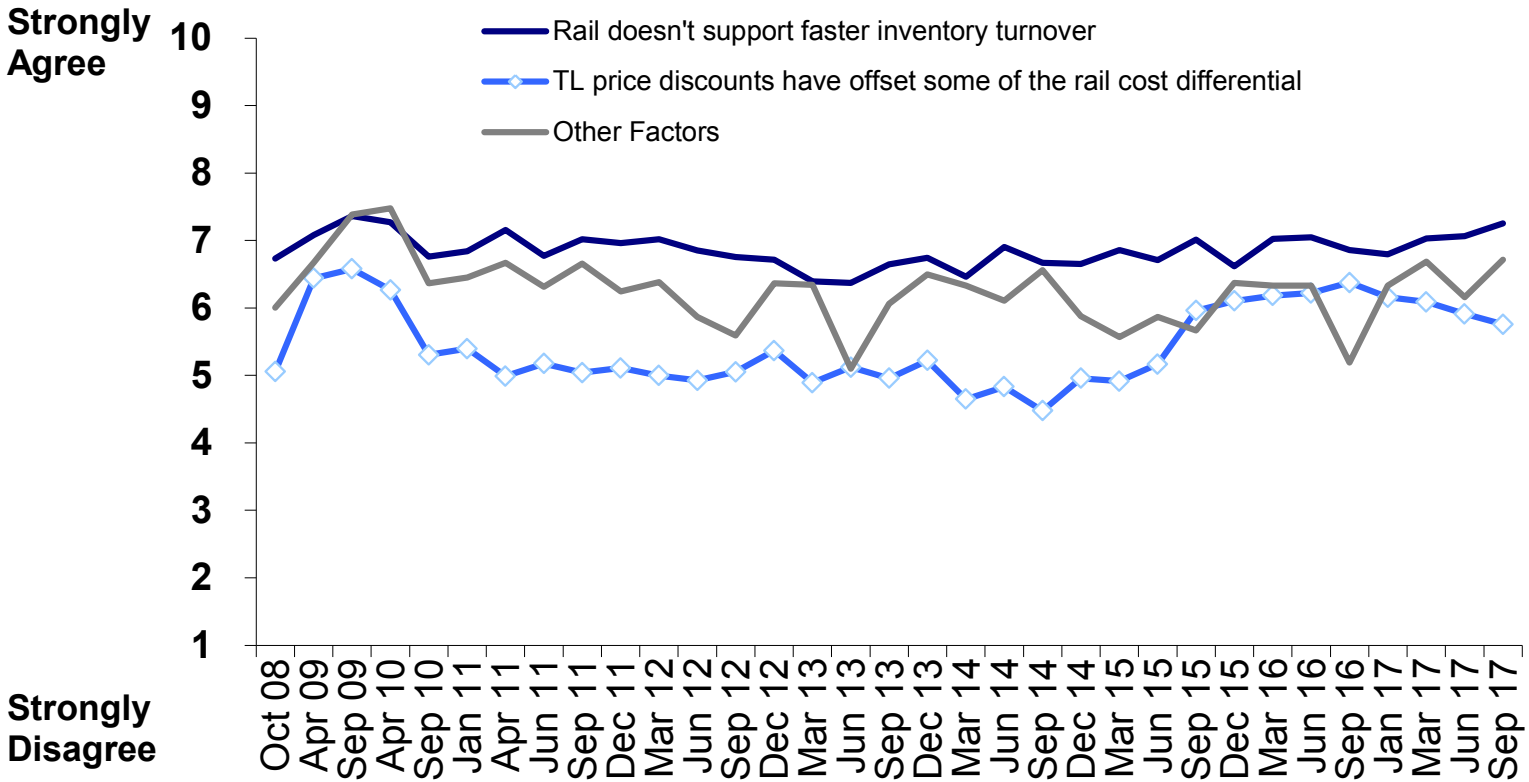
5. TL Price Discounts vs. Intermodal Continue to Slip Slightly from Elevated Levels

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



Source: Morgan Stanley Freight Pulse Surveys

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Parcel Highlights

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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

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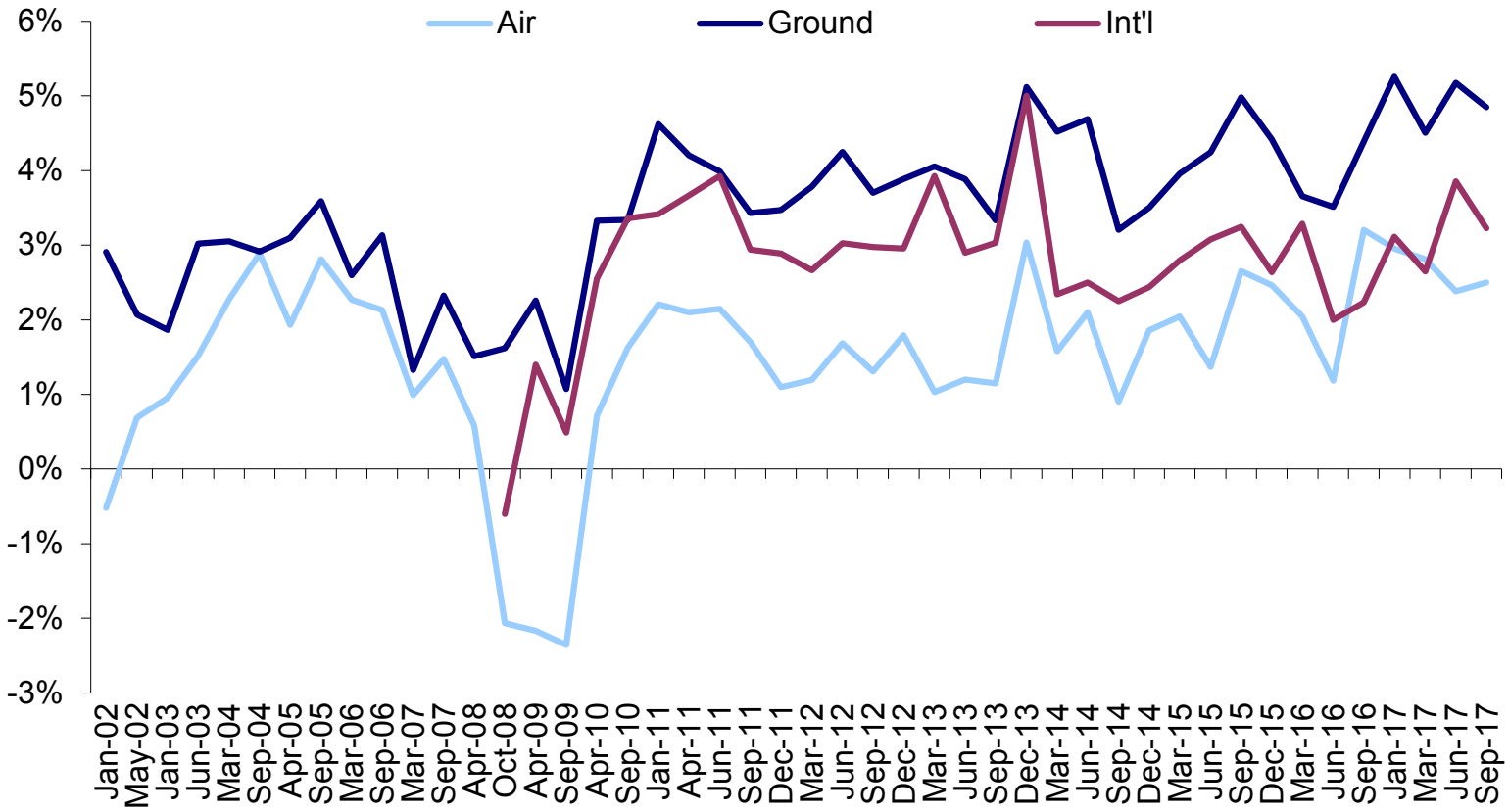
1. Ground and Int'l Volume Growth Outlook Decline; Slight Increase in Air

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

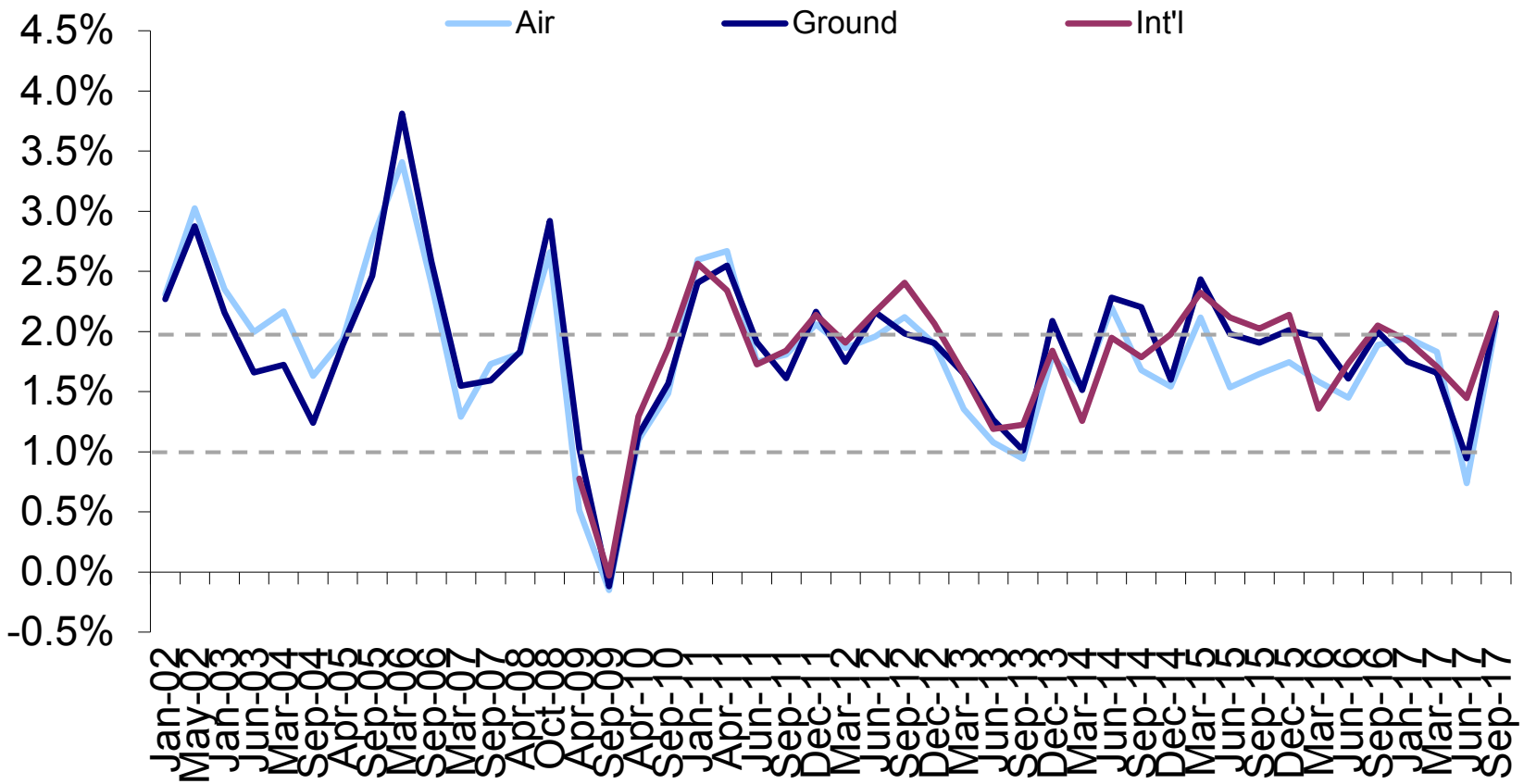


Source: Morgan Stanley Parcel Survey

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

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



Includes All responses, equally-weighted. Source: Morgan Stanley Parcel Survey

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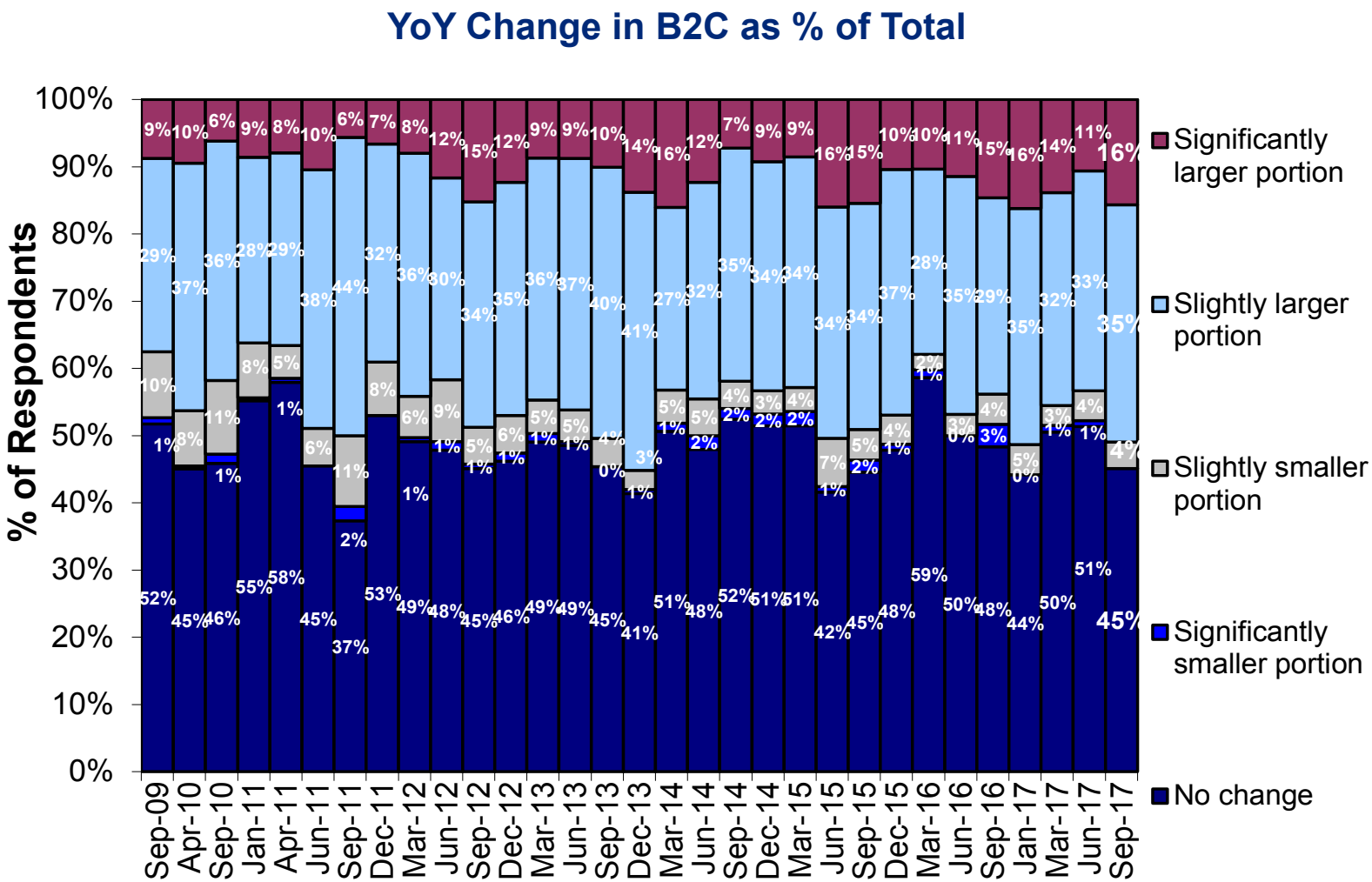
3. Shippers' Expectations for B2C as % of Total Parcel Shipment Increase from Prior Survey



Source: Morgan Stanley Parcel Survey

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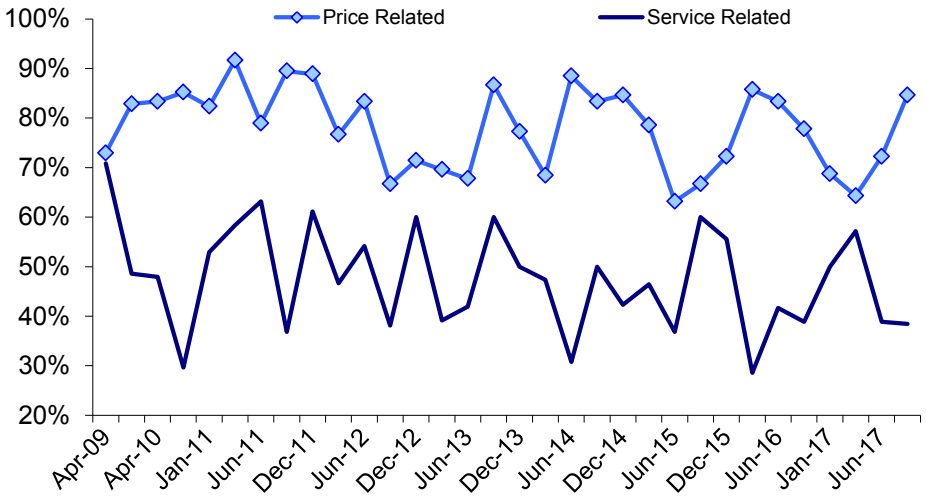
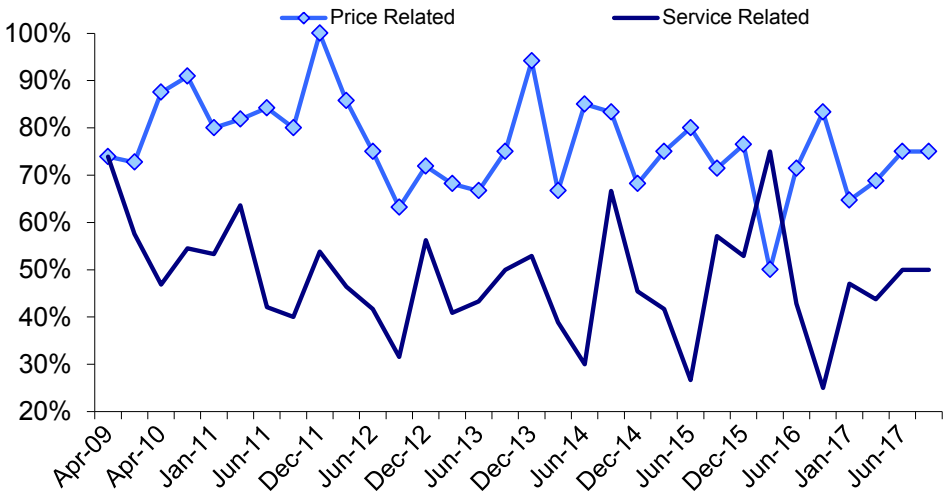
4. Shippers View Price as More Important Driver Than Service for Switching Ground and Air Parcel Carriers, Spread Between Price and Service for Ground Widens

Ground: Reason for Switching Primary Carriers



Air: Reason for Switching Primary Carriers



Source: Morgan Stanley Parcel Survey

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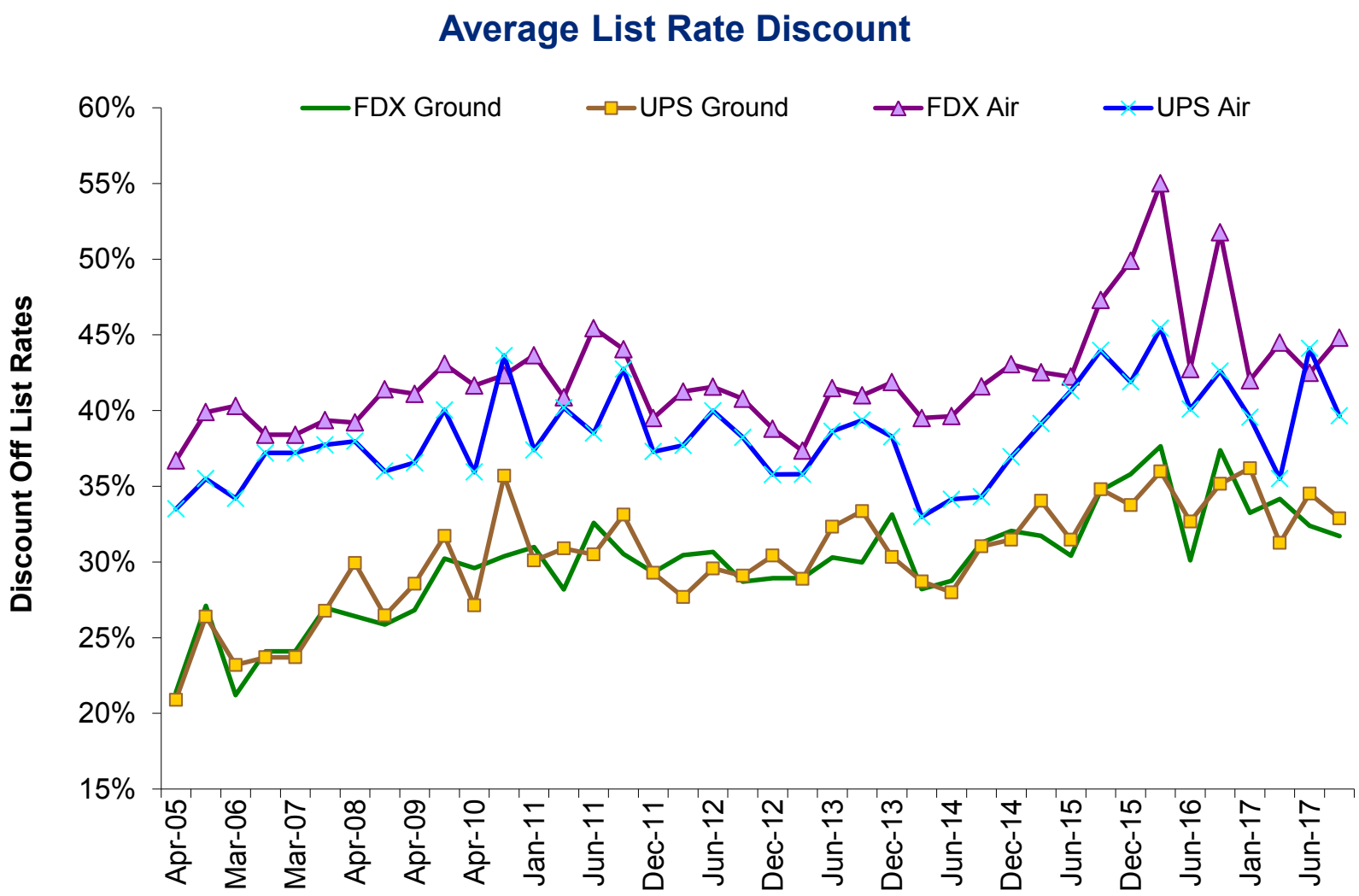
5. According to Shippers, Discounts Have Increased for FDX Air and Decreased for FDX Ground and UPS Air and Ground from Prior Survey



Source: Morgan Stanley Parcel Survey

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Appendix

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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

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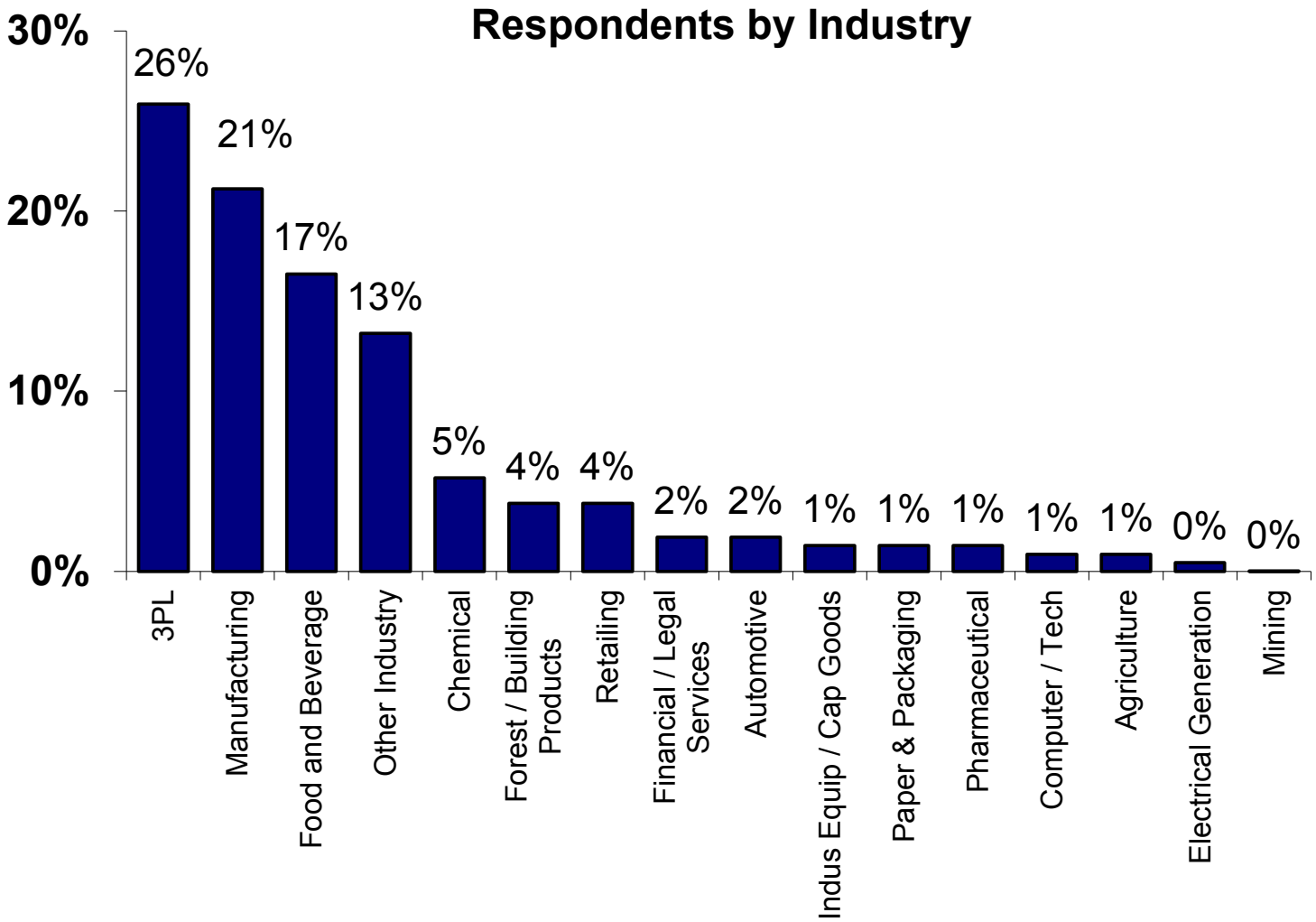
General Freight: About the Freight Pulse Survey



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

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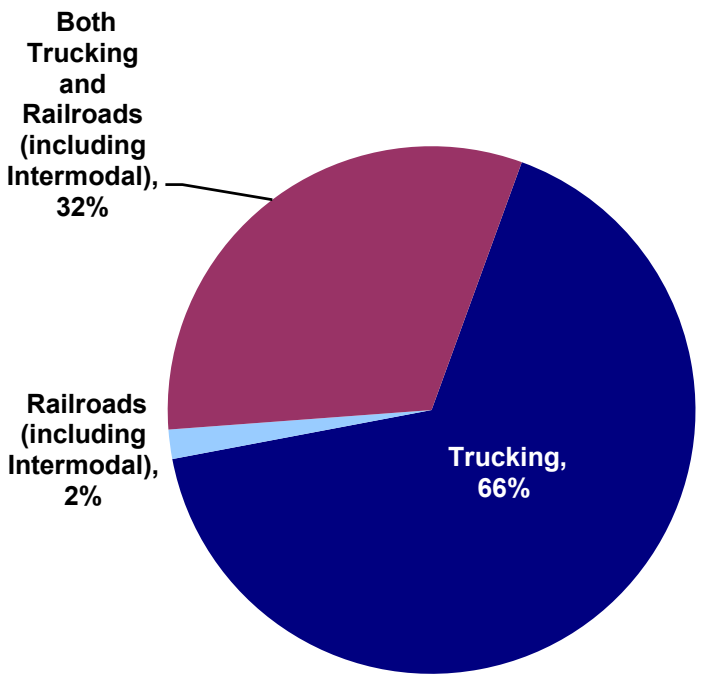
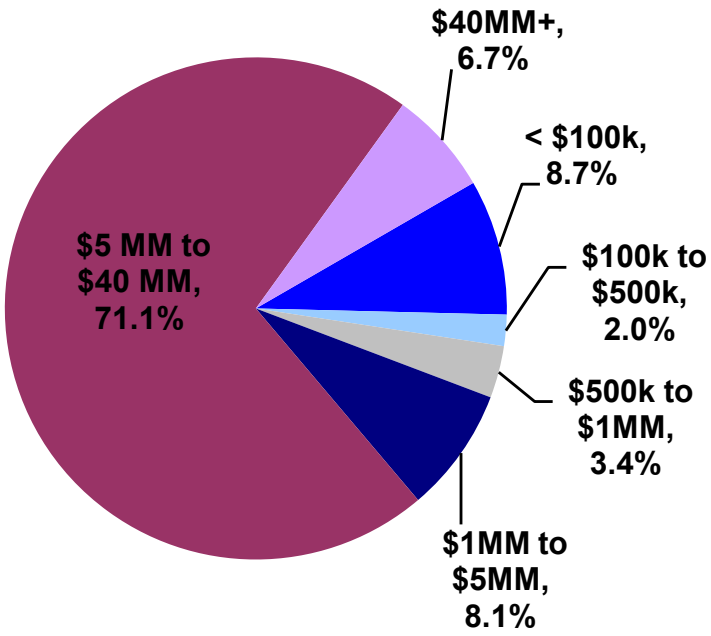
General Freight: Segmented by Shipper Profile

Modes Used



Respondents' Total Spend

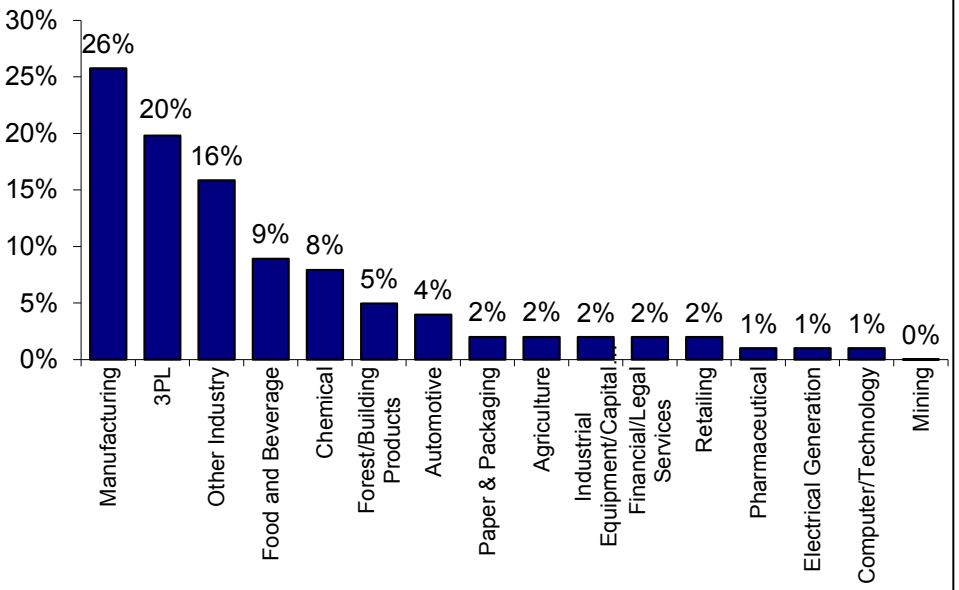


Note: just those shippers providing an industry classification and spend. Source: MS Freight Pulse Surveys

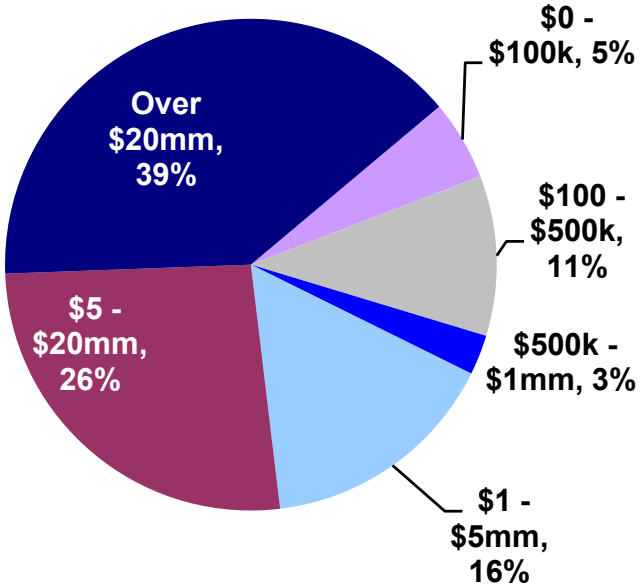
Ravi Shanker, (212) 761-6350, Ravi.Shanker@morganstanley.com

Rails: Segmented by Industry and Shipper Profile

Rail Respondents by Industry



Respondents' Rail Spend

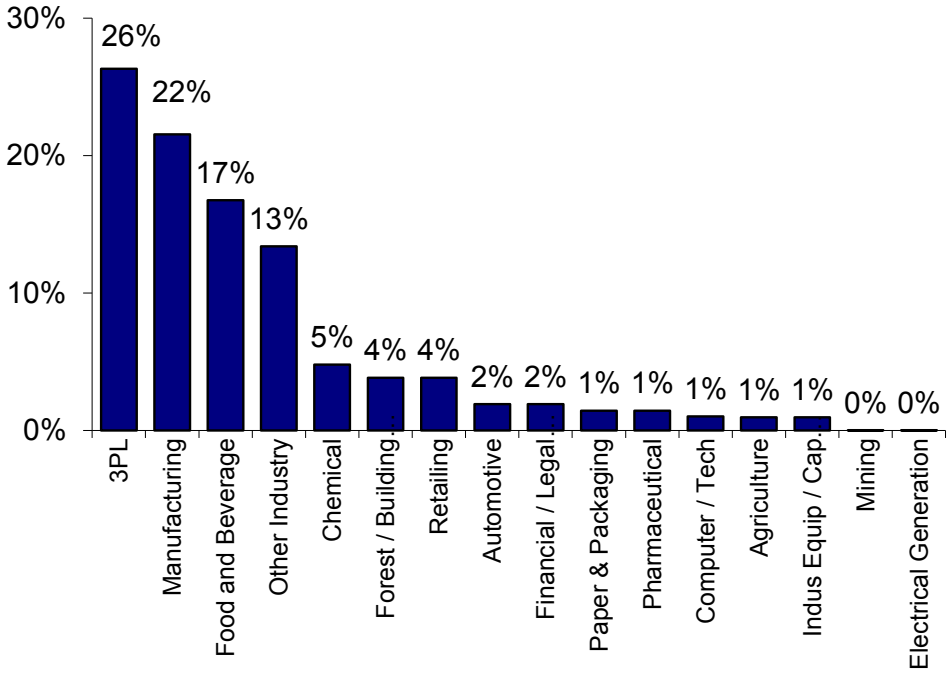


Ravi Shanker, (212) 761-6350, Ravi.Shanker@morganstanley.com

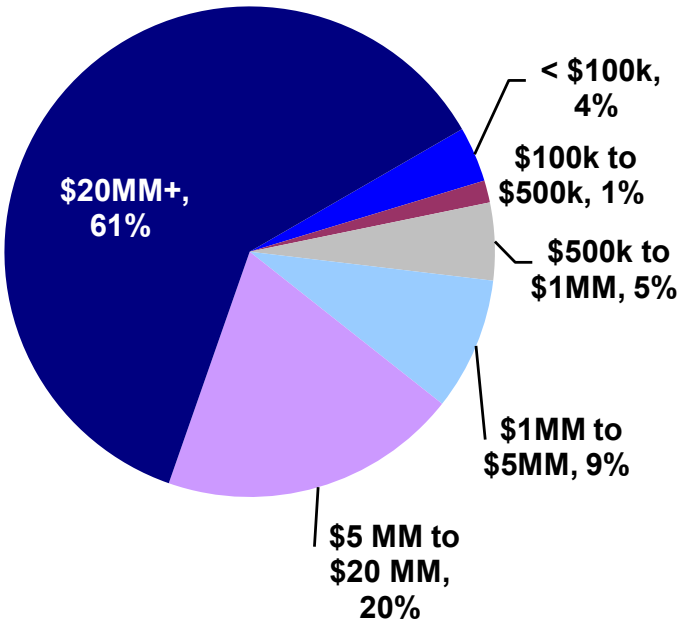
Source: Morgan Stanley Freight Pulse Surveys

Trucks: Segmented by Industry and Shipper Profile

Truck Respondents by Industry



Respondents' Truck Spend

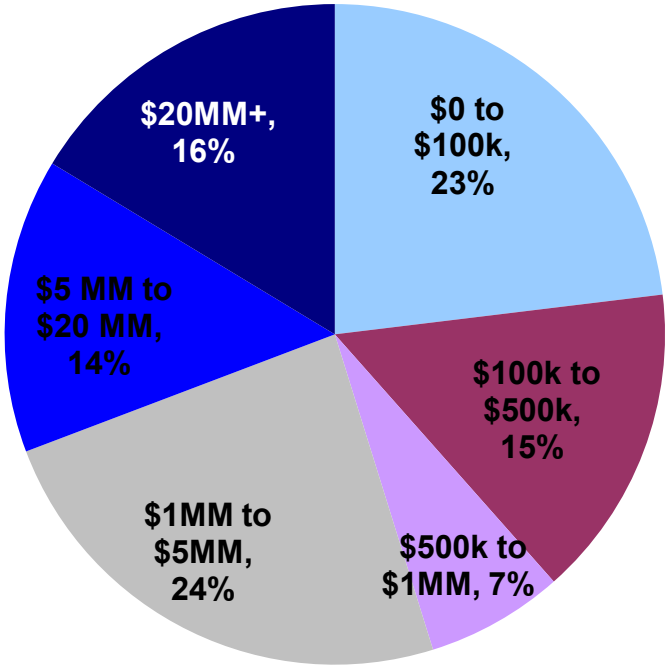


Source: Morgan Stanley Freight Pulse Surveys

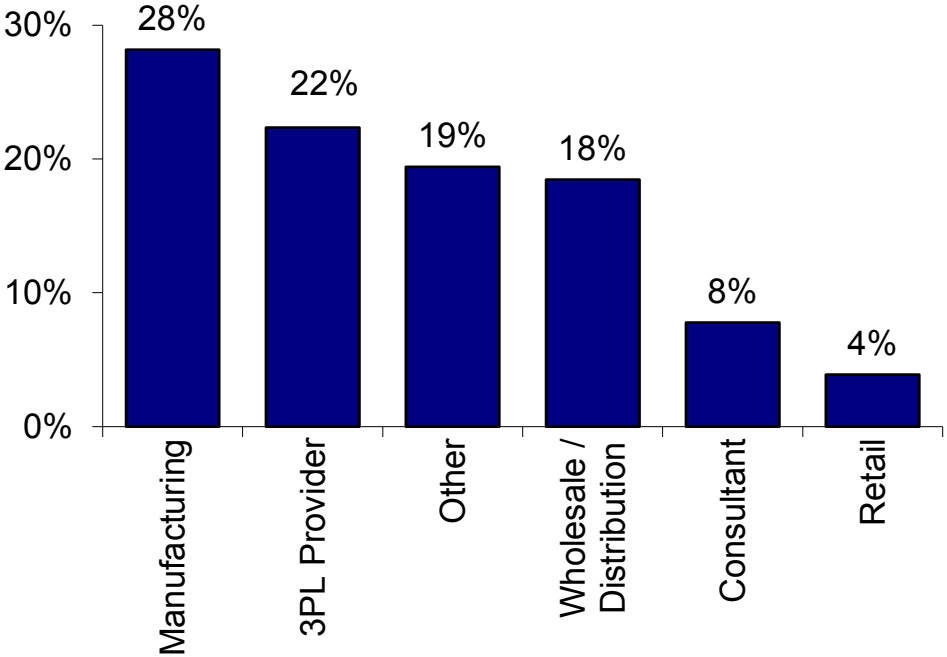
Ravi Shanker, (212) 761-6350, Ravi.Shanker@morganstanley.com

Parcel: About Our Parcel Survey

Respondents' Parcel Spend



Respondents' Primary Business

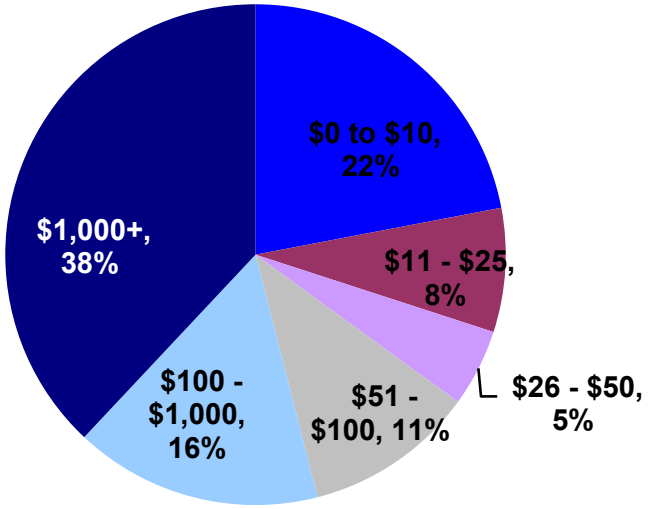


Source: Morgan Stanley Parcel Survey

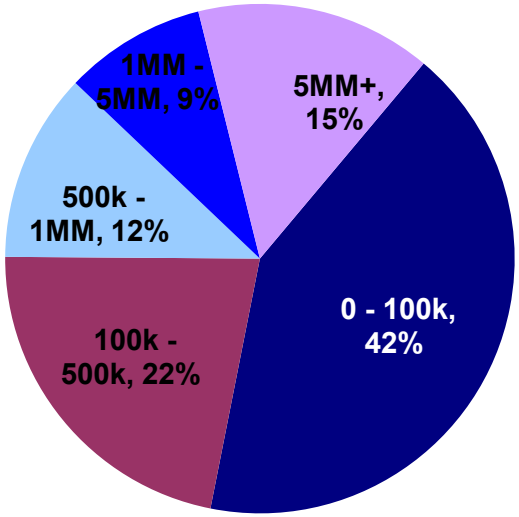
Ravi Shanker, (212) 761-6350, Ravi.Shanker@morganstanley.com

Parcel: Respondent Profile

Company Sales ($MM)



Parcels Shipped

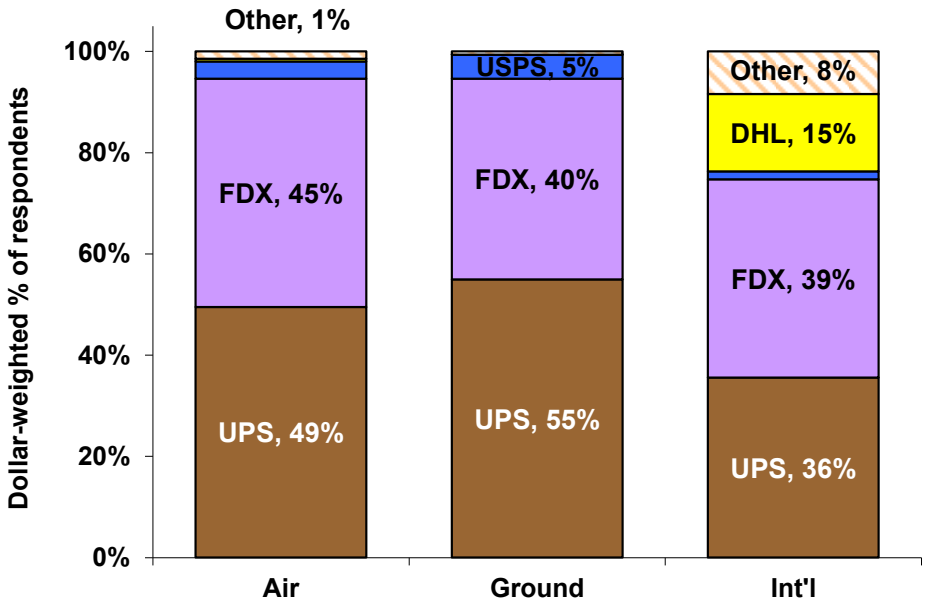


Source: Morgan Stanley Parcel Survey

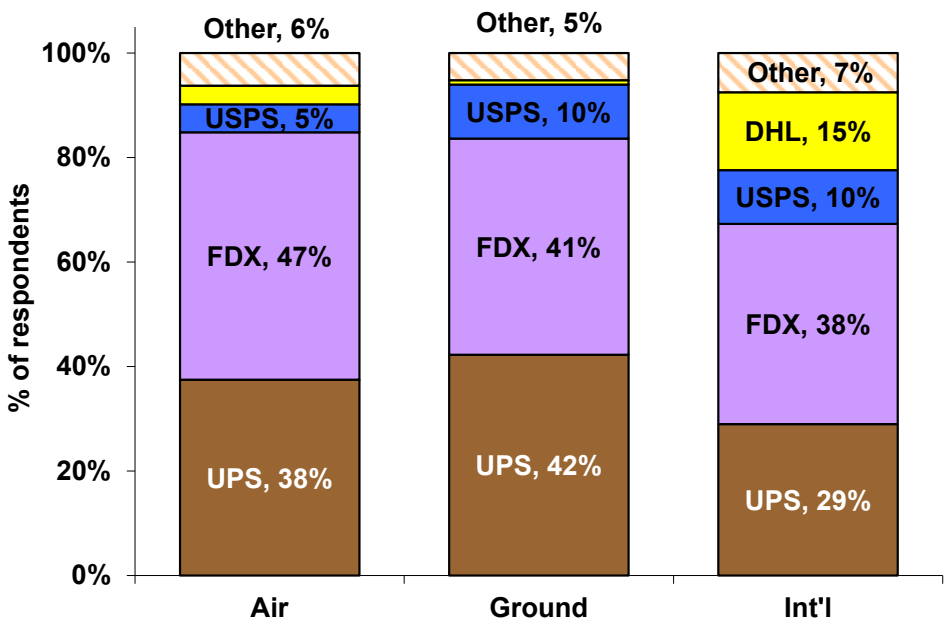
Ravi Shanker, (212) 761-6350, Ravi.Shanker@morganstanley.com

Parcel: Market Share of Respondents Roughly Consistent with Market

Primary Parcel Carrier – Weighted by Spend



Parcel Carrier – Average of All Responses



Source: Morgan Stanley Parcel Survey

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

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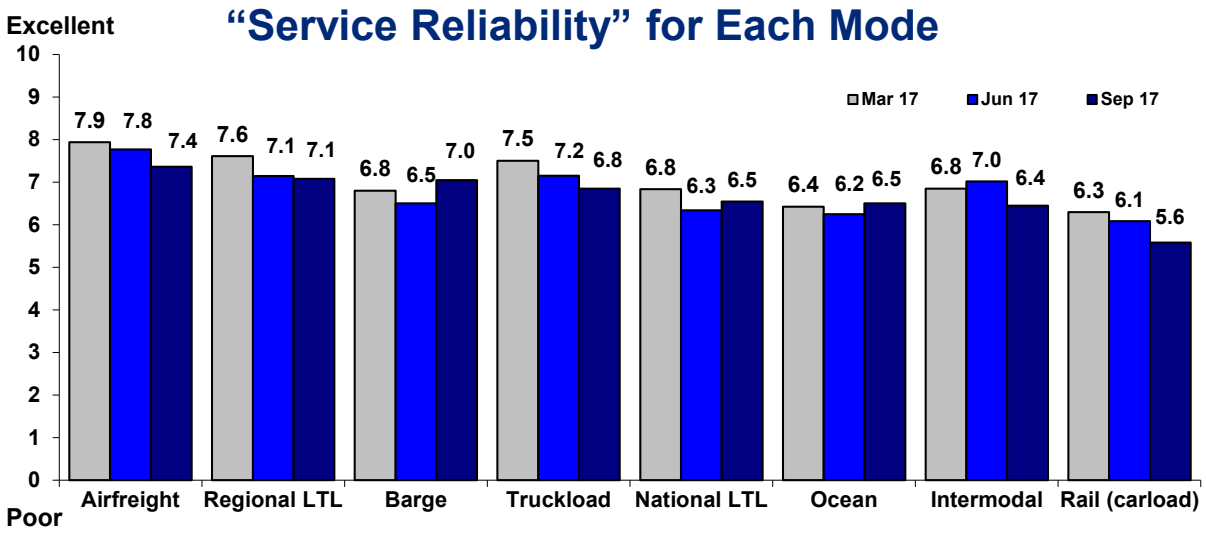
4. Modal Shift
5. Intermodal vs. Truck

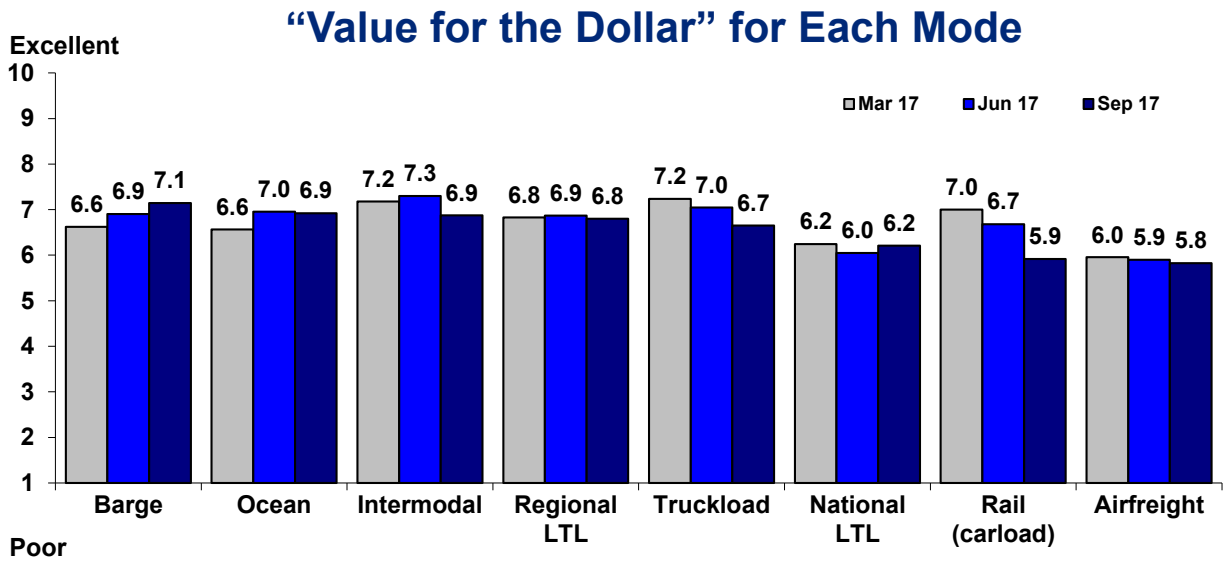
Part 2: Macro Trends

1. Inventories and Orders
2. Economic Outlook

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

Service Reliability & Value by Mode: Average Across All Shippers



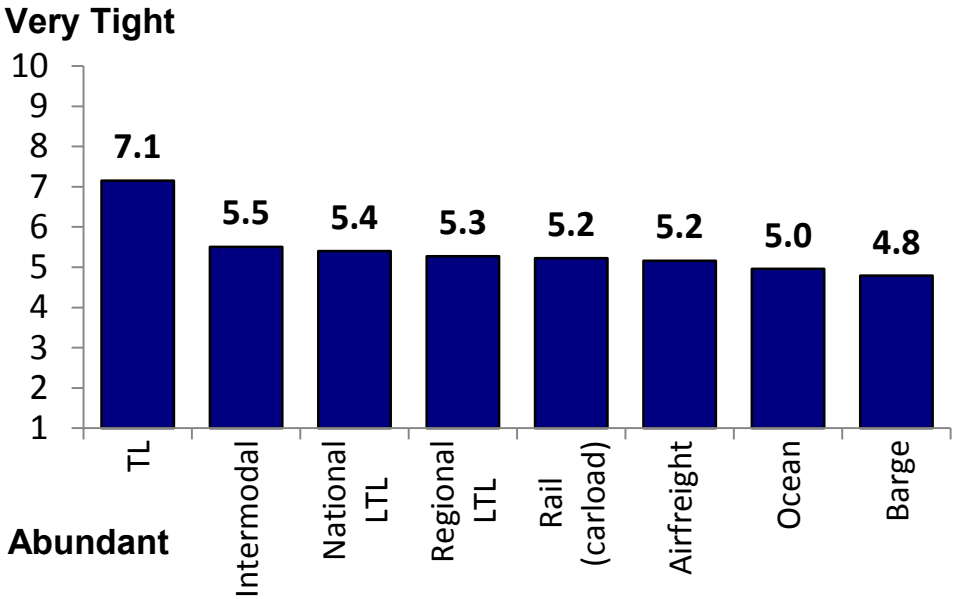


Ravi Shanker, (212) 761-6350, Ravi.Shanker@morganstanley.com

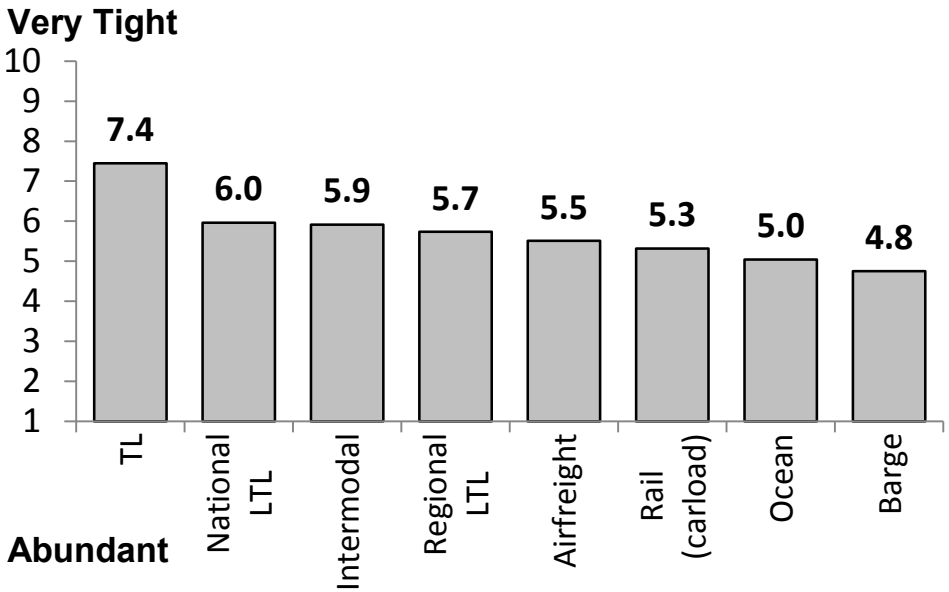
Source: Morgan Stanley Freight Pulse Surveys

Capacity by Mode

Current Capacity



Projected Capacity in 6 Months

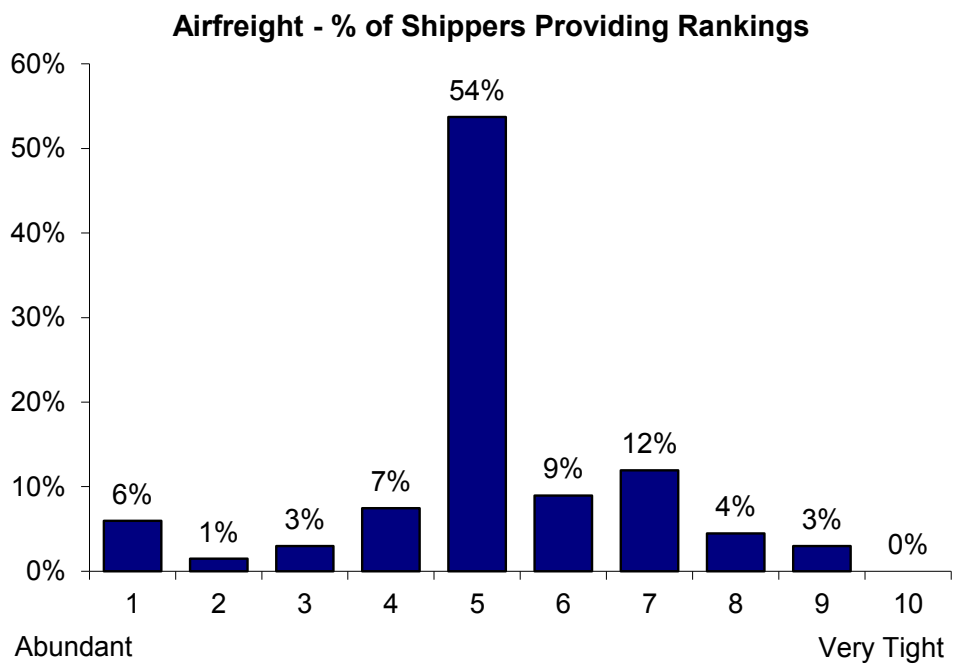


Ravi Shanker, (212) 761-6350, Ravi.Shanker@morganstanley.com

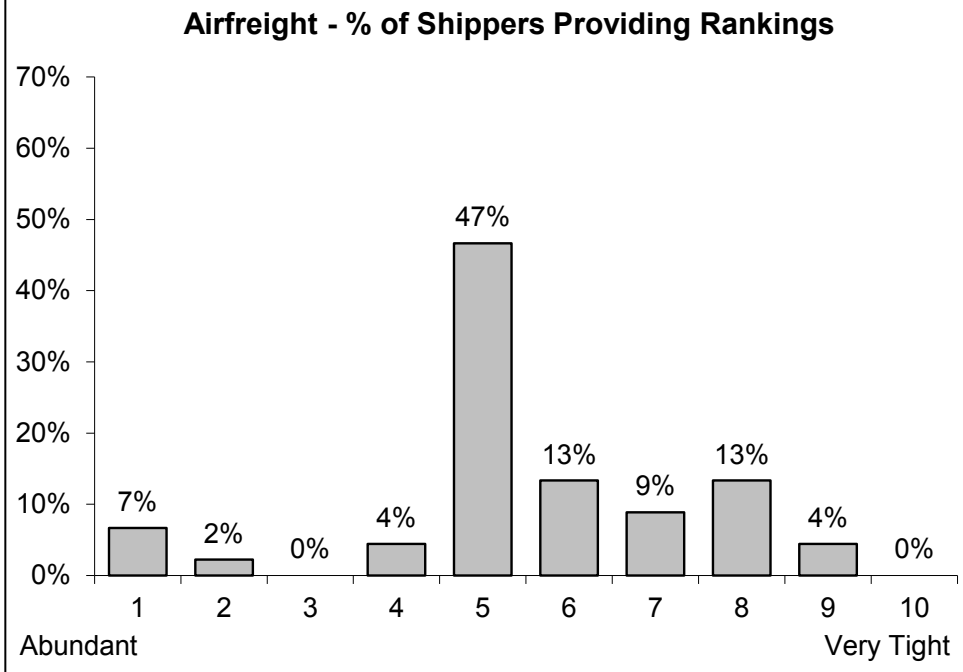
Source: Morgan Stanley Freight Pulse Surveys

Capacity Ranking Skew: Airfreight

Current Capacity



Projected Capacity in 6 Months

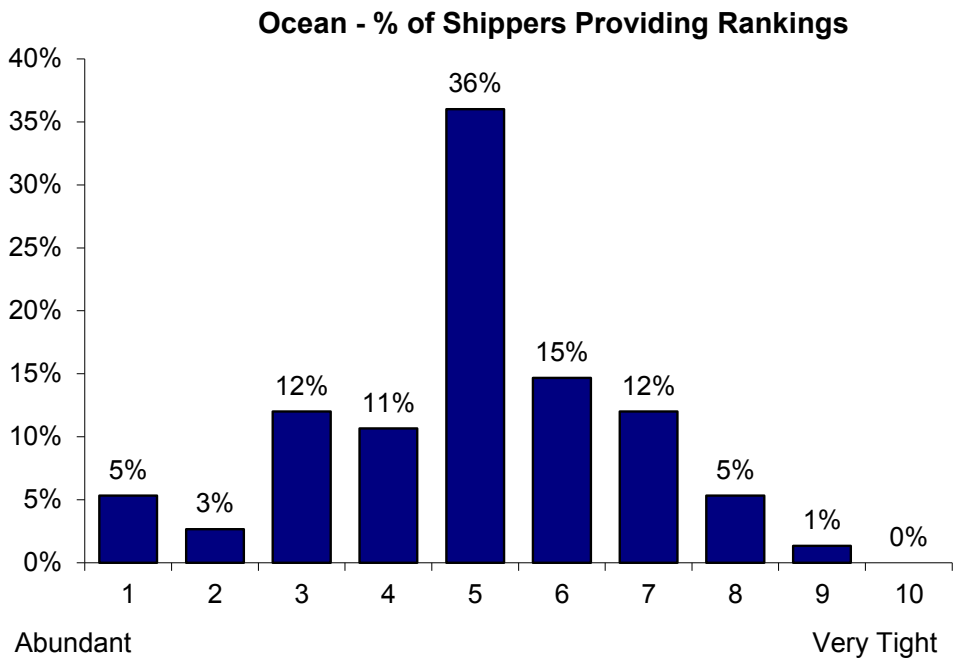


Ravi Shanker, (212) 761-6350, Ravi.Shanker@morganstanley.com

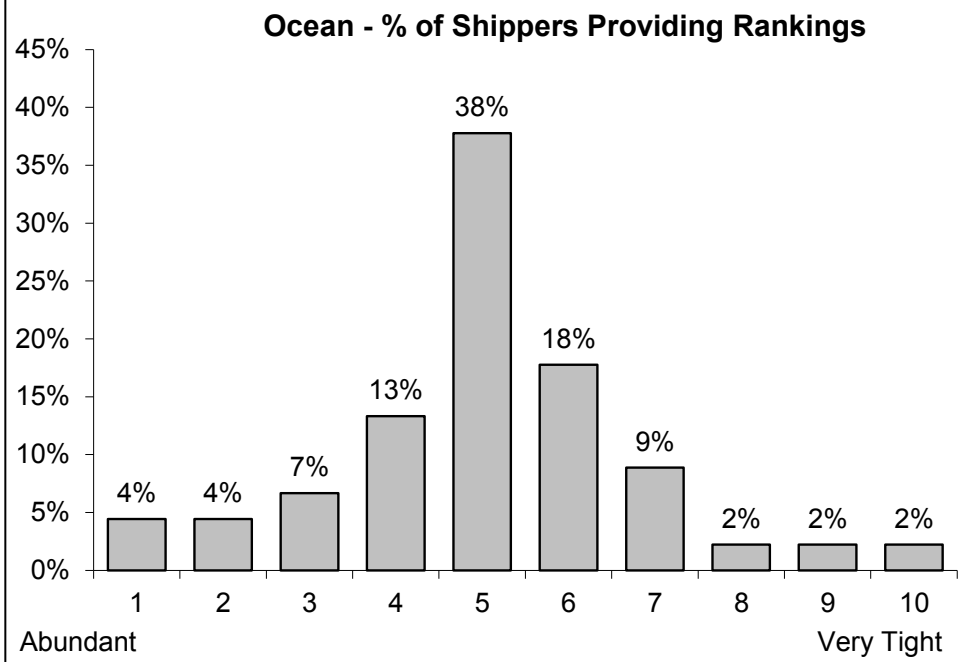
Source: Morgan Stanley Freight Pulse Surveys

Capacity Ranking Skew: Ocean

Current Capacity



Projected Capacity in 6 Months

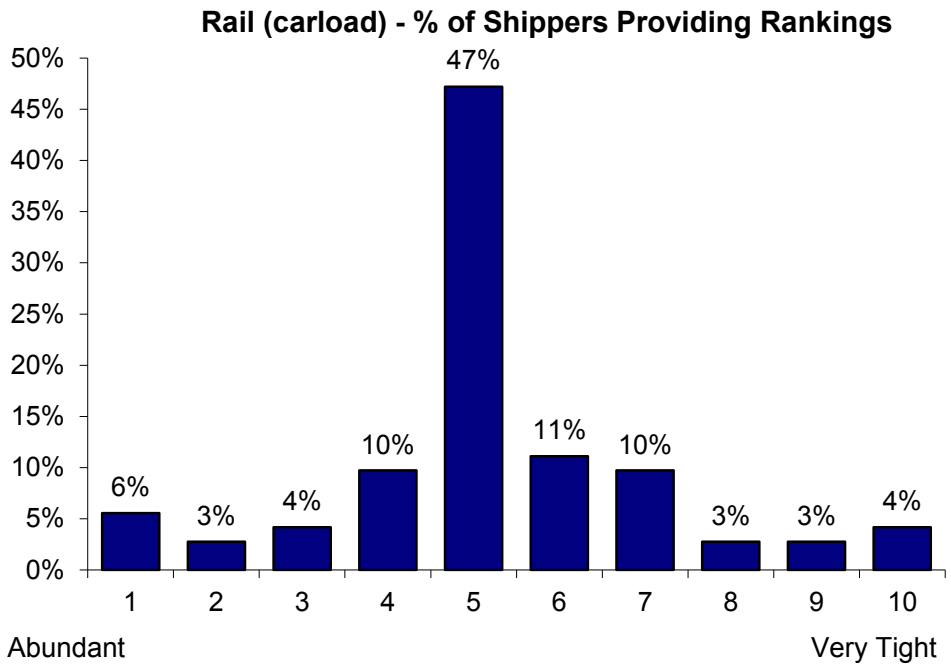


Ravi Shanker, (212) 761-6350, Ravi.Shanker@morganstanley.com

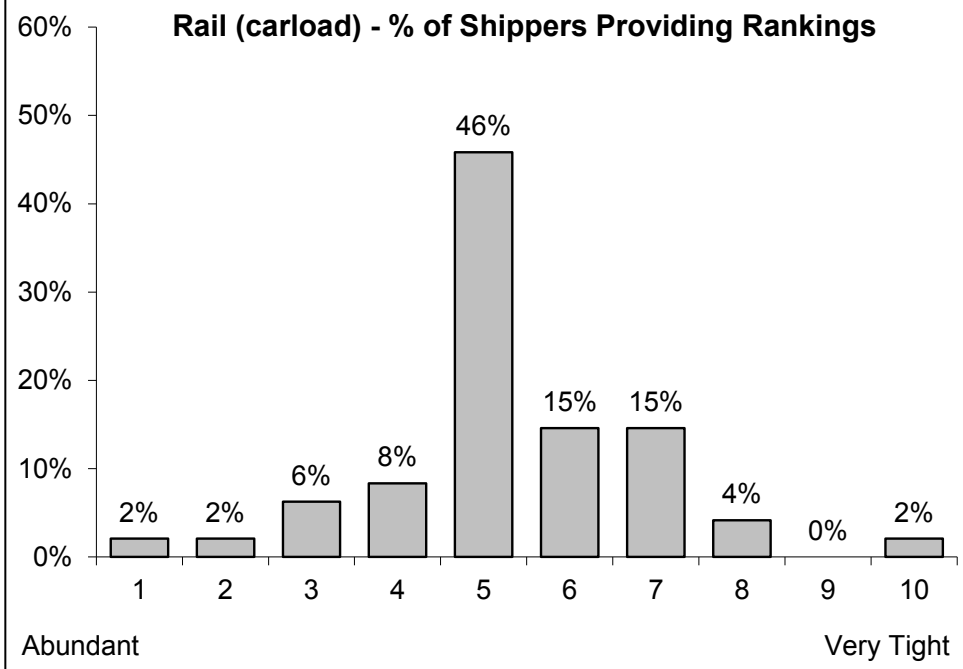
Source: Morgan Stanley Freight Pulse Surveys

Capacity Ranking Skew: Rail (Carload)

Current Capacity



Projected Capacity in 6 Months

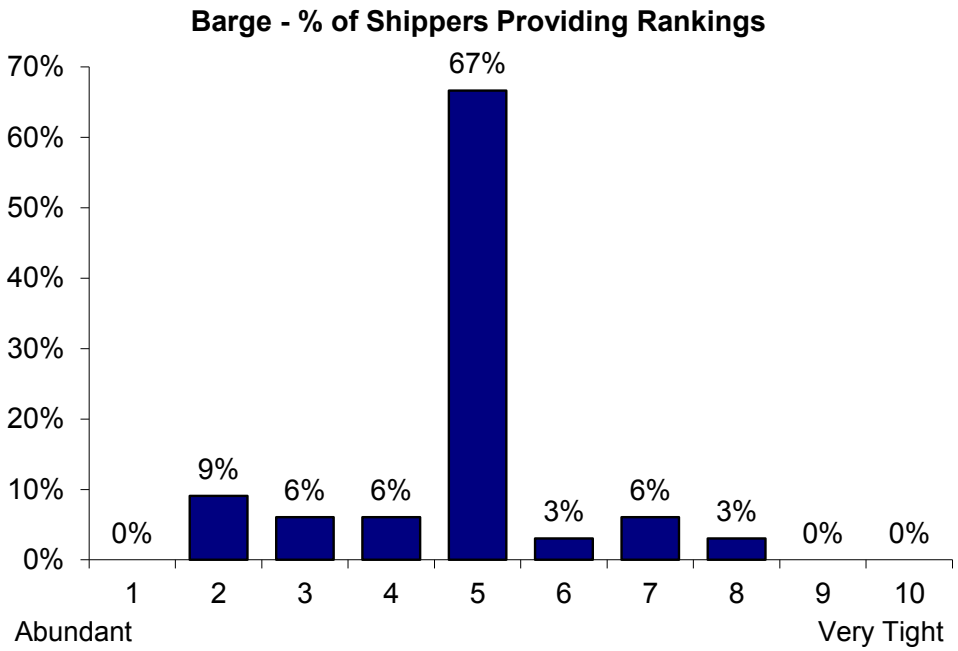


Ravi Shanker, (212) 761-6350, Ravi.Shanker@morganstanley.com

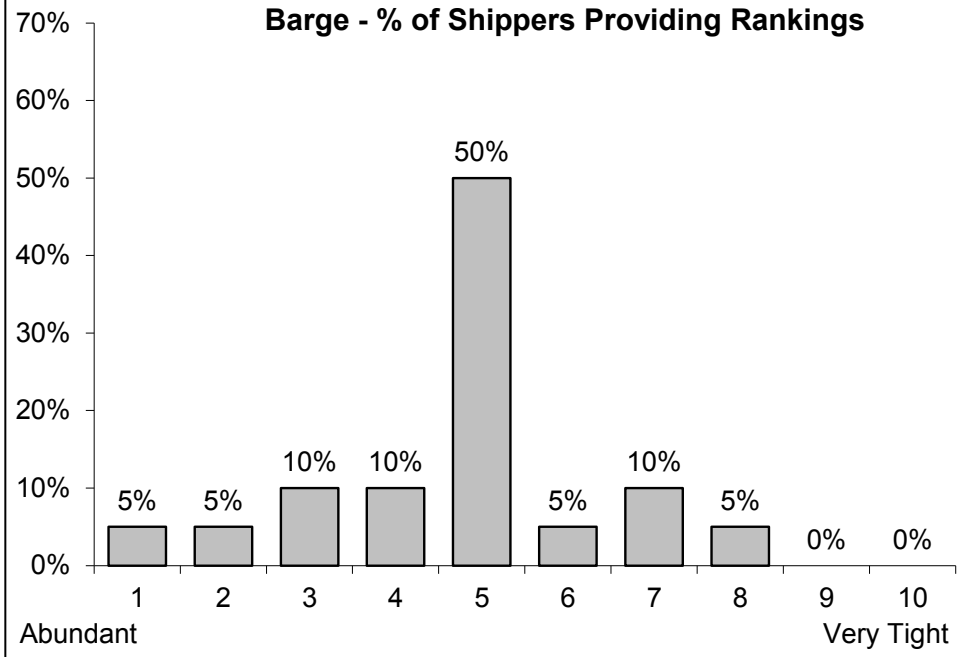
Source: Morgan Stanley Freight Pulse Surveys

Capacity Ranking Skew: Barge

Current Capacity



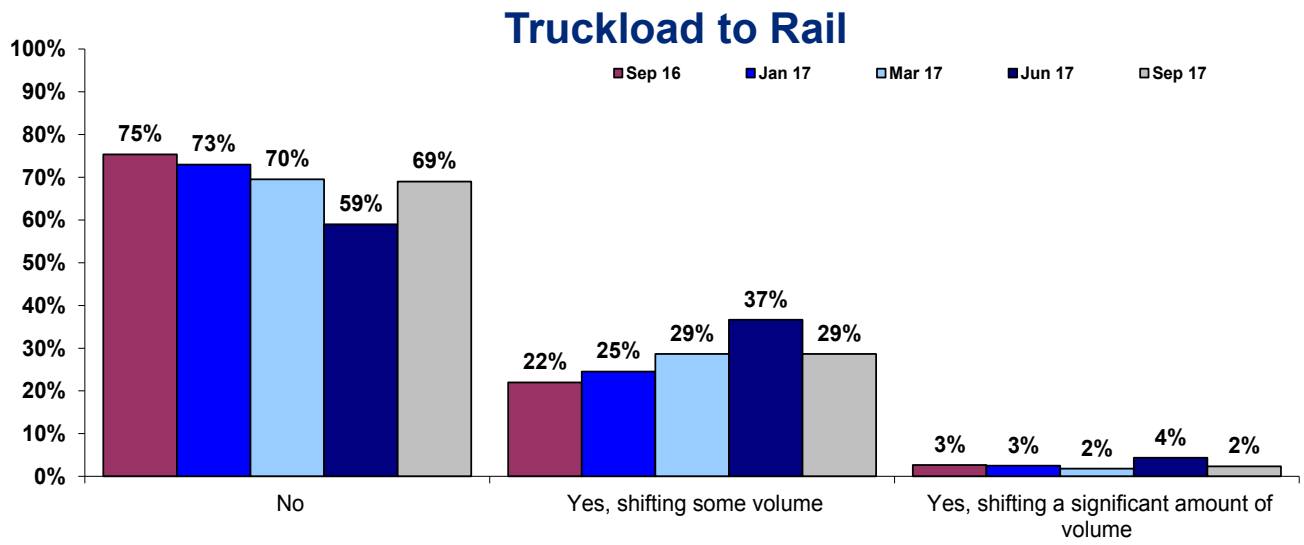
Projected Capacity in 6 Months

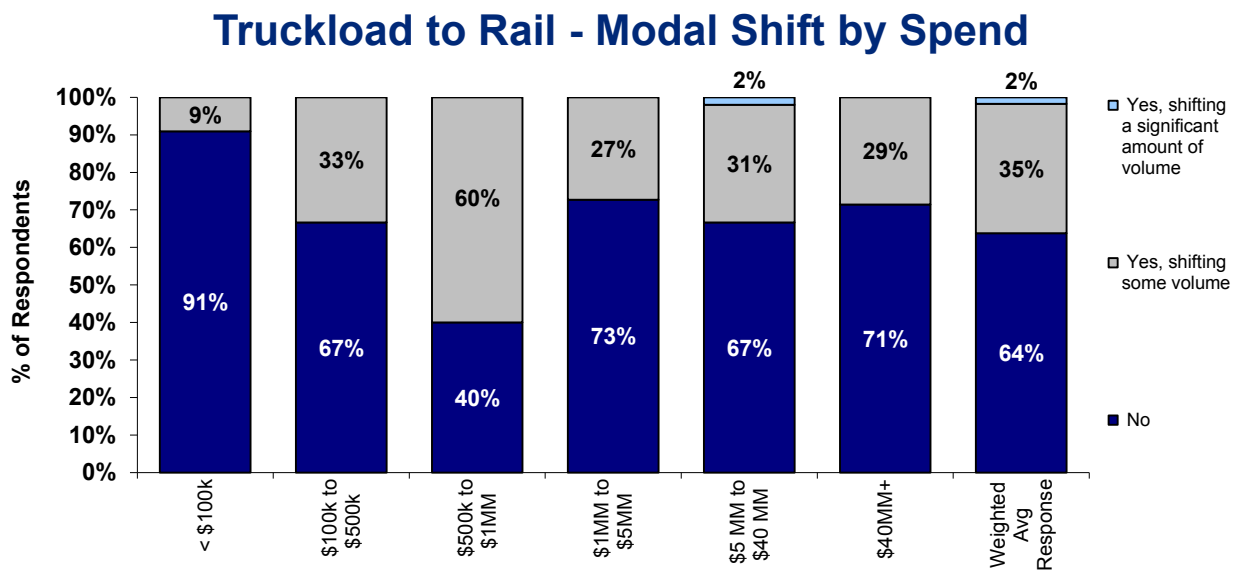


Ravi Shanker, (212) 761-6350, Ravi.Shanker@morganstanley.com

Source: Morgan Stanley Freight Pulse Surveys

Shipper Modal Shift Statistics – Truckload to Rail



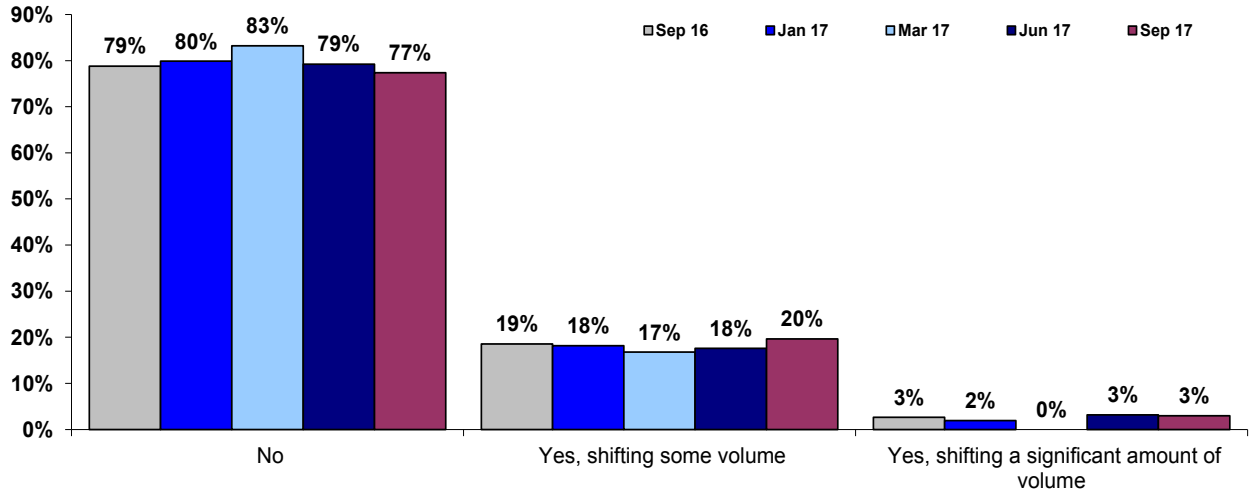


Ravi Shanker, (212) 761-6350, Ravi.Shanker@morganstanley.com

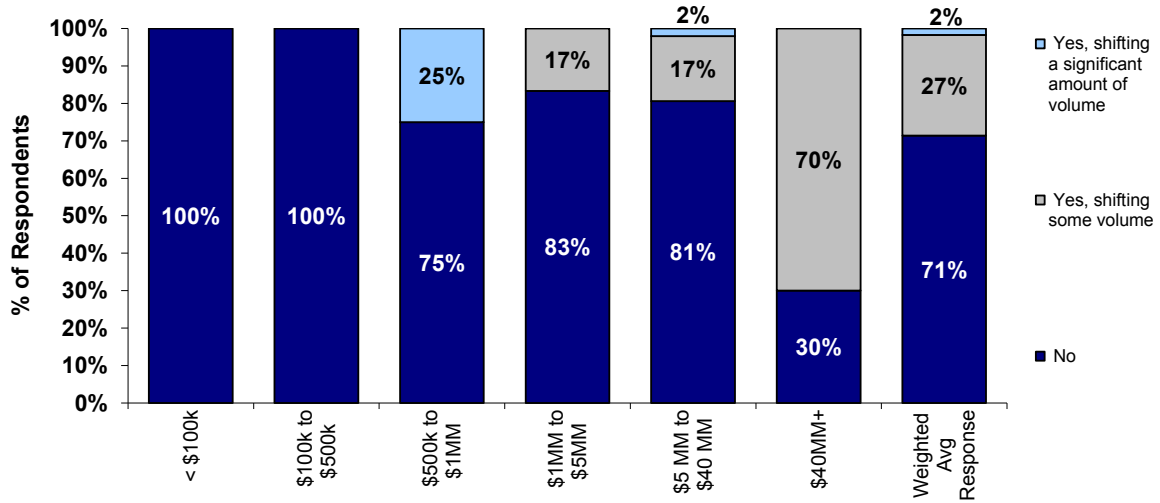
Source: Morgan Stanley Freight Pulse Surveys

Shipper Modal Shift Statistics – Rail to Truckload

Rail to Truckload



Rail to Truckload - Modal Shift by Spend

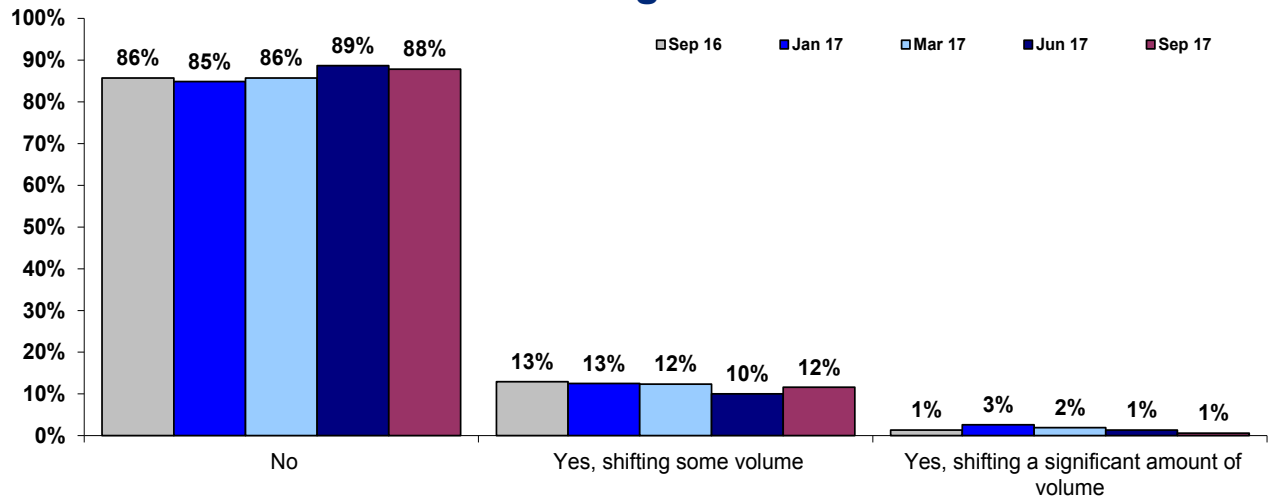


Ravi Shanker, (212) 761-6350, Ravi.Shanker@morganstanley.com

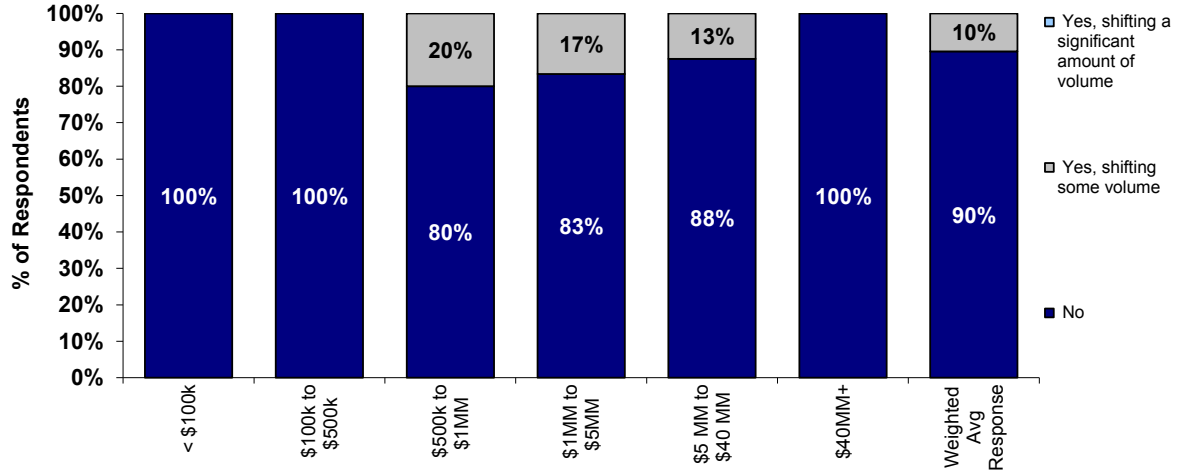
Source: Morgan Stanley Freight Pulse Surveys

Shipper Modal Shift Statistics – Airfreight to LTL

Airfreight to LTL



Airfreight to LTL - Modal Shift by Spend

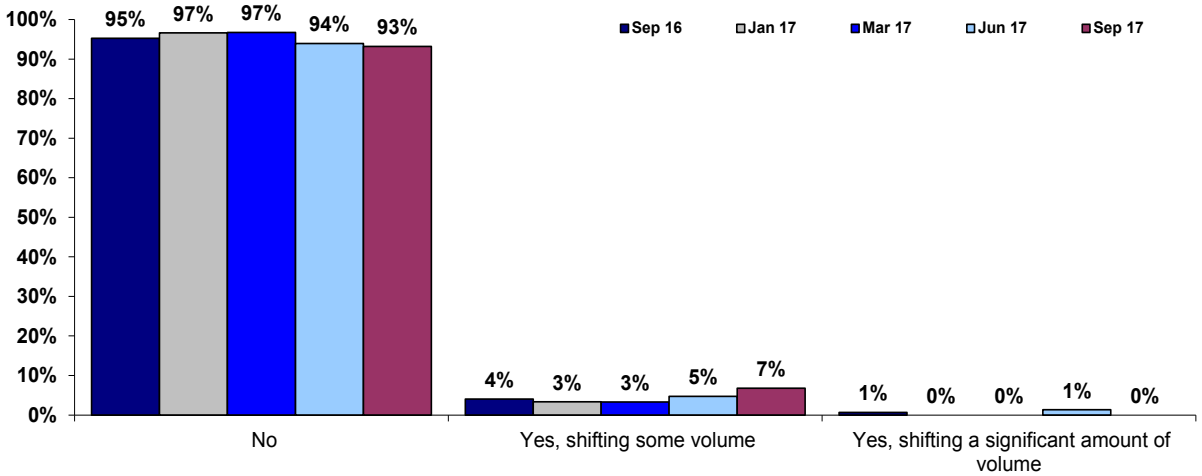


Ravi Shanker, (212) 761-6350, Ravi.Shanker@morganstanley.com

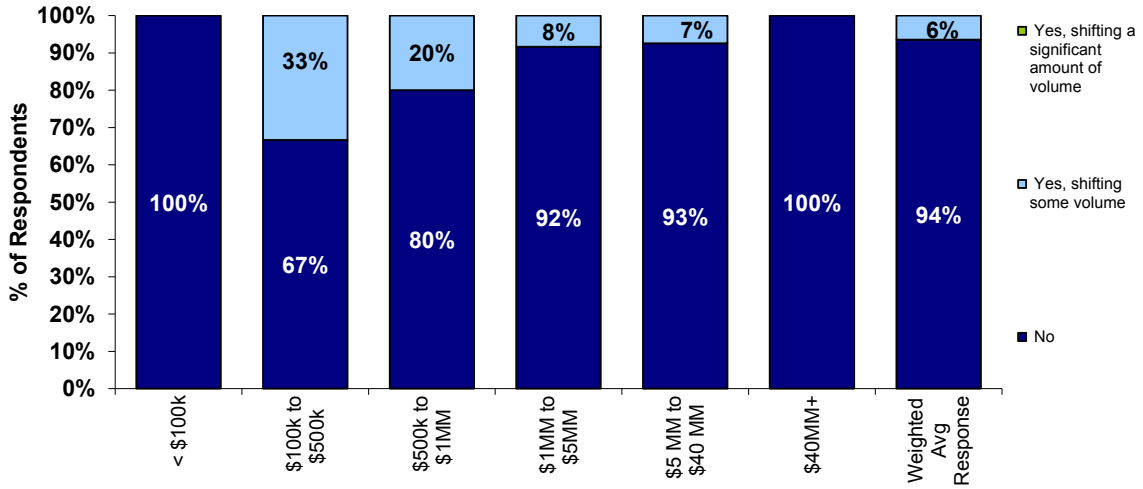
Source: Morgan Stanley Freight Pulse Surveys

Shipper Modal Shift Statistics – LTL to Airfreight

LTL to Airfreight



LTL to Airfreight - Modal Shift by Spend

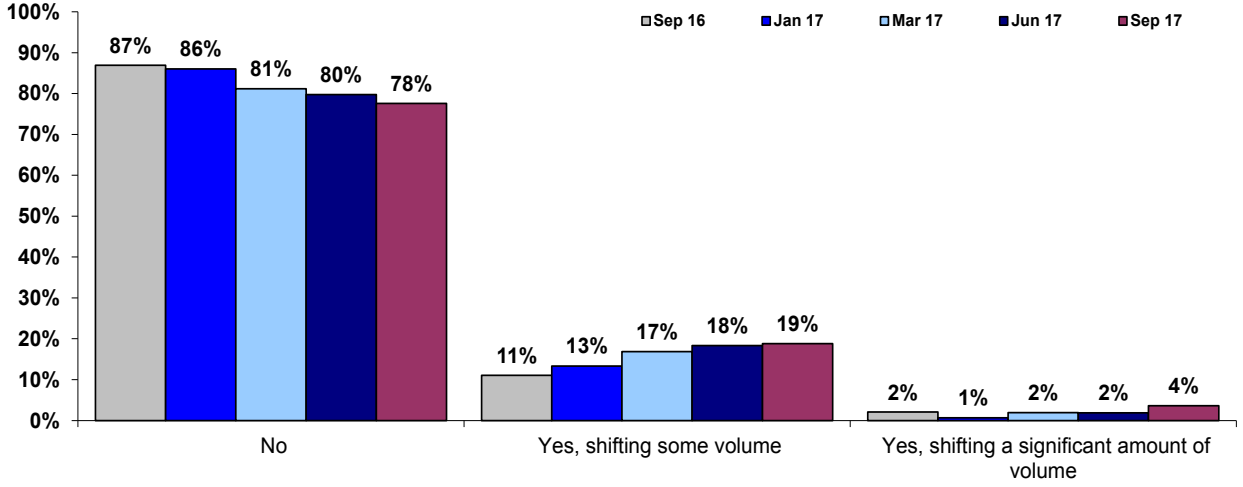


Ravi Shanker, (212) 761-6350, Ravi.Shanker@morganstanley.com

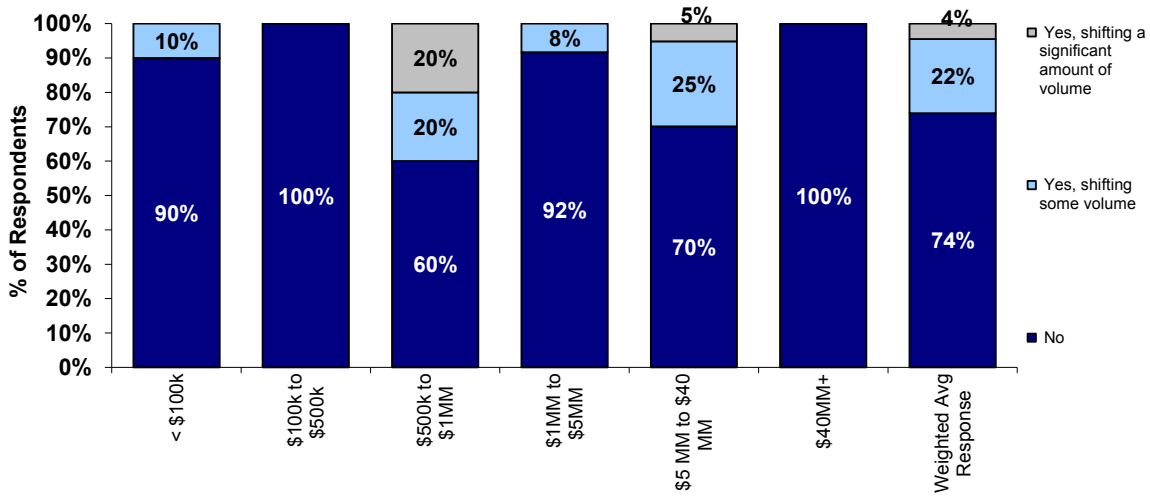
Source: Morgan Stanley Freight Pulse Surveys

Shipper Modal Shift Statistics – Truckload to LTL

Truckload to LTL



Truckload to LTL - Modal Shift by Spend

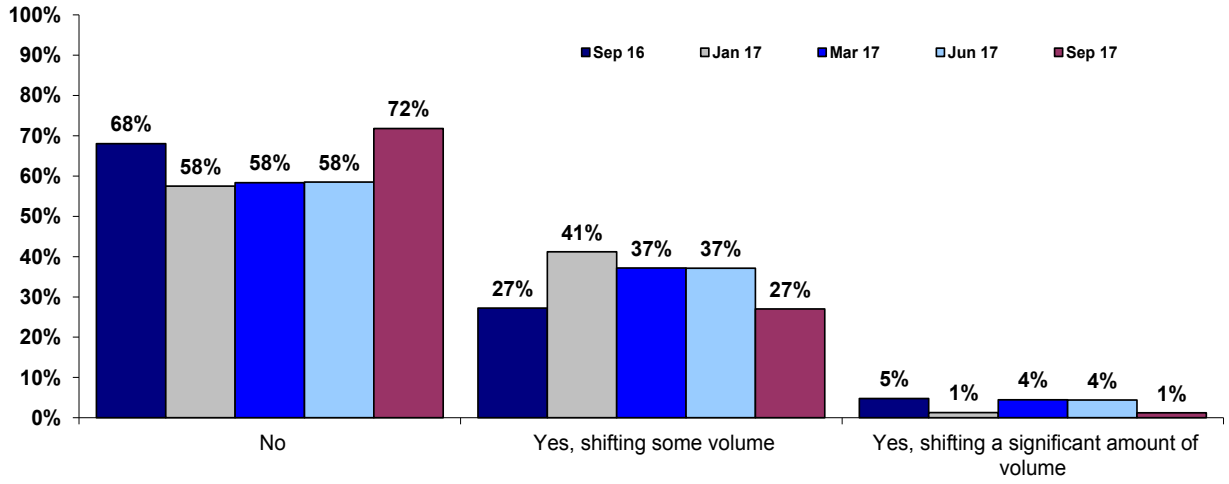


Ravi Shanker, (212) 761-6350, Ravi.Shanker@morganstanley.com

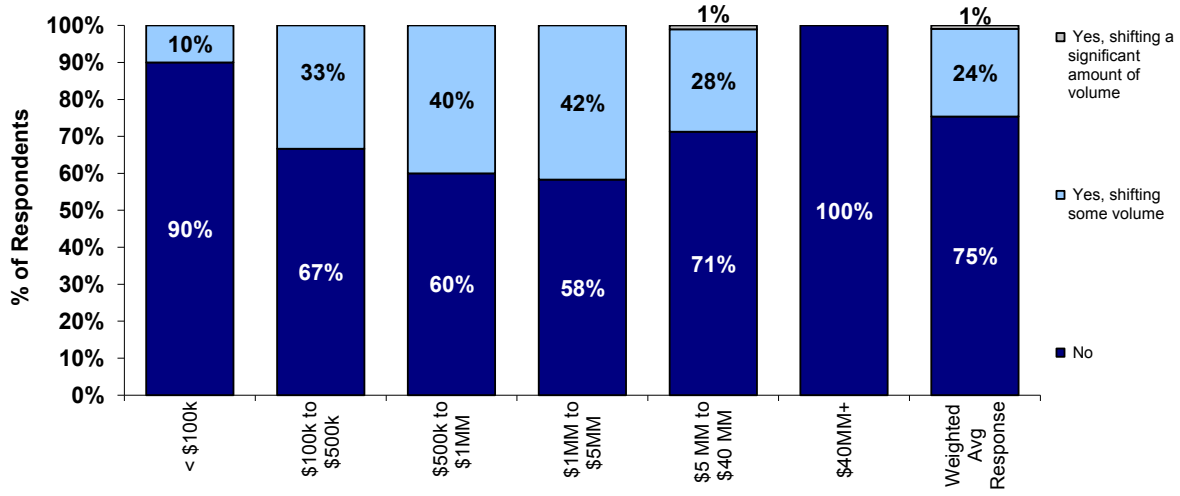
Source: Morgan Stanley Freight Pulse Surveys

Shipper Modal Shift Statistics – LTL to Truckload

LTL to Truckload



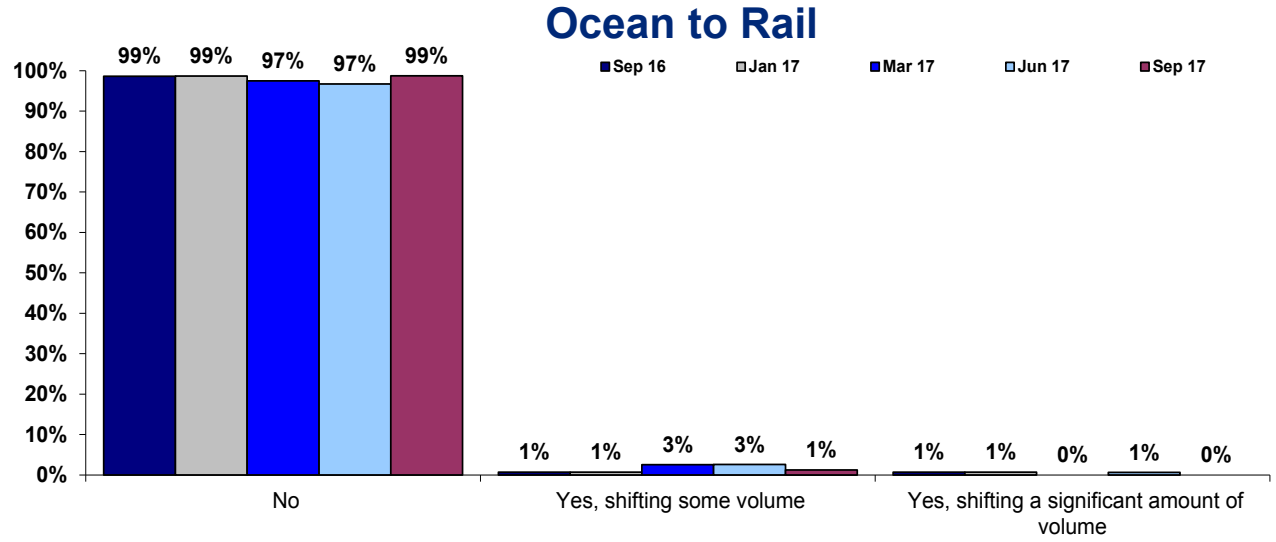
LTL to Truckload - Modal Shift by Spend

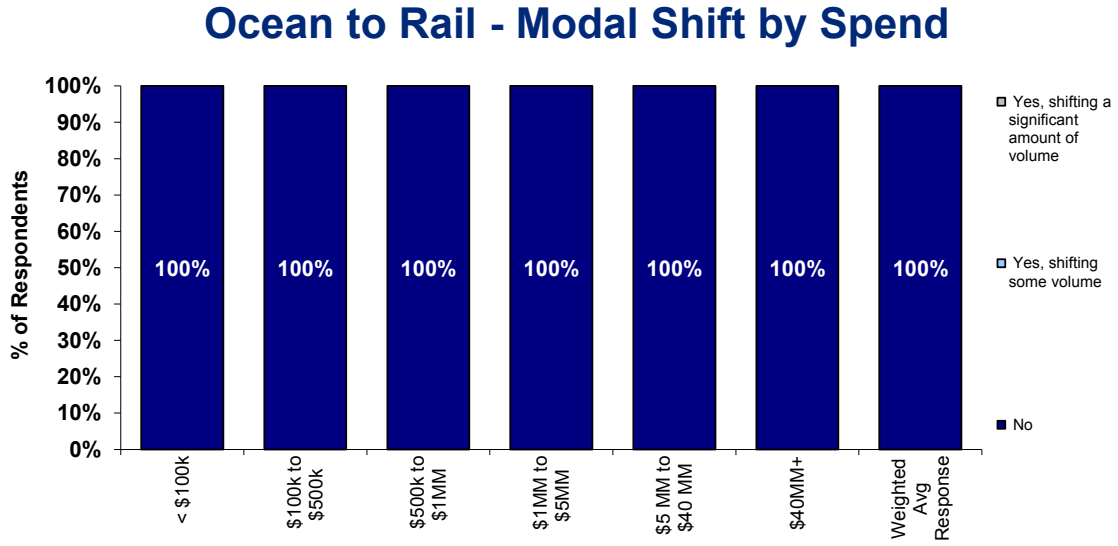


Ravi Shanker, (212) 761-6350, Ravi.Shanker@morganstanley.com

Source: Morgan Stanley Freight Pulse Surveys

Shipper Modal Shift Statistics – Ocean to Rail



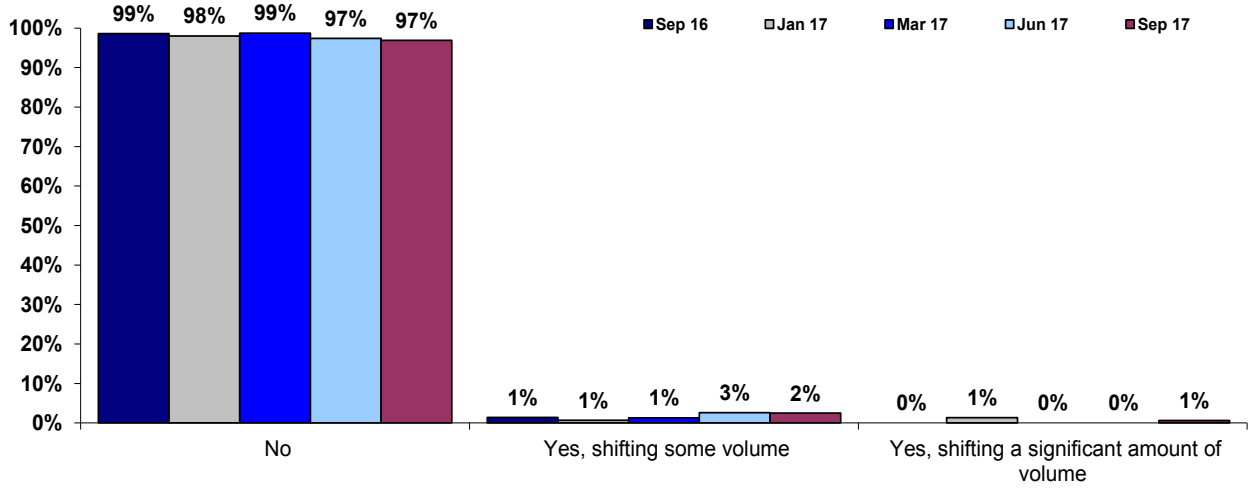


Ravi Shanker, (212) 761-6350, Ravi.Shanker@morganstanley.com

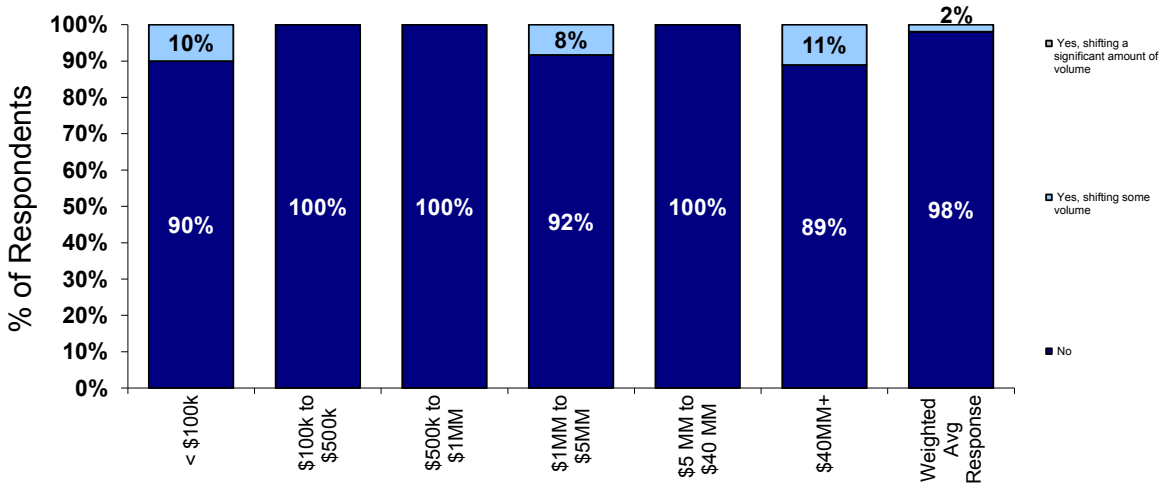
Source: Morgan Stanley Freight Pulse Surveys

Shipper Modal Shift Statistics – Rail to Ocean

Rail to Ocean



Rail to Ocean - Modal Shift by Spend

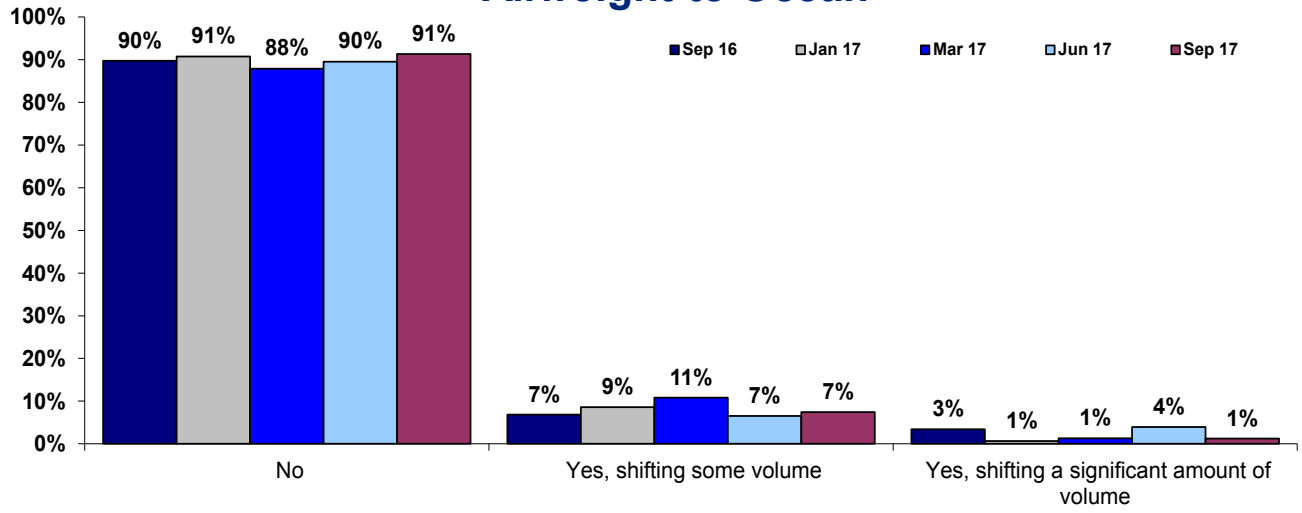


Ravi Shanker, (212) 761-6350, Ravi.Shanker@morganstanley.com

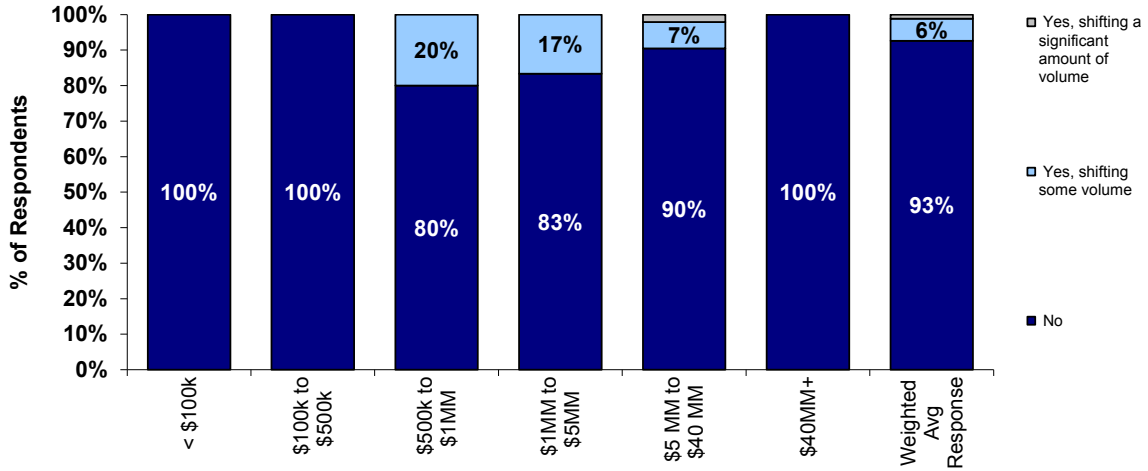
Source: Morgan Stanley Freight Pulse Surveys

Shipper Modal Shift Statistics – Airfreight to Ocean

Airfreight to Ocean



Airfreight to Ocean - Modal Shift by Spend

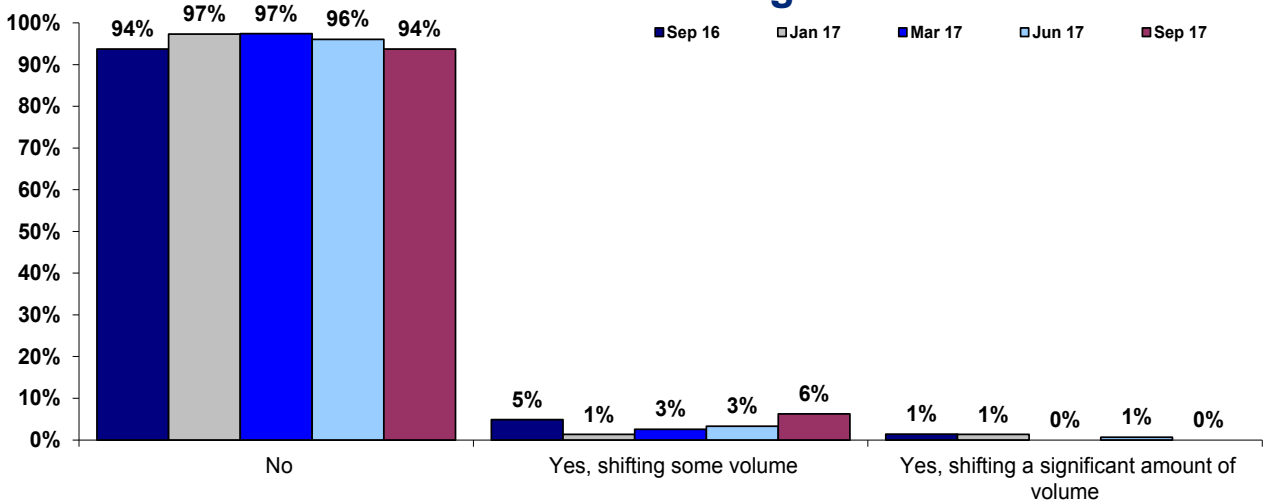


Ravi Shanker, (212) 761-6350, Ravi.Shanker@morganstanley.com

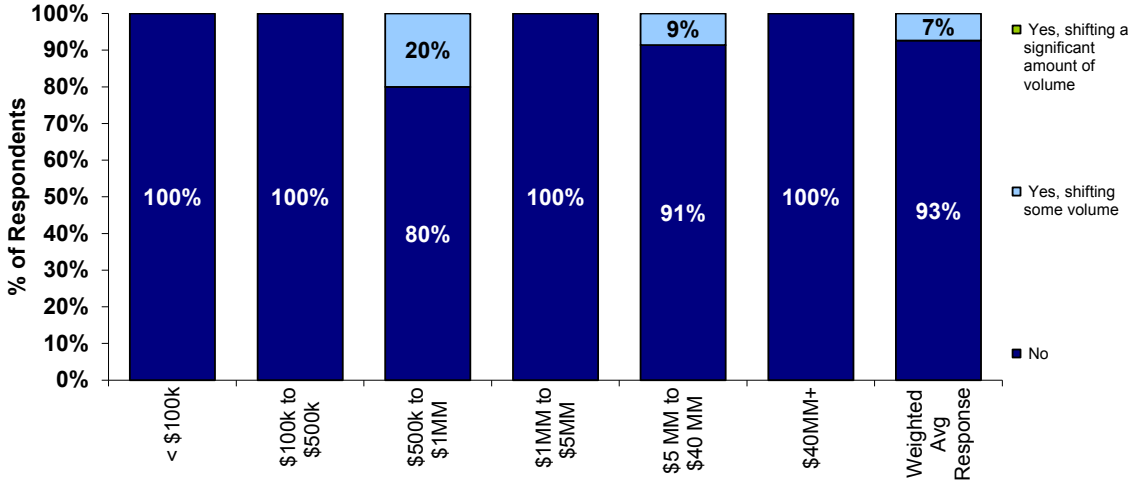
Source: Morgan Stanley Freight Pulse Surveys

Shipper Modal Shift Statistics – Ocean to Airfreight

Ocean to Airfreight



Ocean to Airfreight - Modal Shift by Spend

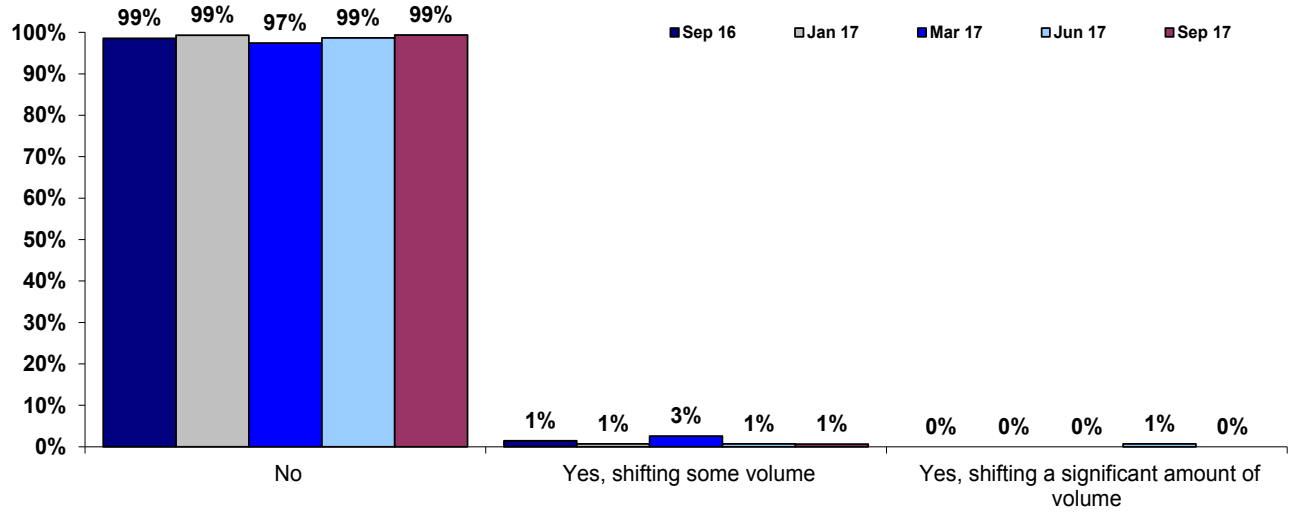


Ravi Shanker, (212) 761-6350, Ravi.Shanker@morganstanley.com

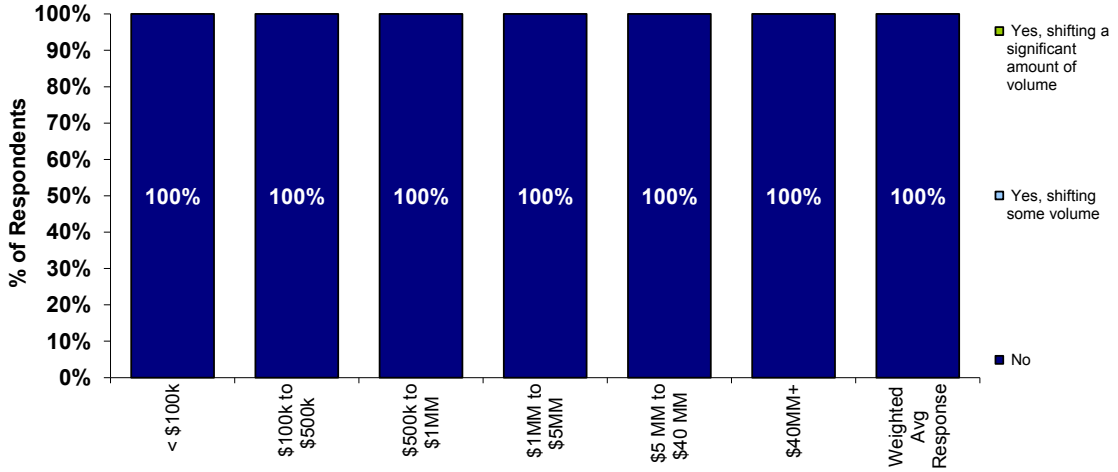
Source: Morgan Stanley Freight Pulse Surveys

Shipper Modal Shift Statistics – Barge to Rail

Barge to Rail



Barge to Rail - Modal Shift by Spend

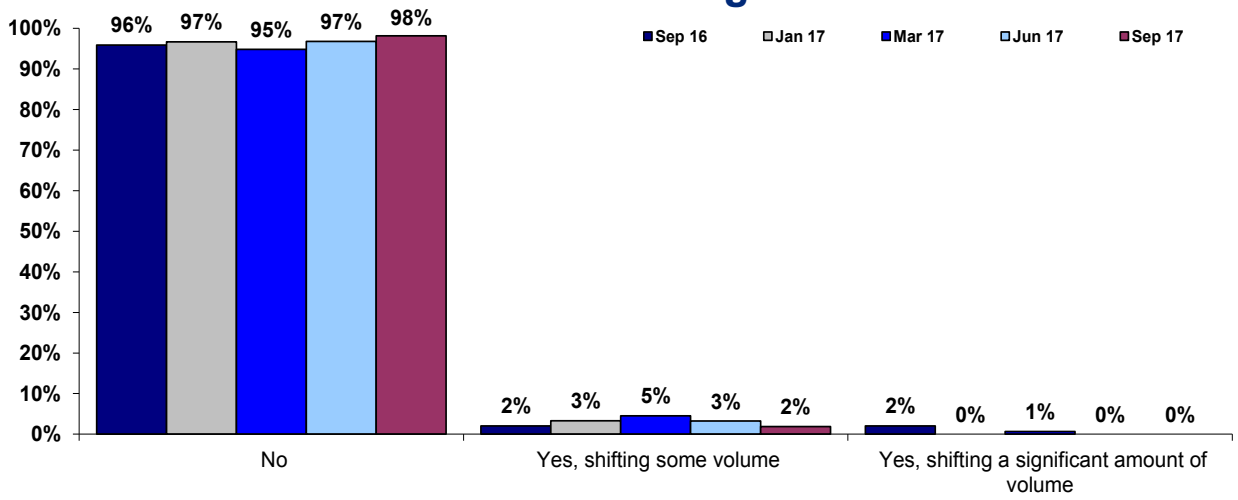


Ravi Shanker, (212) 761-6350, Ravi.Shanker@morganstanley.com

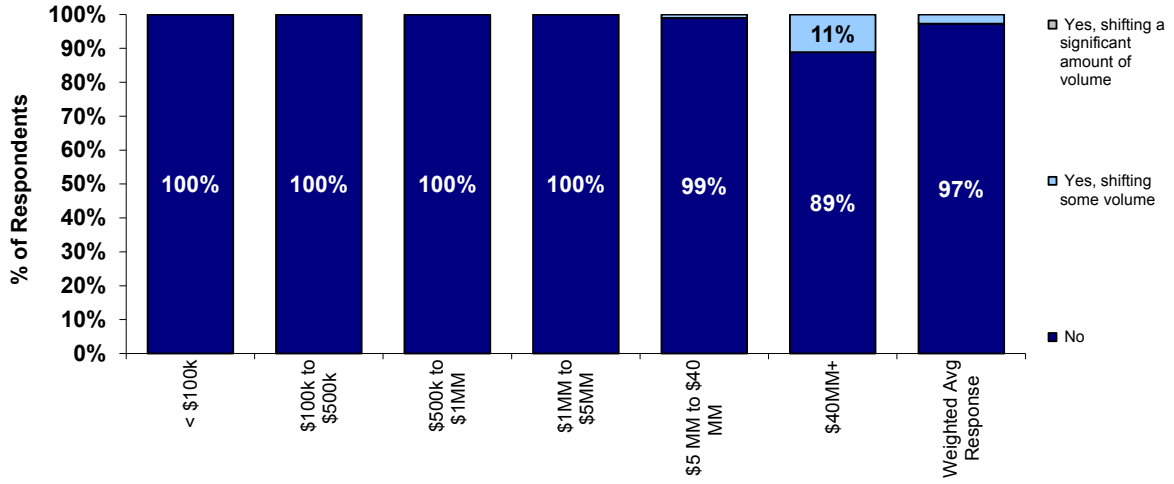
Source: Morgan Stanley Freight Pulse Surveys

Shipper Modal Shift Statistics – Rail to Barge

Rail to Barge



Rail to Barge - Modal Shift by Spend



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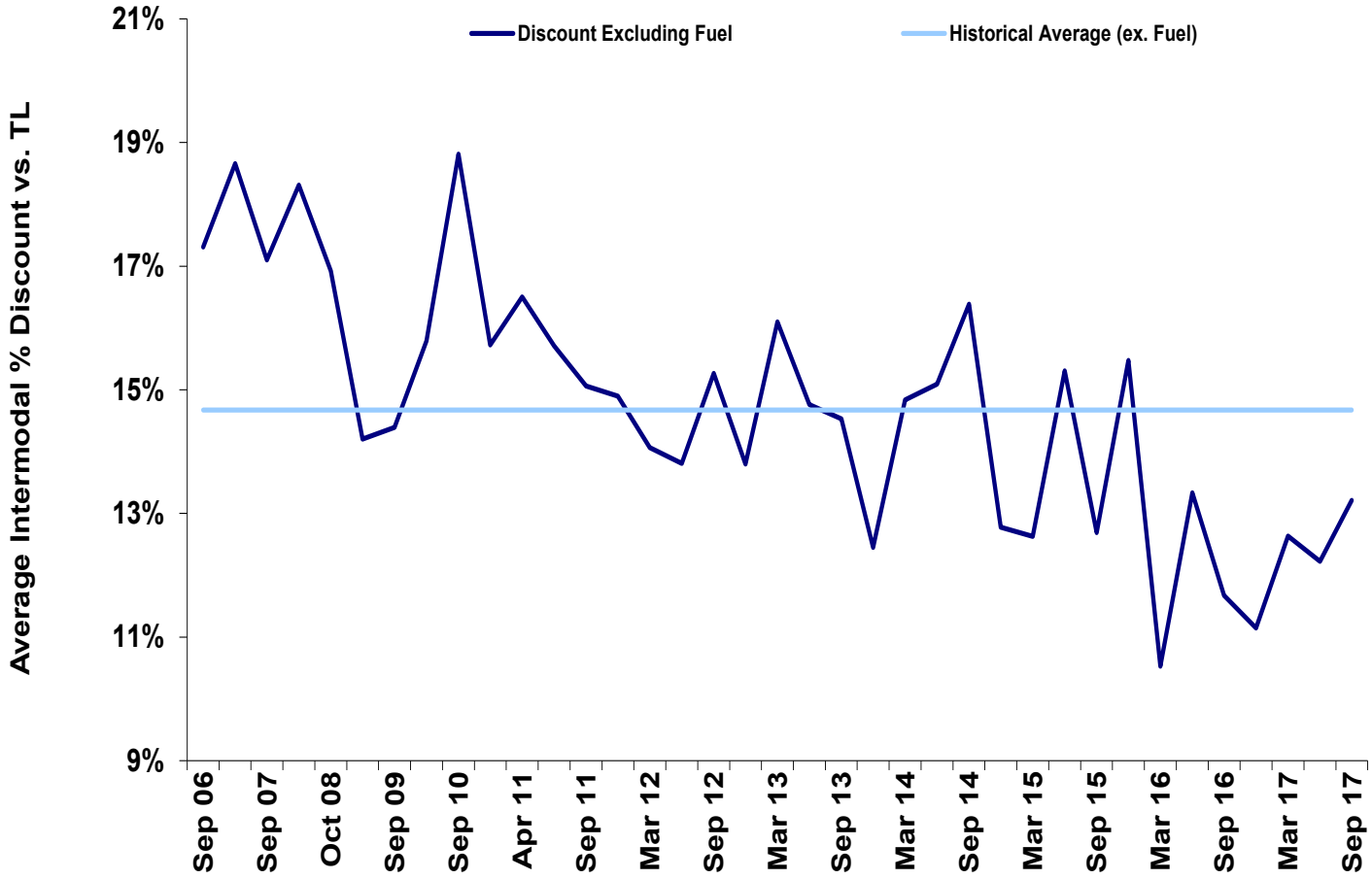
Source: Morgan Stanley Freight Pulse Surveys

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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Source: Morgan Stanley Freight Pulse Surveys

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3. Modal Shift
4. Intermodal vs. Truck

Part 2: Macro Trends

1. Inventories and Orders
2. Economic Outlook

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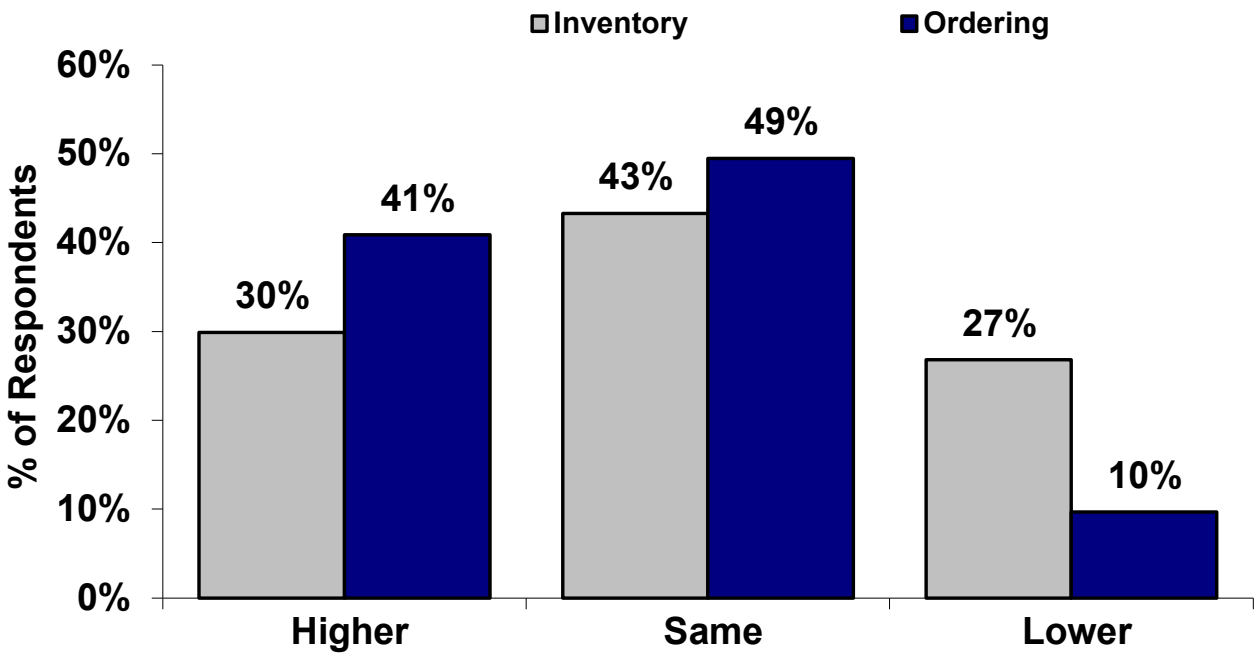
Shipper Inventory and Stocking Trends

Shipper Inventories and Orders Relative to Last Year



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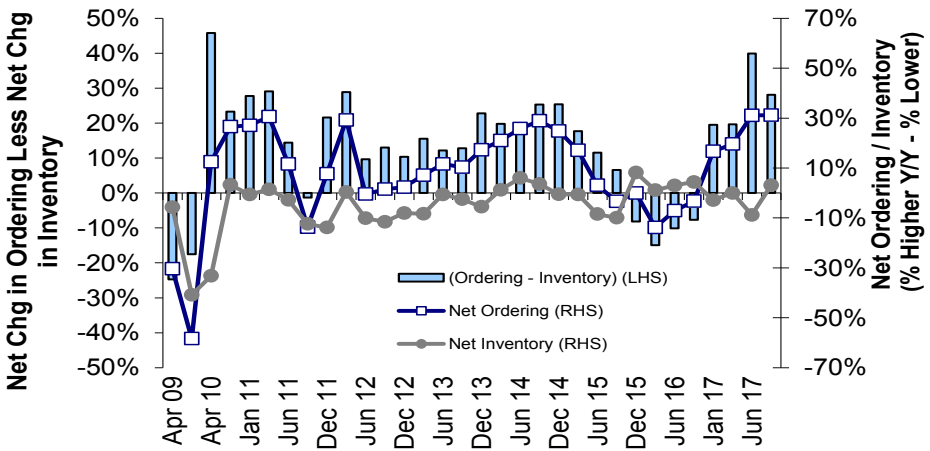
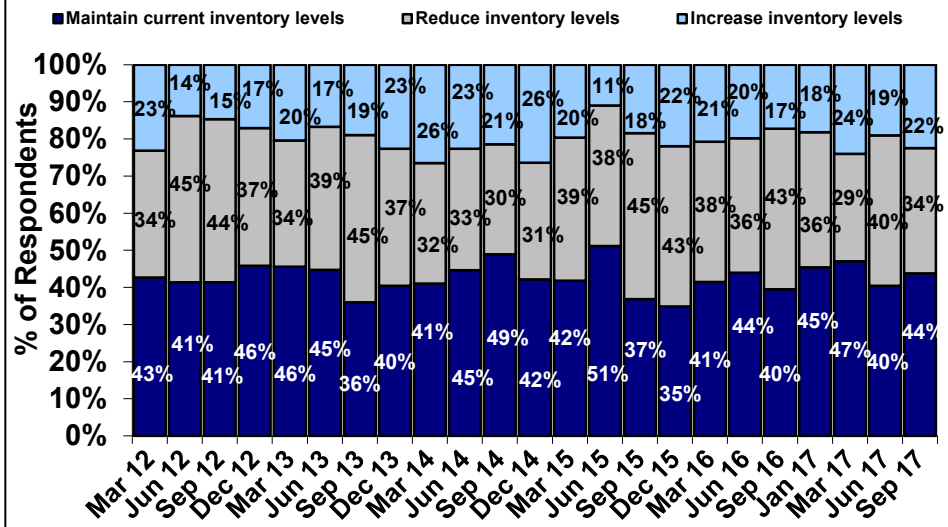
Source: Morgan Stanley Freight Pulse Surveys

Assessing Restocking Potential: Net Inventory Trends and Inventory Plans

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



Shippers' Inventory Plans



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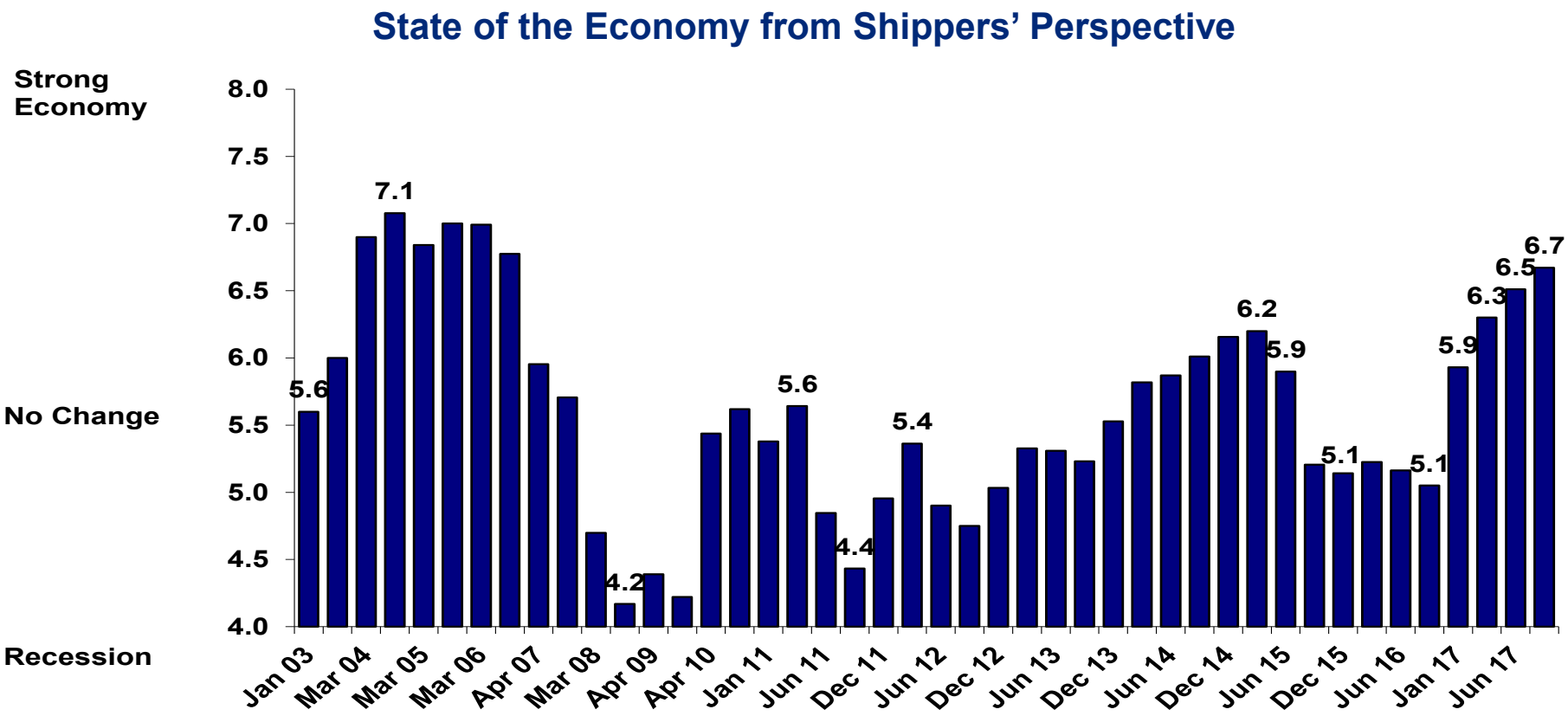
Source: Morgan Stanley Freight Pulse Surveys

Economic Outlook: Average Across All Shippers



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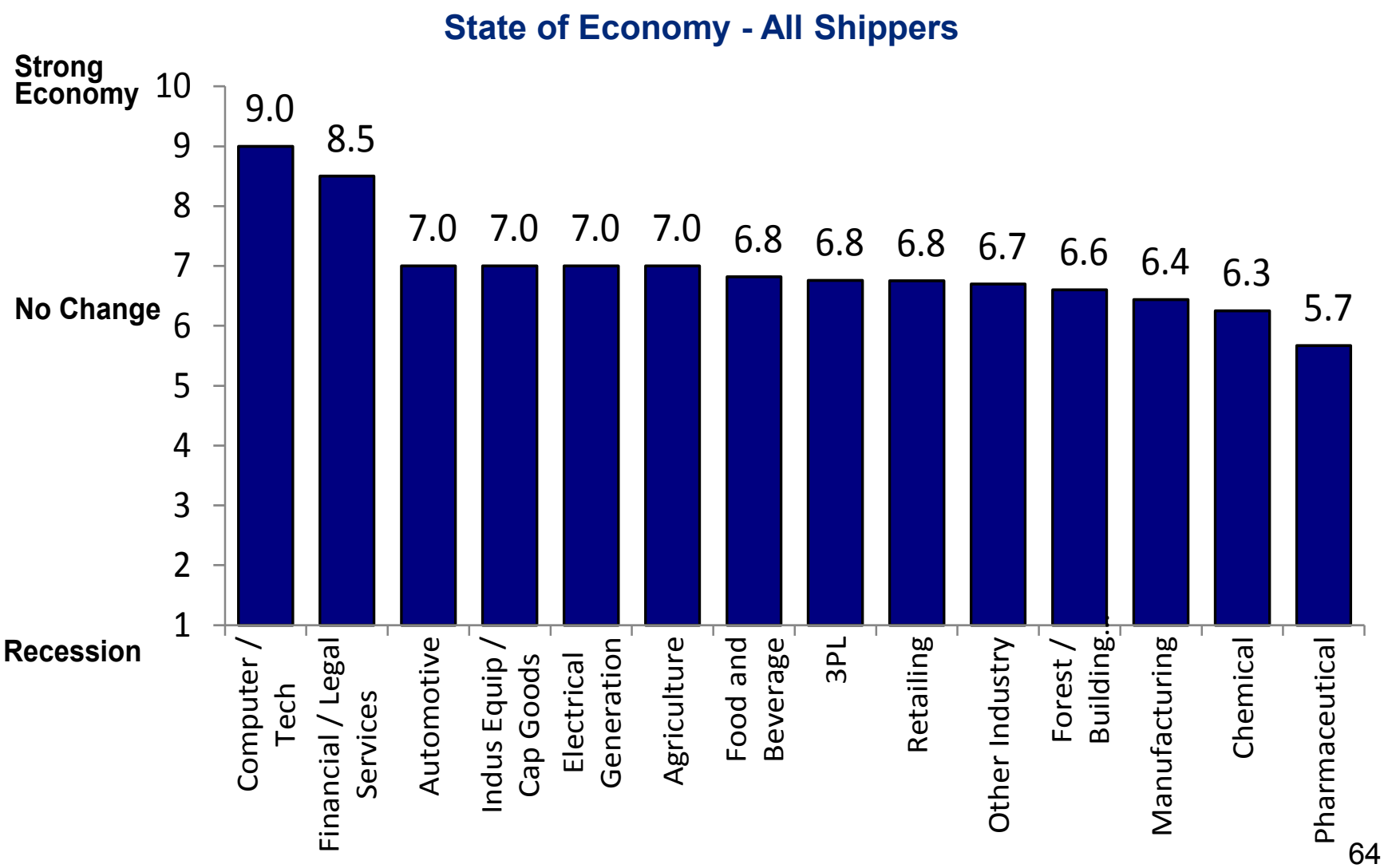
Source: Morgan Stanley Freight Pulse Surveys

Economic Outlook: Granular View by Spend and Shipper Industry



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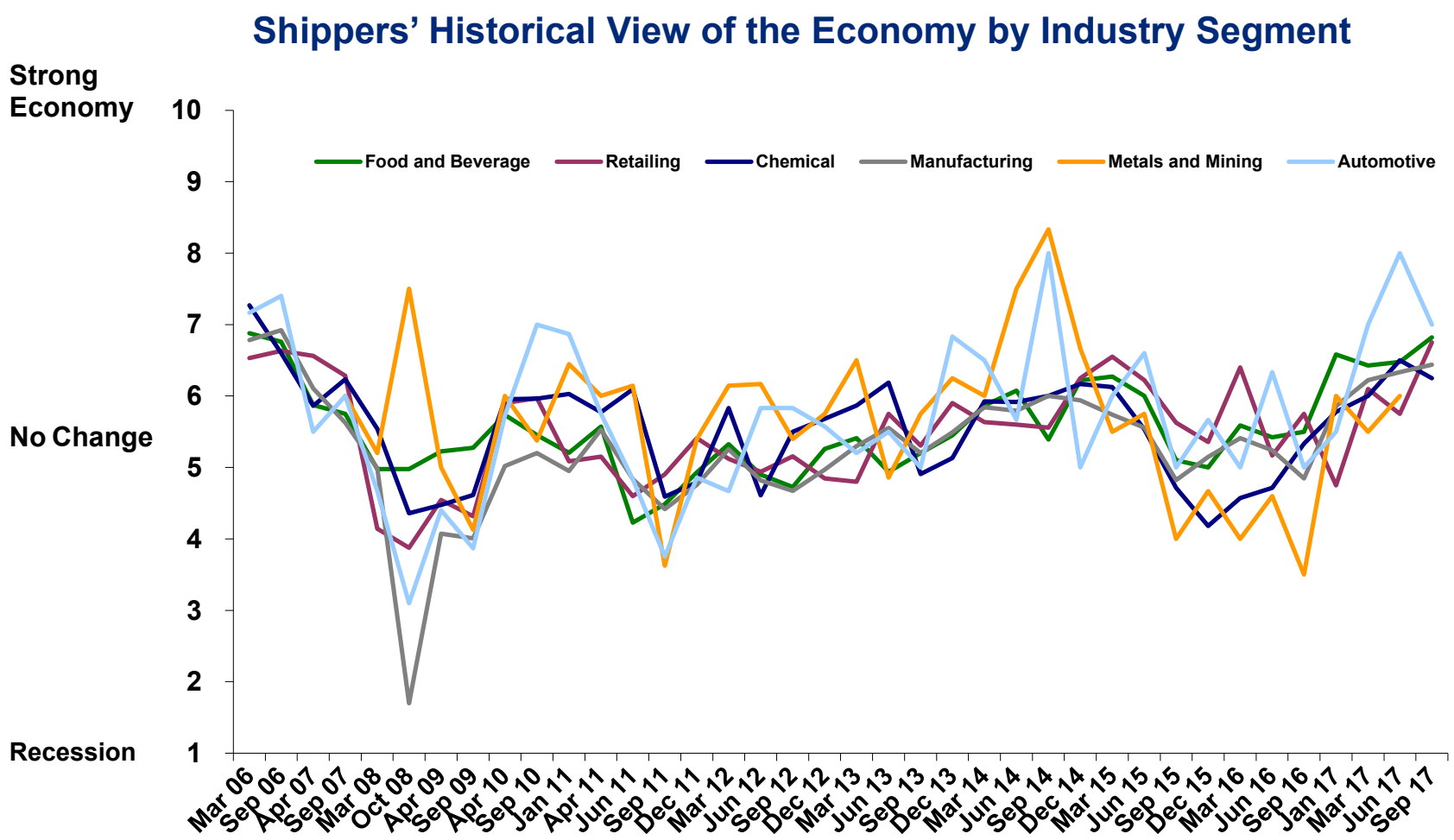
Source: Morgan Stanley Freight Pulse Surveys

Economic Outlook: View by Industry Over Time



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Source: Morgan Stanley Freight Pulse Surveys

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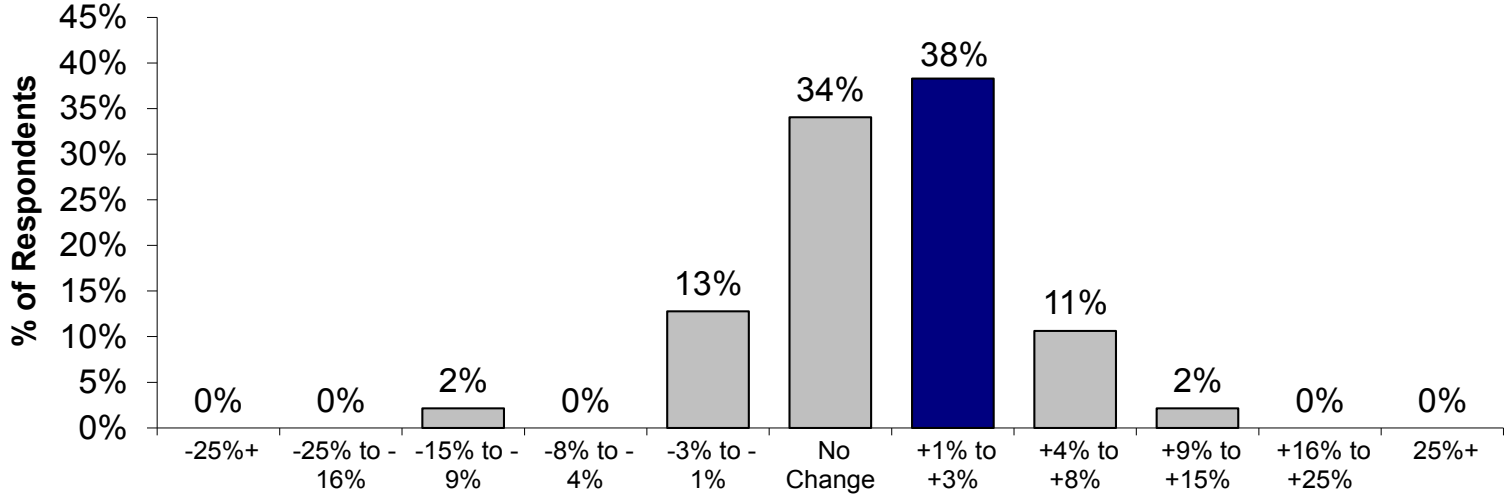
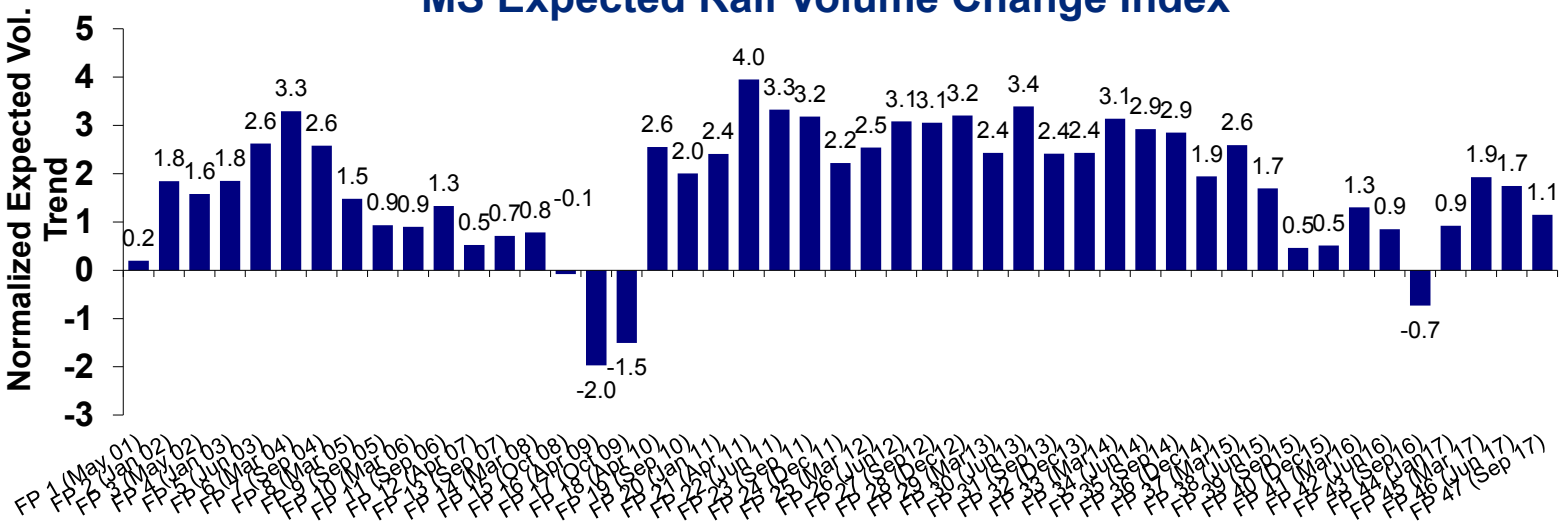
Rail Volume Trends: Forward 6 Month YoY Volume Expectations

YoY Volume Growth Expectations for Next 6 Mo. by Range



MS Expected Rail Volume Change Index



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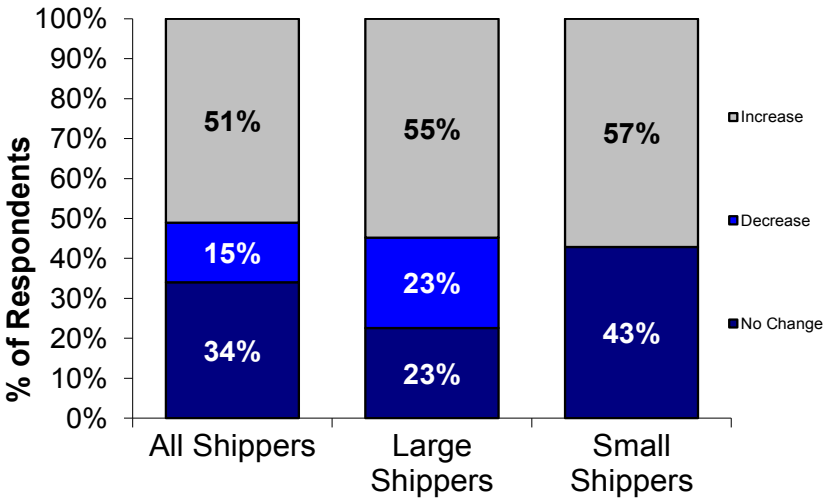
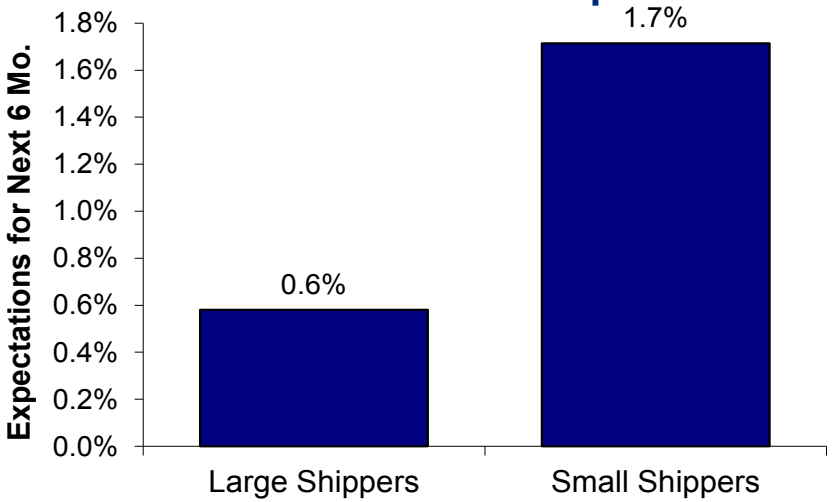
Source: Morgan Stanley Freight Pulse Surveys

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

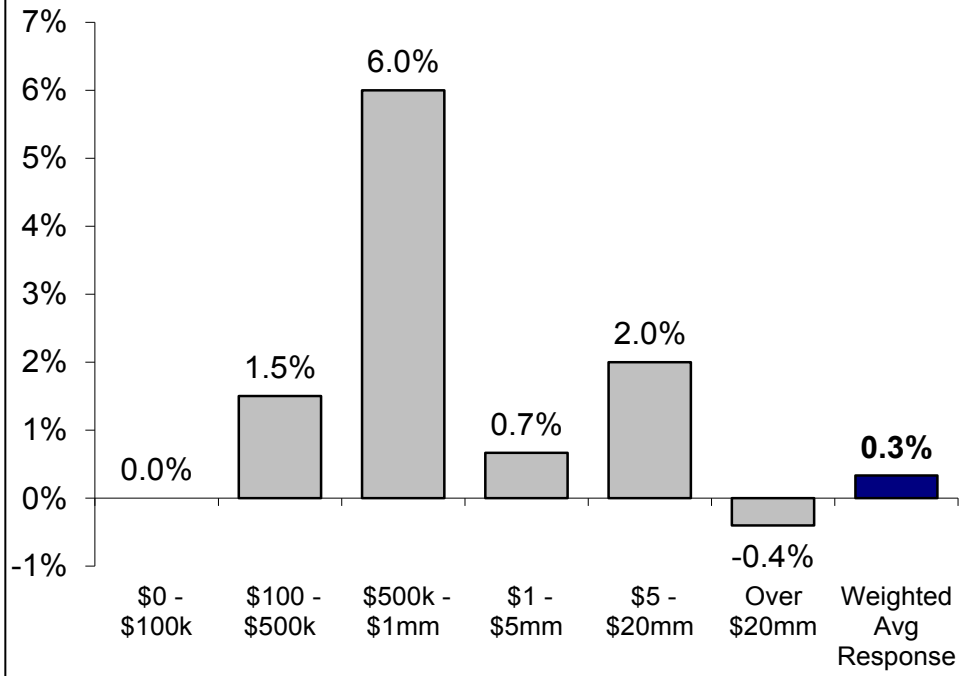
YoY Volume Growth Expectations



YoY Volume Growth Expectations



6 Mo. YoY Volume Growth Expectation by Spend



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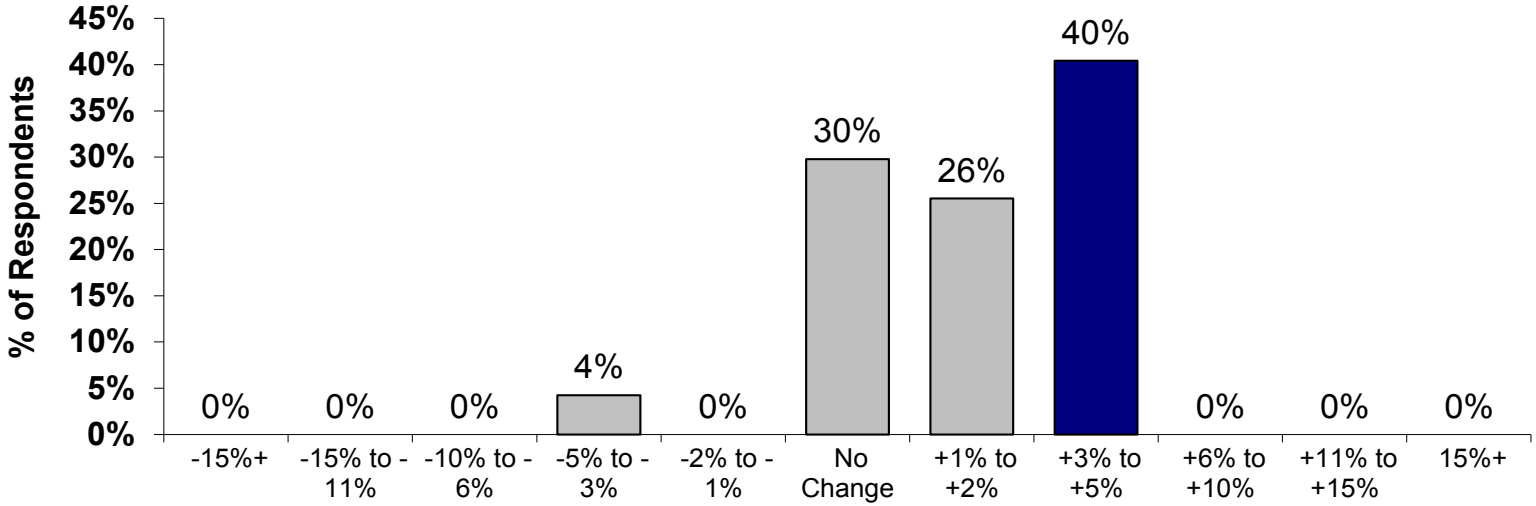
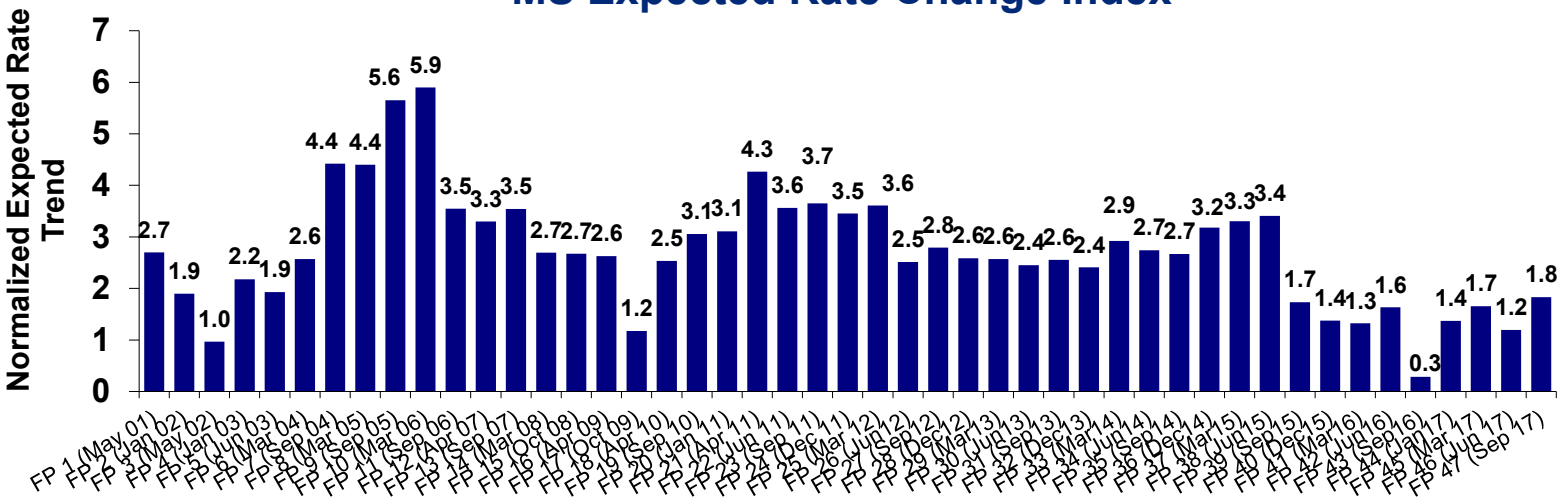
Source: Morgan Stanley Freight Pulse Surveys

Rail Rate Trends: Forward 6 Month YoY Rate Expectations

YoY Rate Growth Expectations for Next 6 Mo. by Range



MS Expected Rate Change Index



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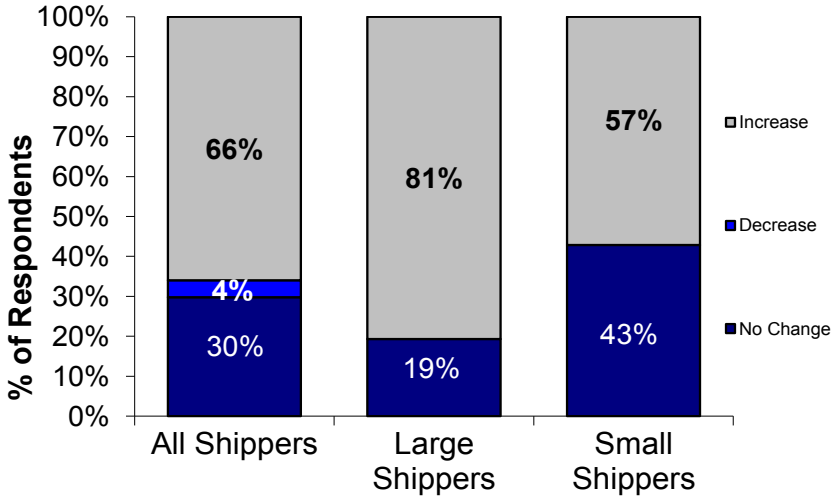
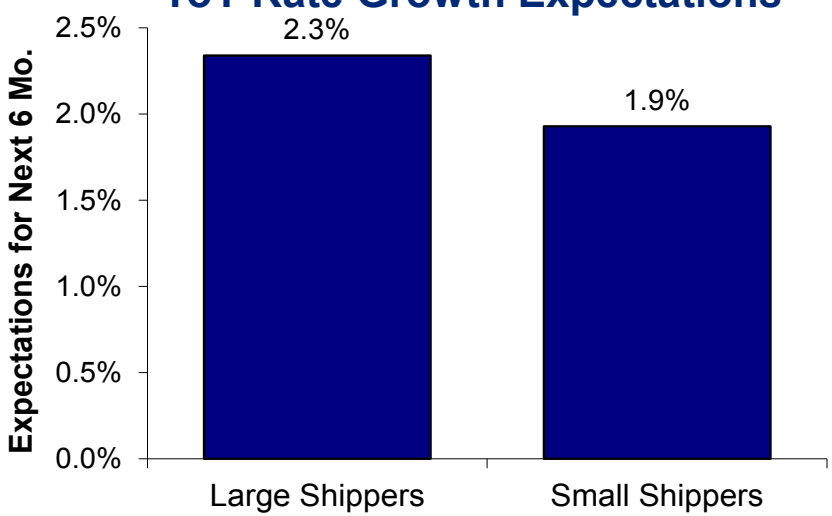
Source: Morgan Stanley Freight Pulse Surveys

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

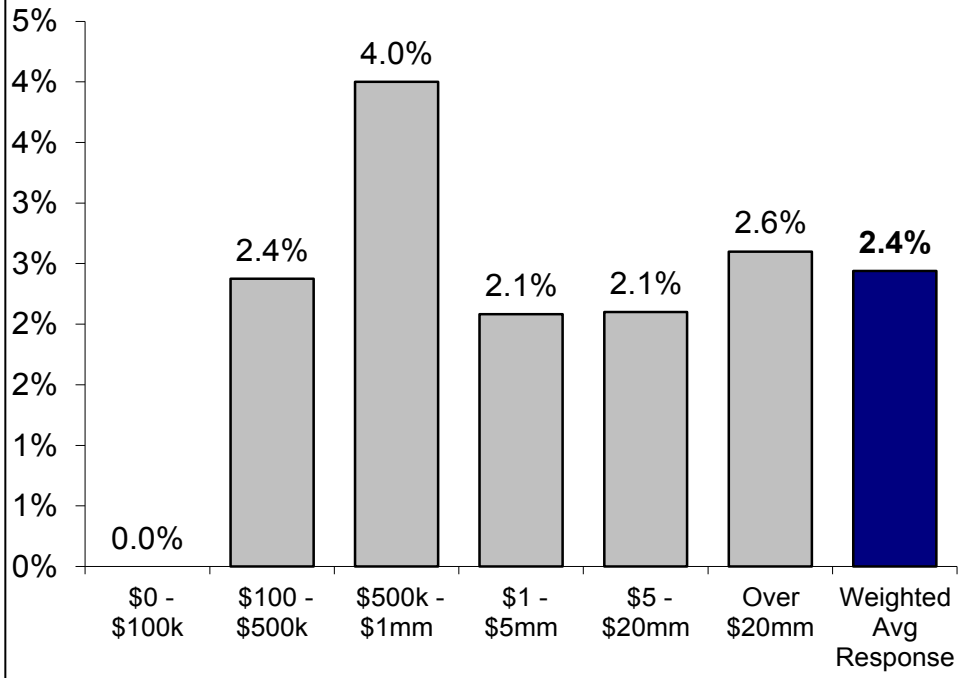
YoY Rate Growth Expectations



YoY Rate Growth Expectations



6 Mo. YoY Rate Growth Expectation by Spend



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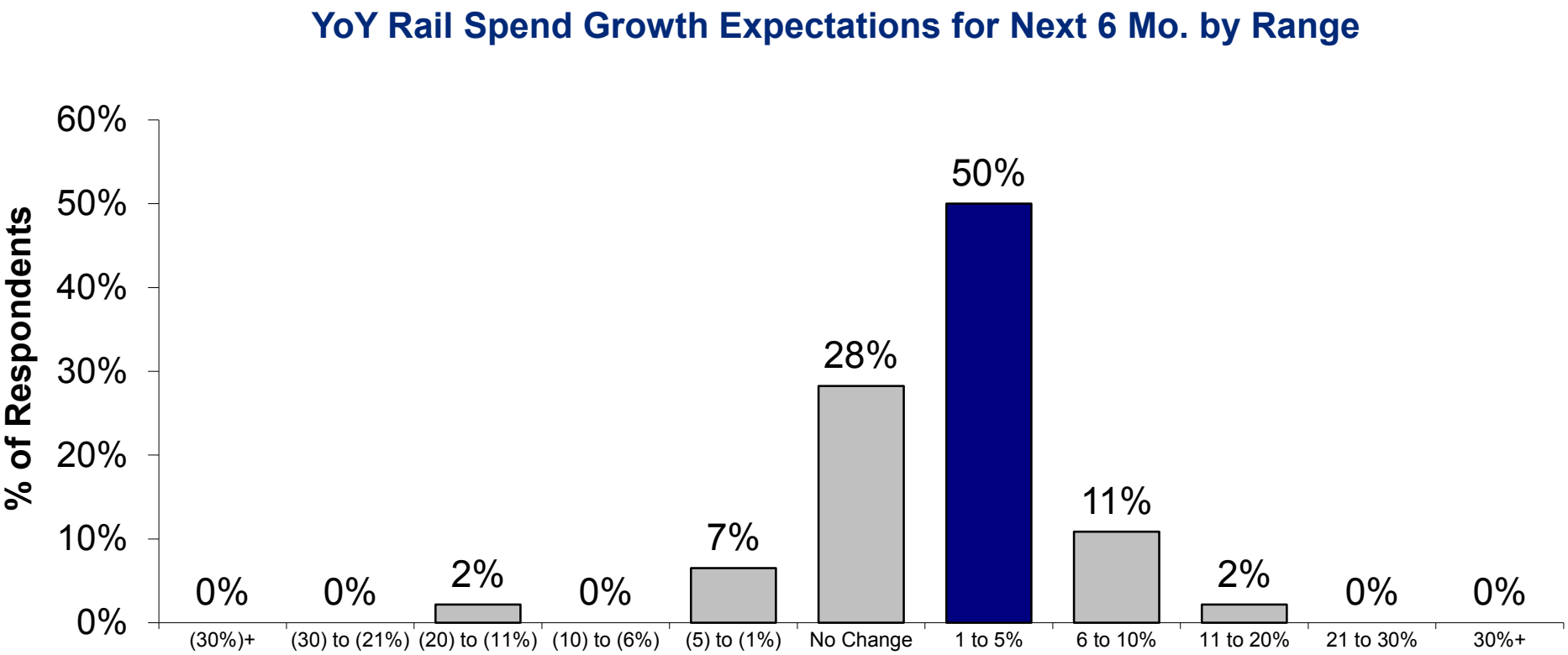
Source: Morgan Stanley Freight Pulse Surveys

Rail Spend Trends: Forward 6 Month YoY Spend Expectations



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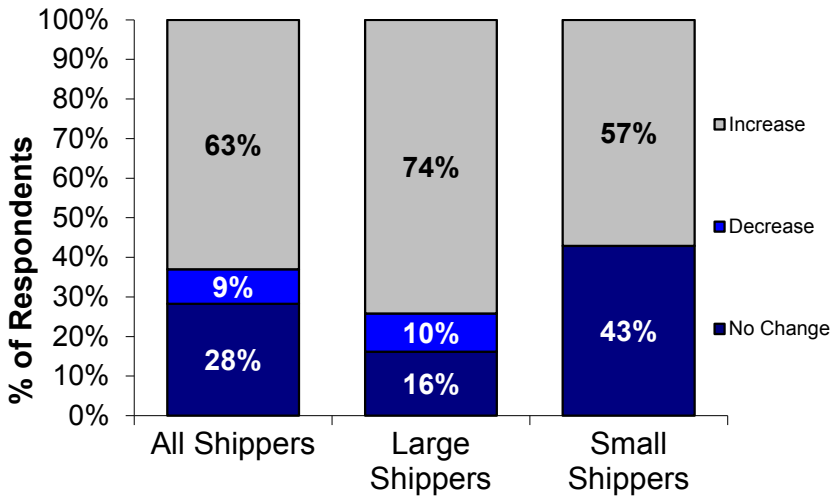
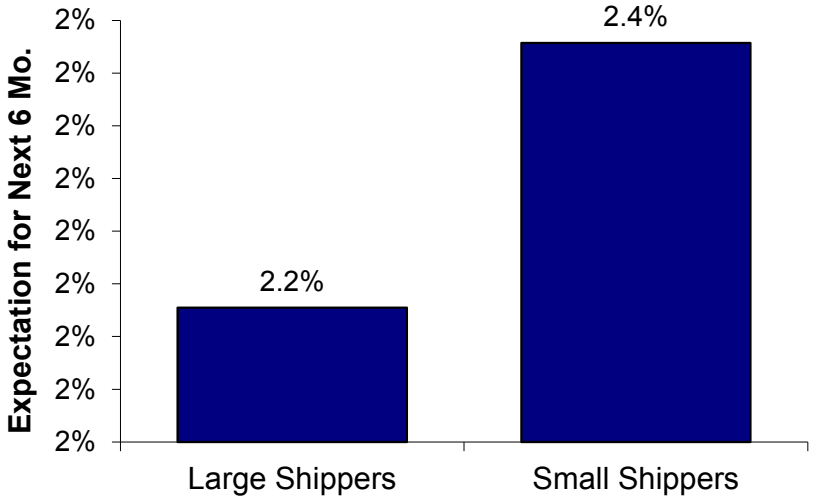
Source: Morgan Stanley Freight Pulse Surveys

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

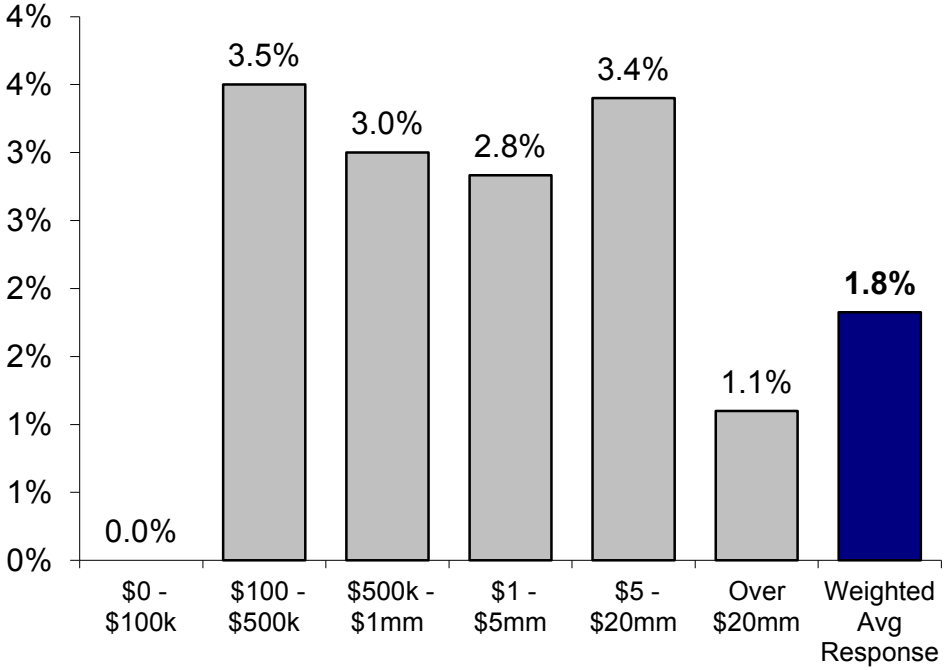
YoY Spend Growth Expectations



Spend Expectations by Size



6 Mo. YoY Spend Growth Expectation by Spend



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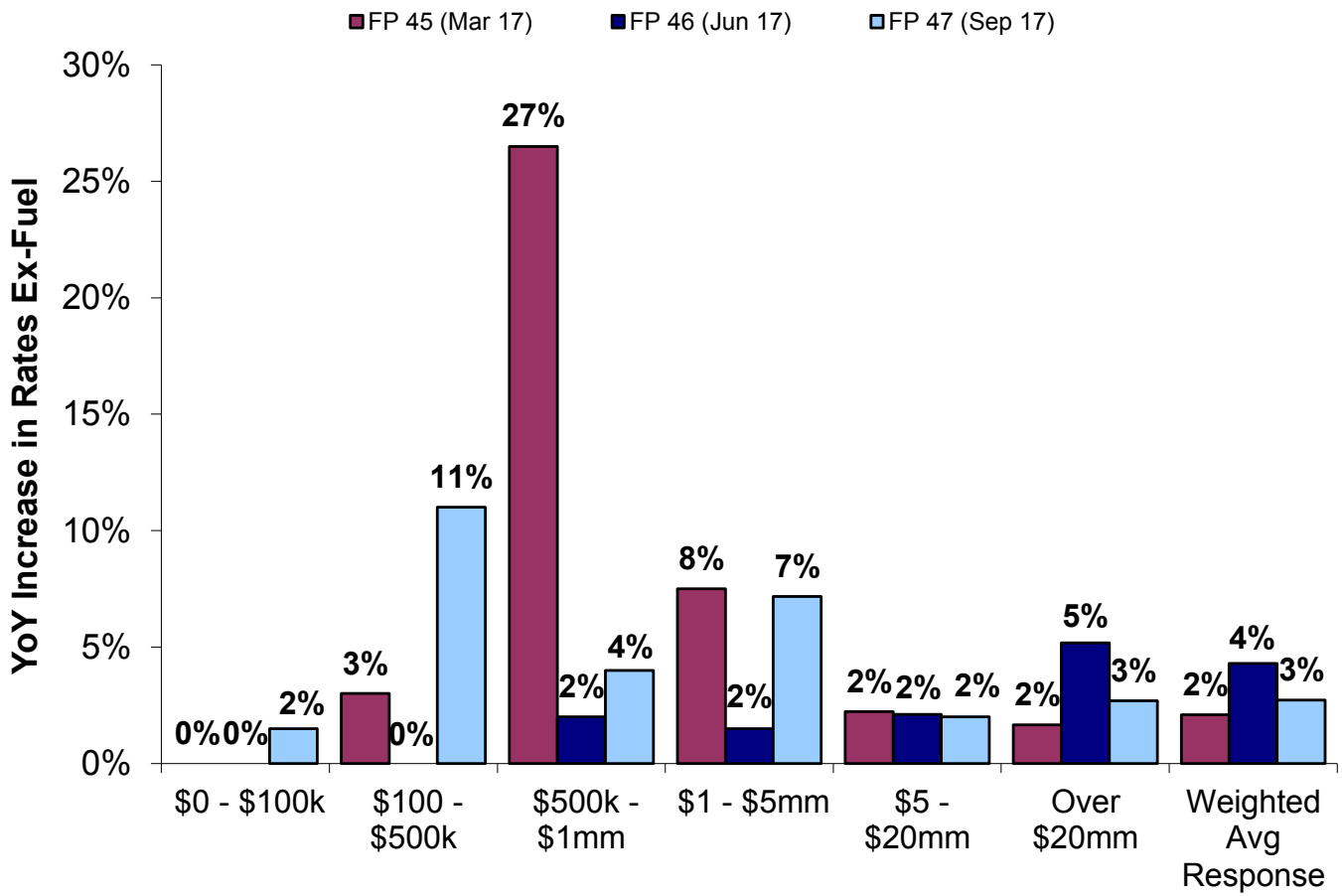
Source: Morgan Stanley Freight Pulse Surveys

Rail Pricing Trends: Renewal Rates

Expectations for Current Year YoY Pricing Ex-Fuel by Spend



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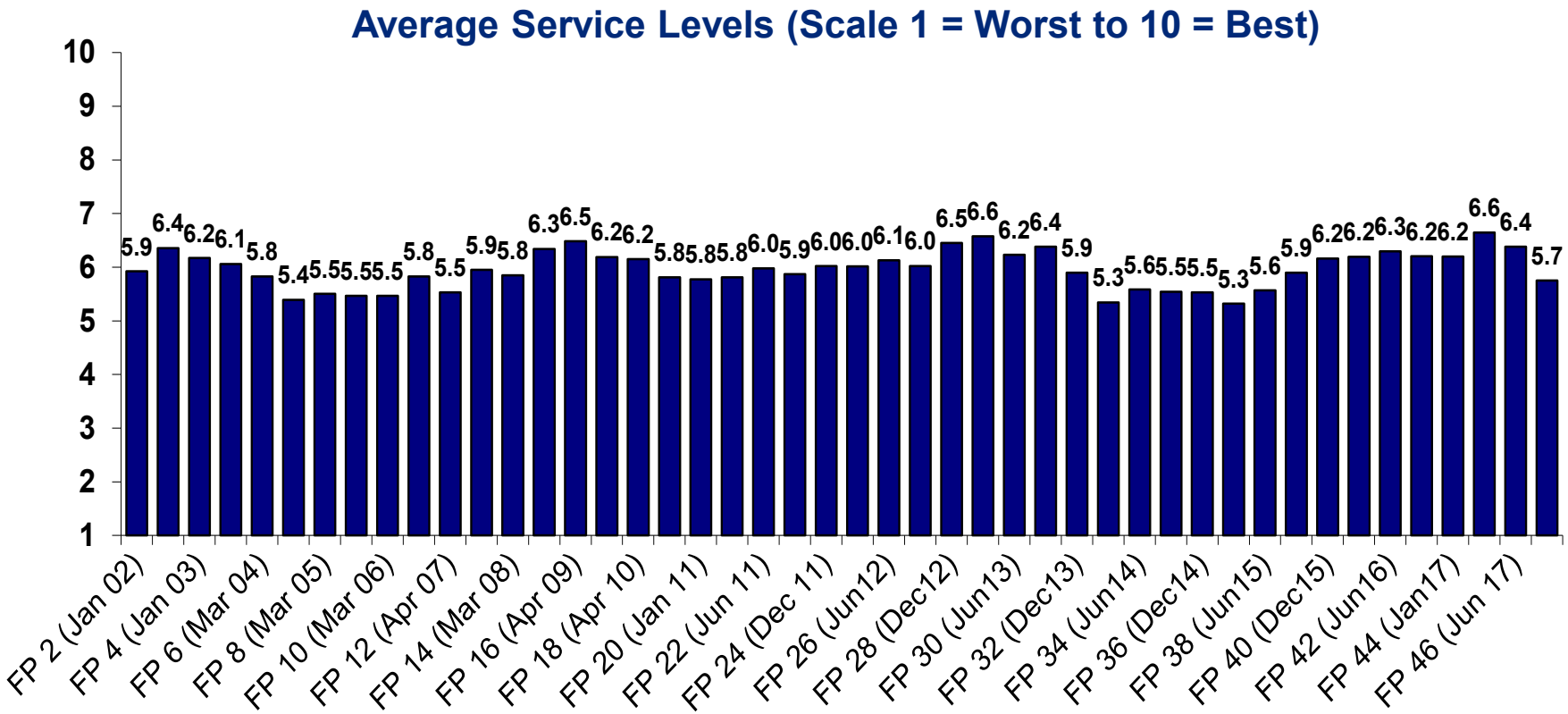
Source: Morgan Stanley Freight Pulse Surveys

Rail Service Trends: Average Service Levels



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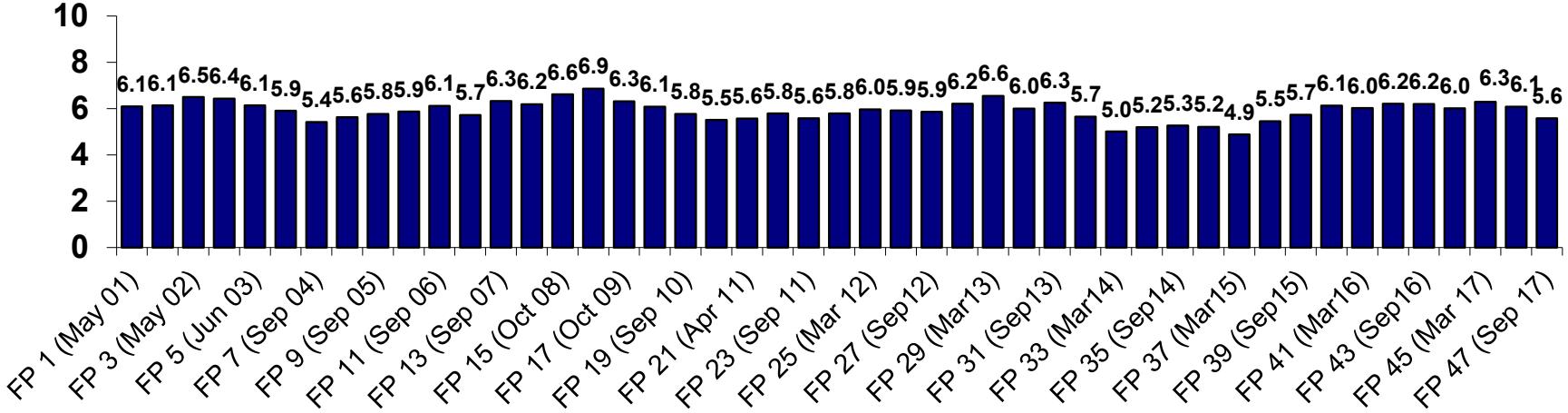
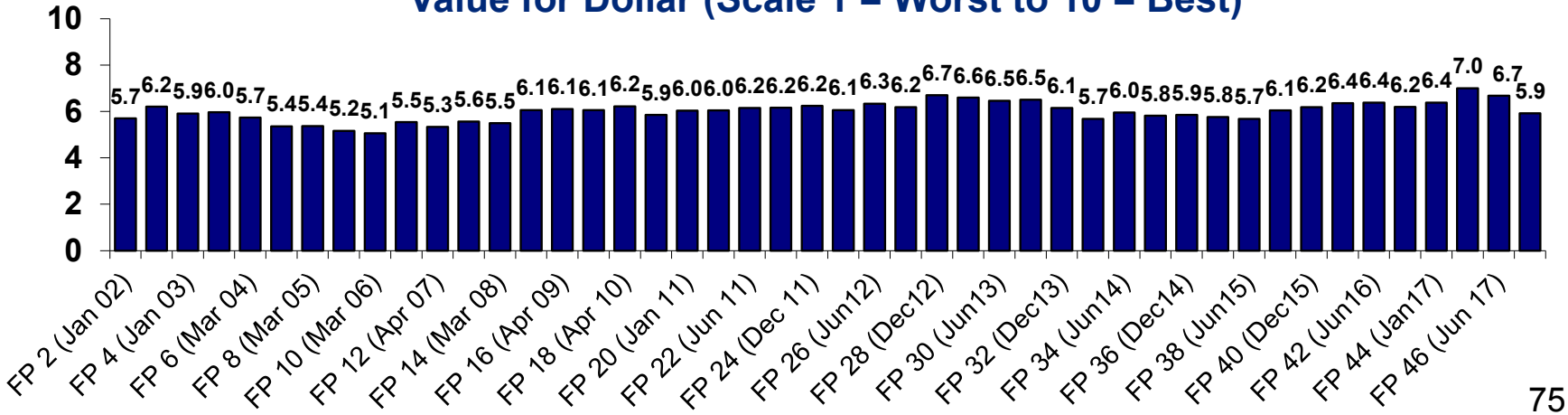
Source: Morgan Stanley Freight Pulse Surveys

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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5. Rate Cases
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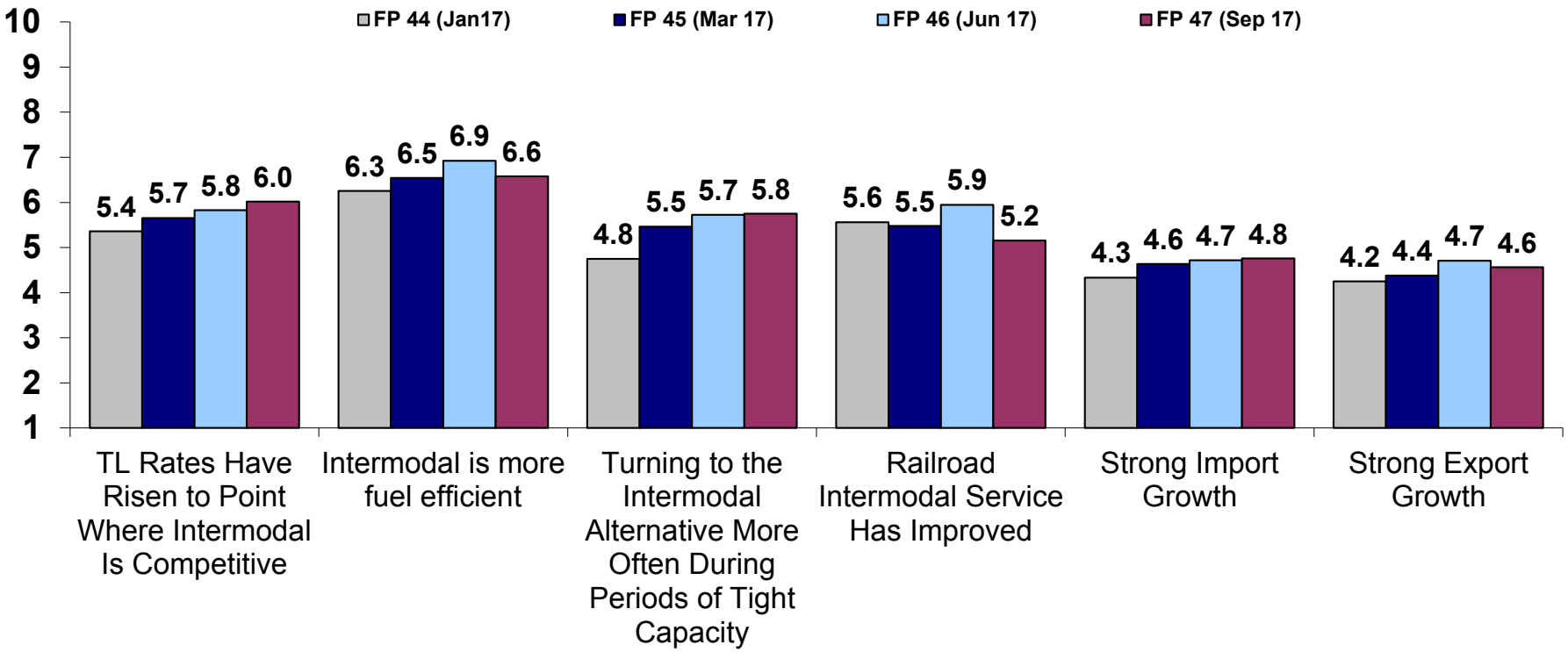
Intermodal: What Factors Are Impacting Your Use of Intermodal Most?

Avg. Response on Scale of 1 (Least Impact) to 10 (Most Impact)



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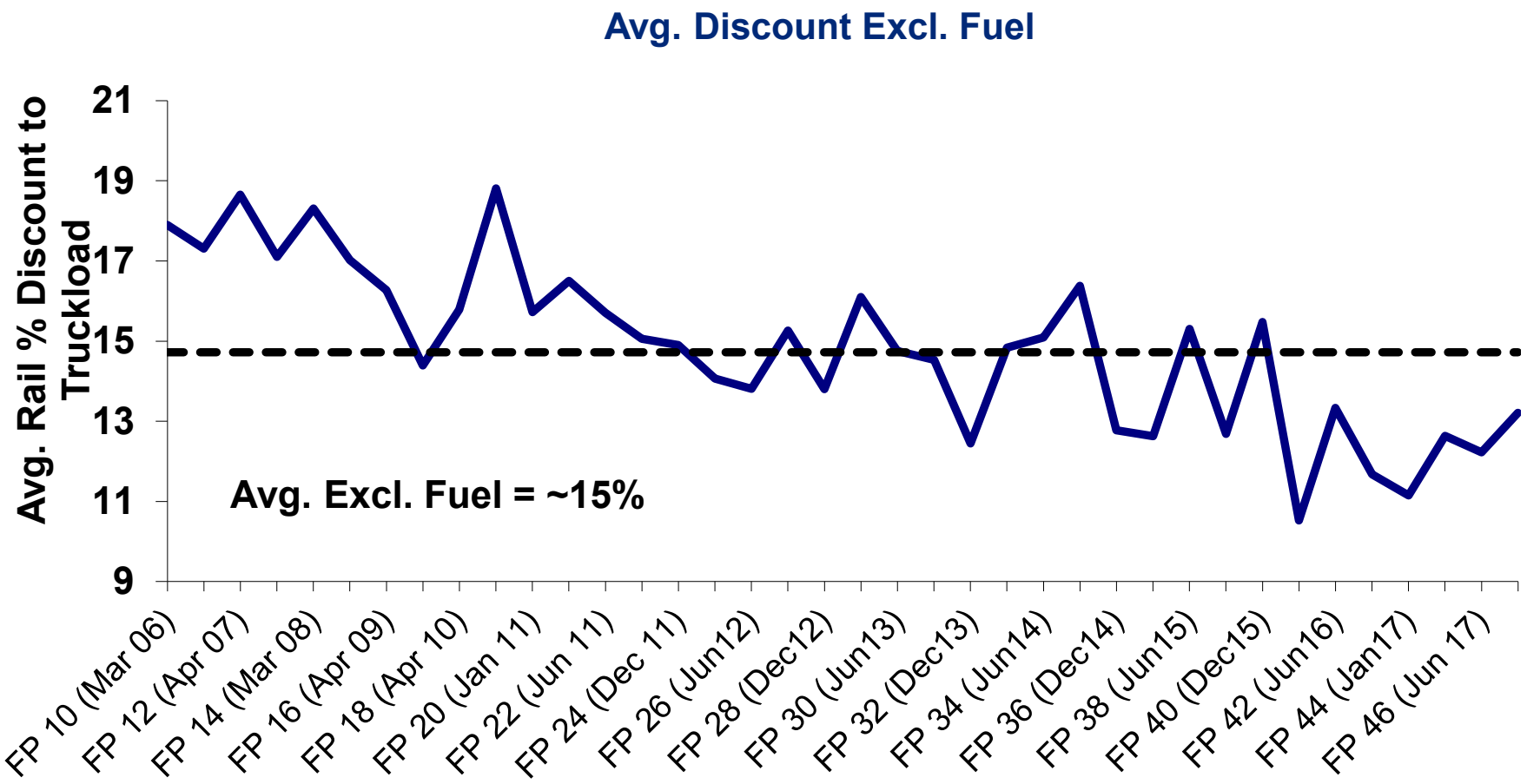
Source: Morgan Stanley Freight Pulse Surveys

Intermodal: Average % Discount to Truckload Carriers?



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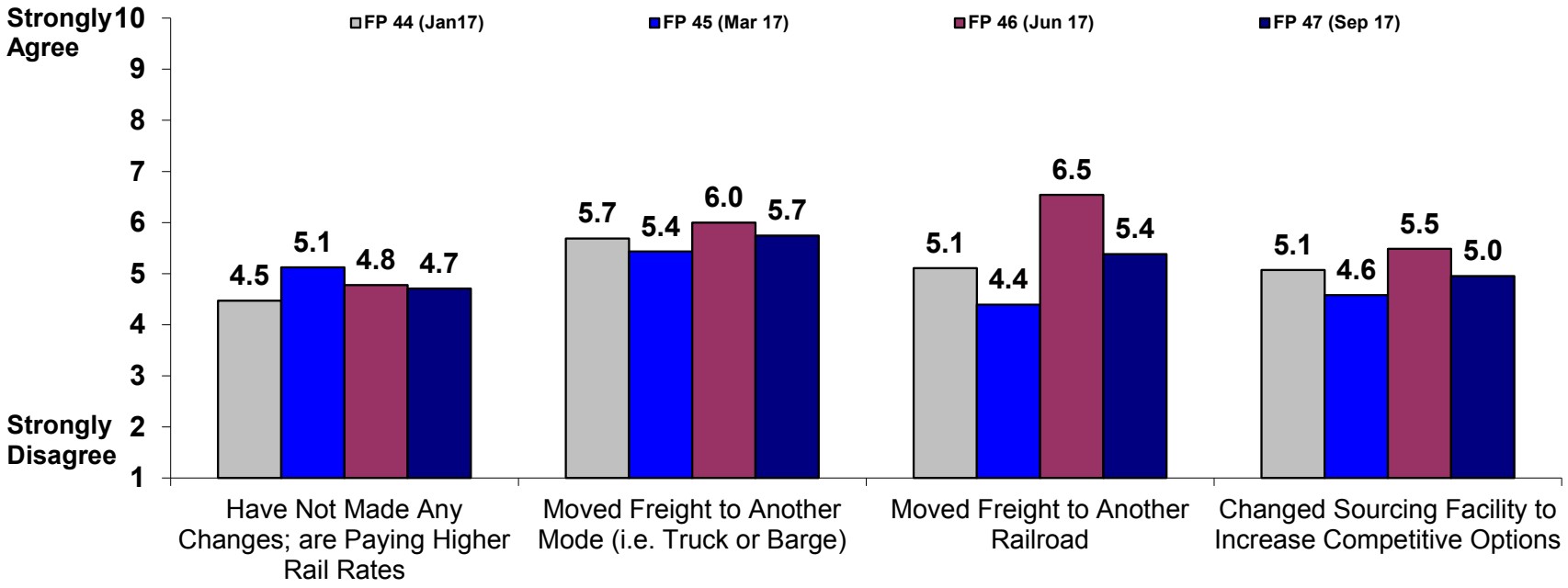
Source: Morgan Stanley Freight Pulse Surveys

Rate Mitigation: What Have You Done in an Effort to Reduce Railroad Spend ?



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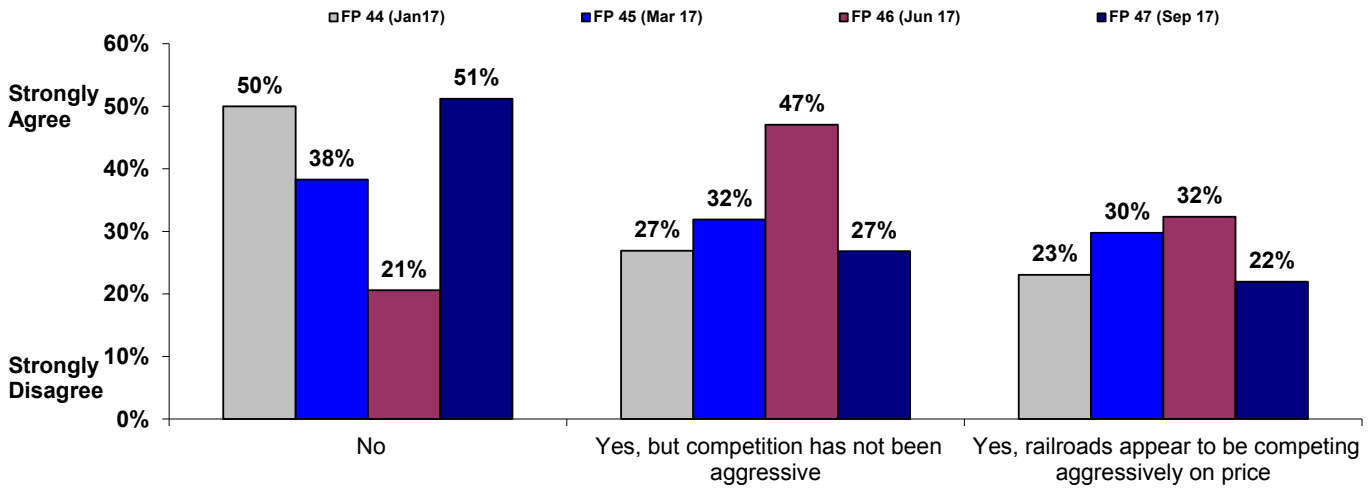
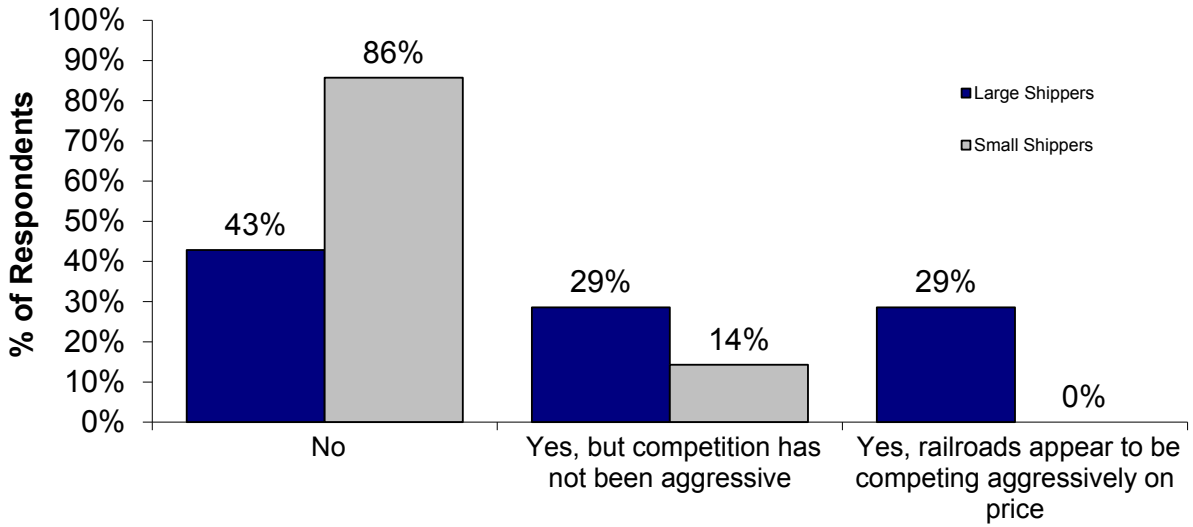
Source: Morgan Stanley Freight Pulse Surveys

Competition: Have You Been Solicited With Competing Bids Offering Lower Rates?

All Shippers



Price Competition from Railroads



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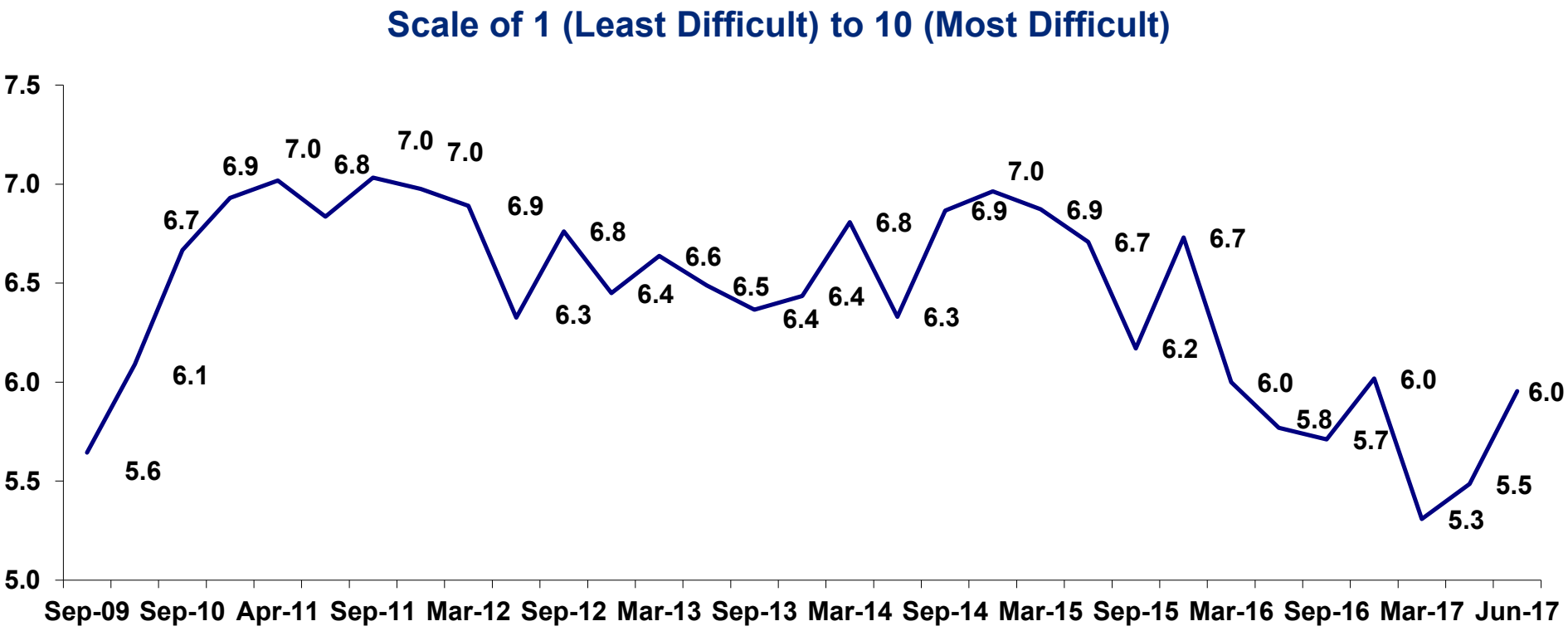
Rail Rate Negotiations: Rate the Difficulty of Recent Rate Negotiations



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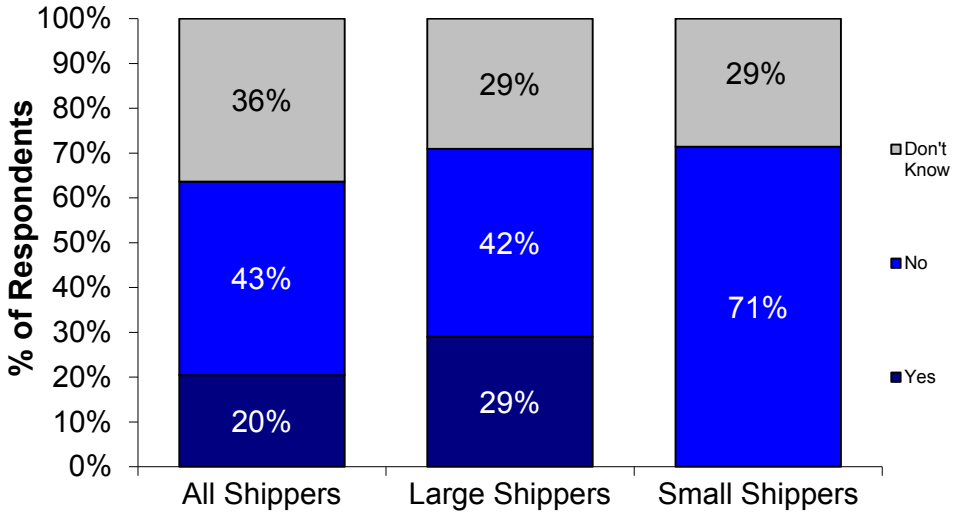
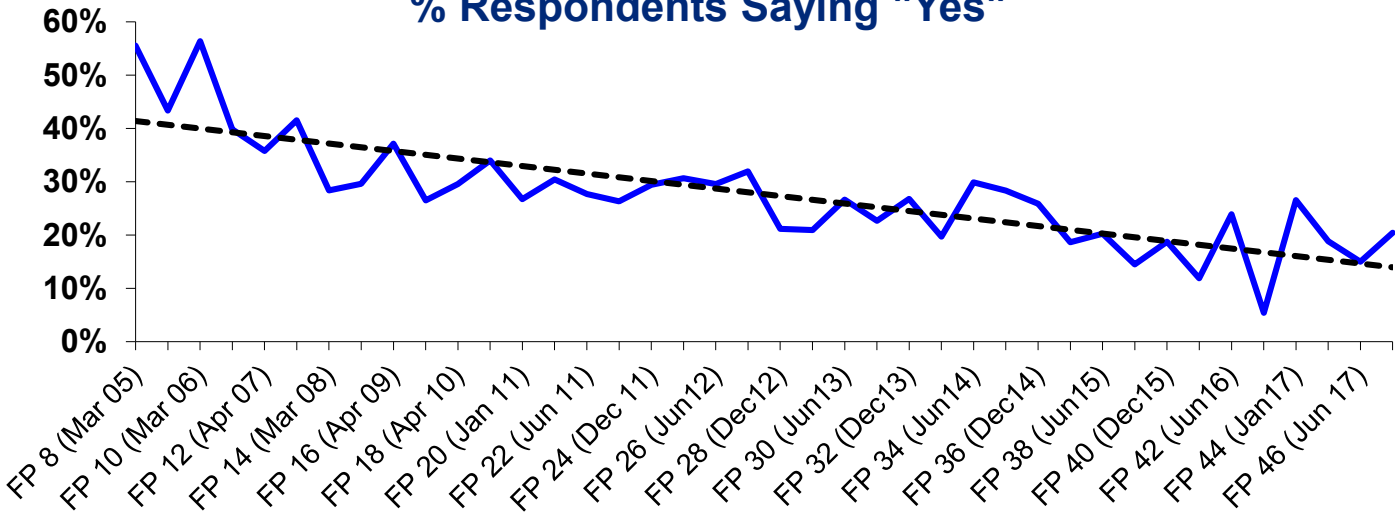
Source: Morgan Stanley Freight Pulse Surveys

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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2. Fuel Surcharge Concessions
3. Limitations on Truck to Rail Conversion

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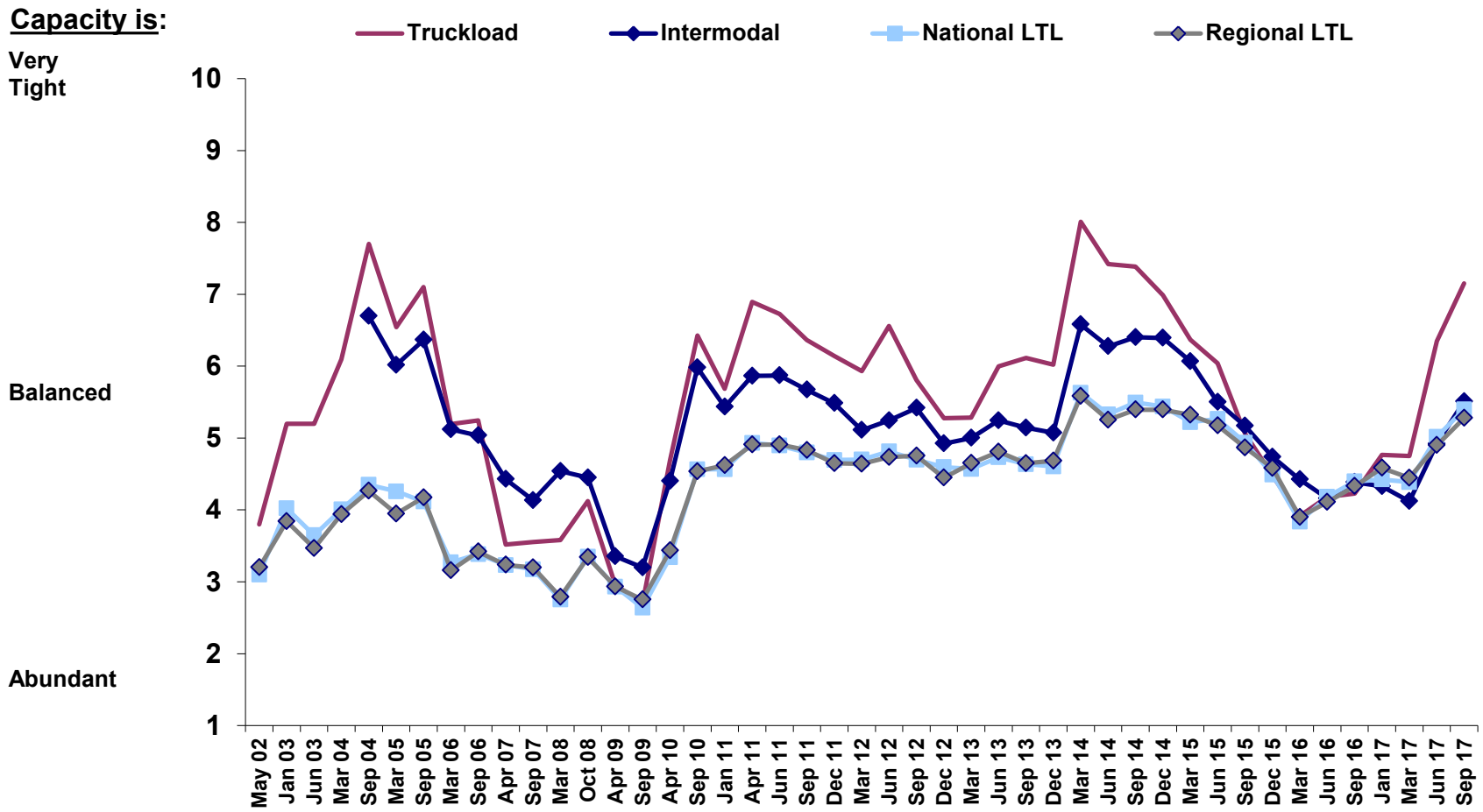
Shipper Measures for Availability of Truck Capacity

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



Source: Morgan Stanley Freight Pulse Surveys

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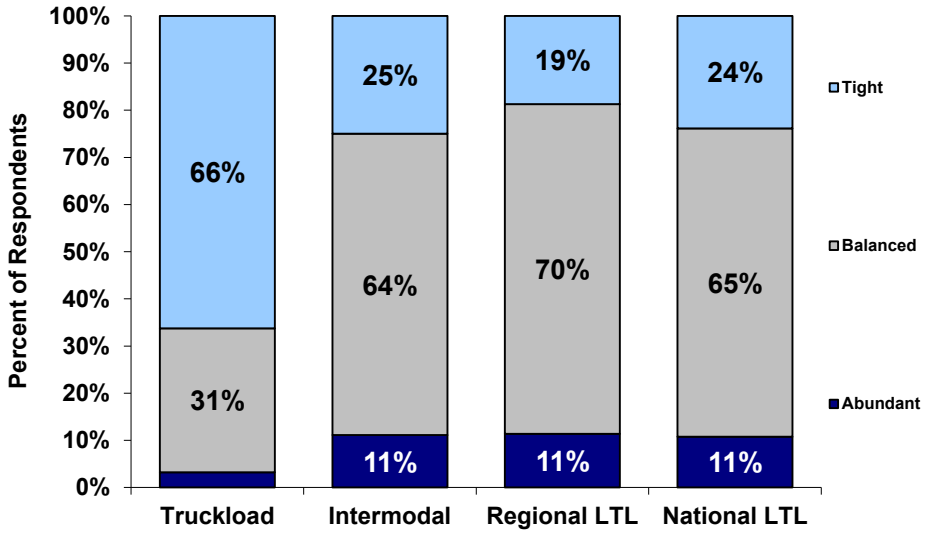
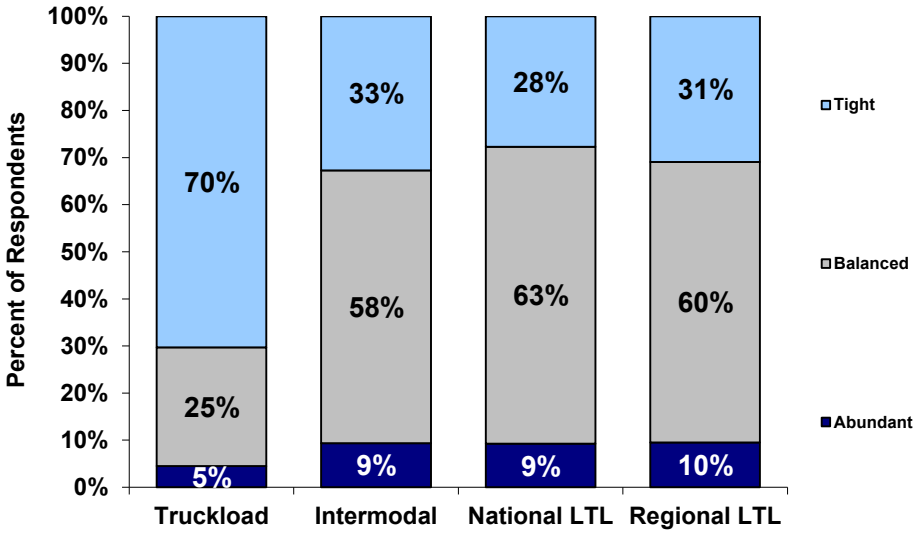
Shipper Expectations for Availability of Truck Capacity

Current Capacity



Projected Capacity in 6 Months



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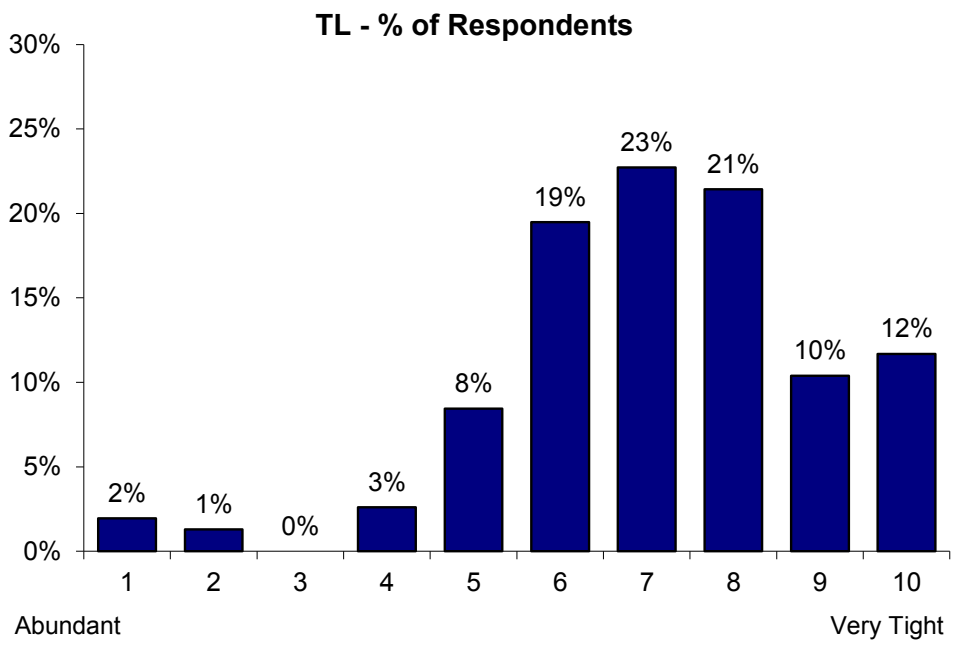
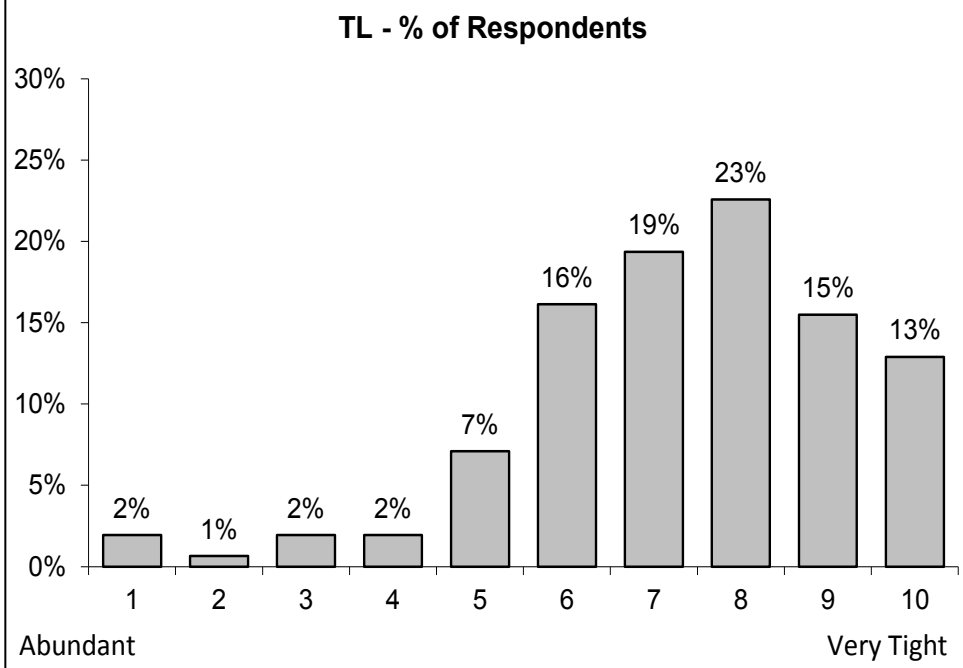
Capacity: Distribution of Truckload Capacity Rankings

Current Capacity



Projected Capacity in 6 Months



*** Shipper rankings of available capacity where 1= Abundant and 10 = Very Tight**
Source: Morgan Stanley Freight Pulse Surveys

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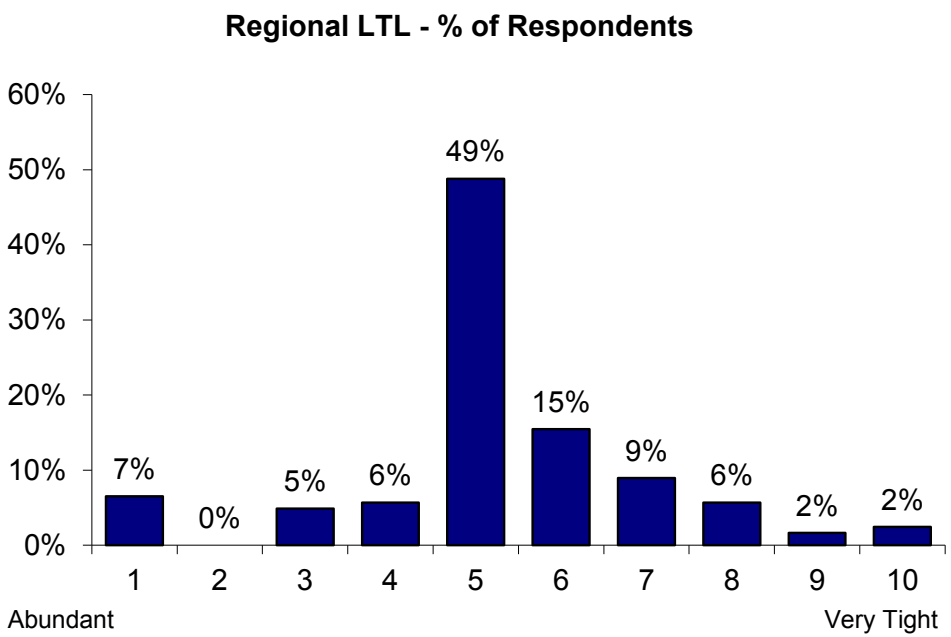
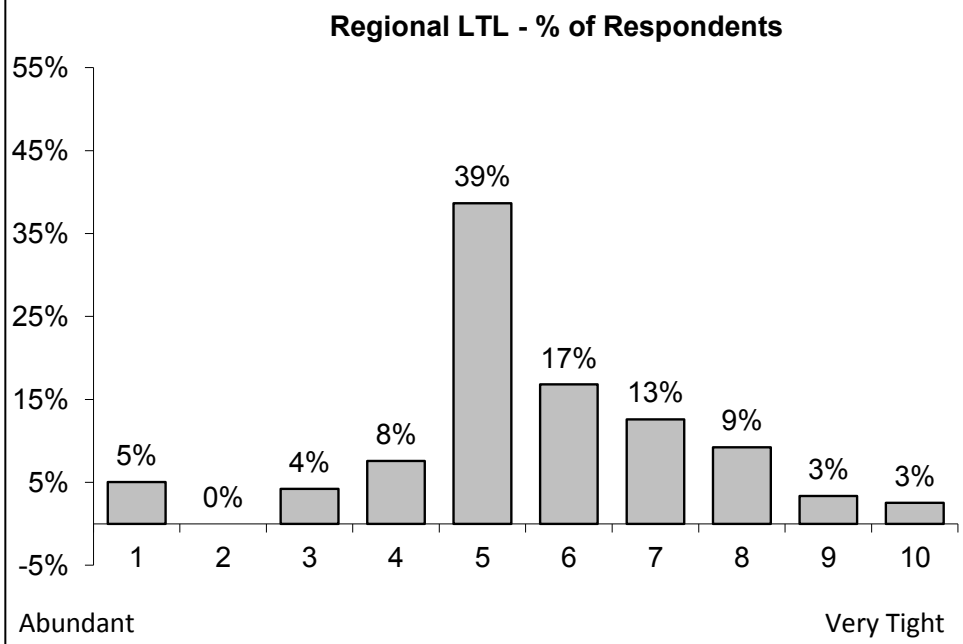
Capacity: Distribution of Regional Less-Than-Truckload Capacity Rankings

Current Capacity



Projected Capacity in 6 Months

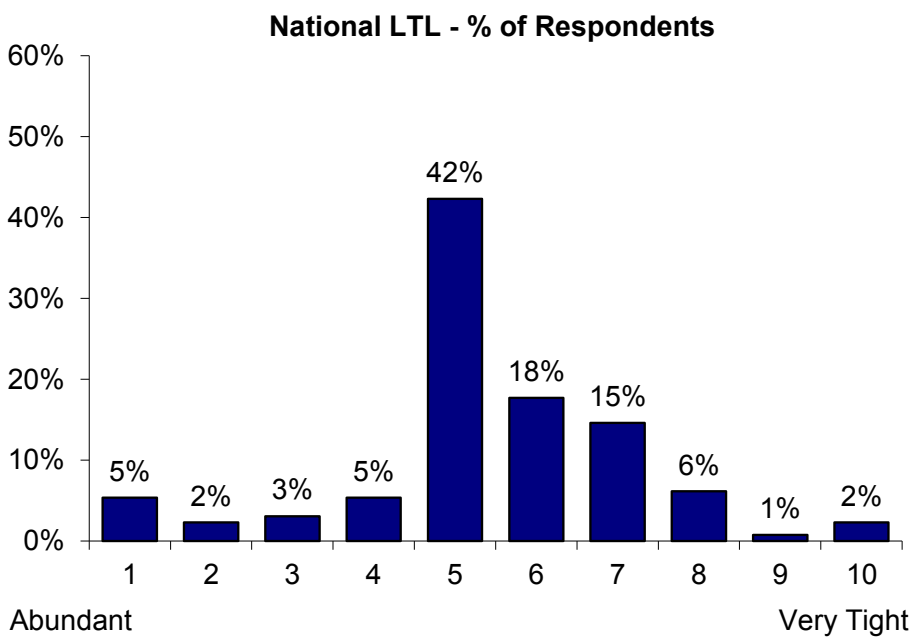


*** Shipper rankings of available capacity where 1= Abundant and 10 = Very Tight**
Source: Morgan Stanley Freight Pulse Surveys

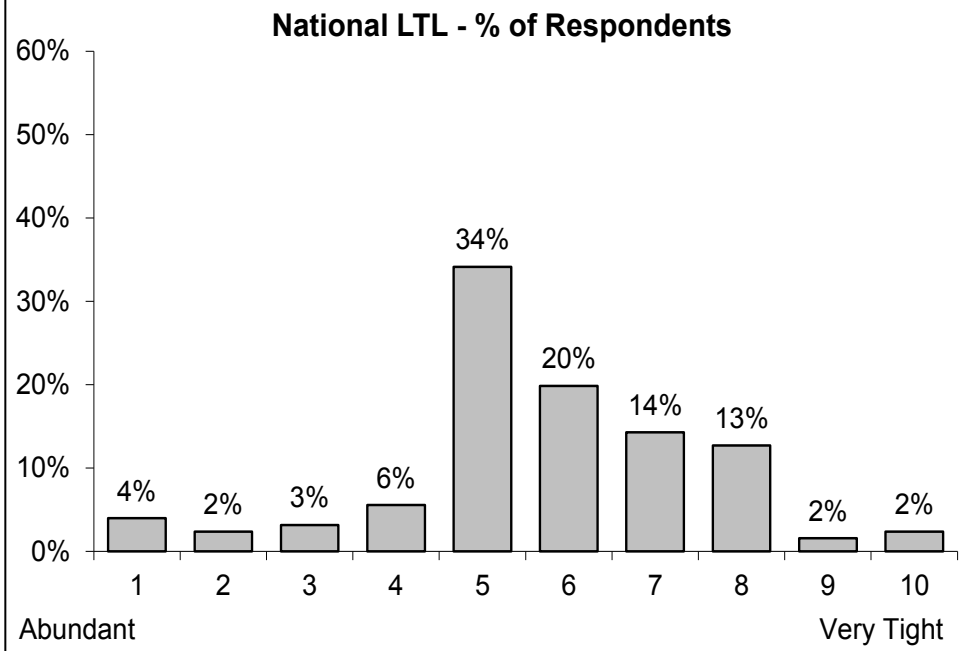
Ravi Shanker, (212) 761-6350, Ravi.Shanker@morganstanley.com

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

Current Capacity



Projected Capacity in 6 Months



*** Shipper rankings of available capacity where 1= Abundant and 10 = Very Tight**
Source: Morgan Stanley Freight Pulse Surveys

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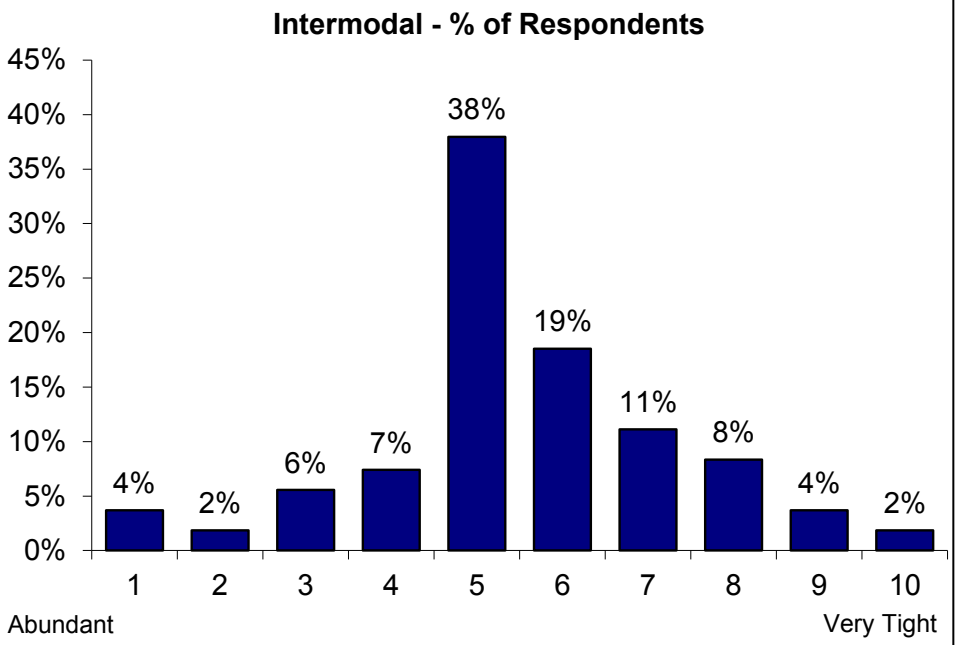
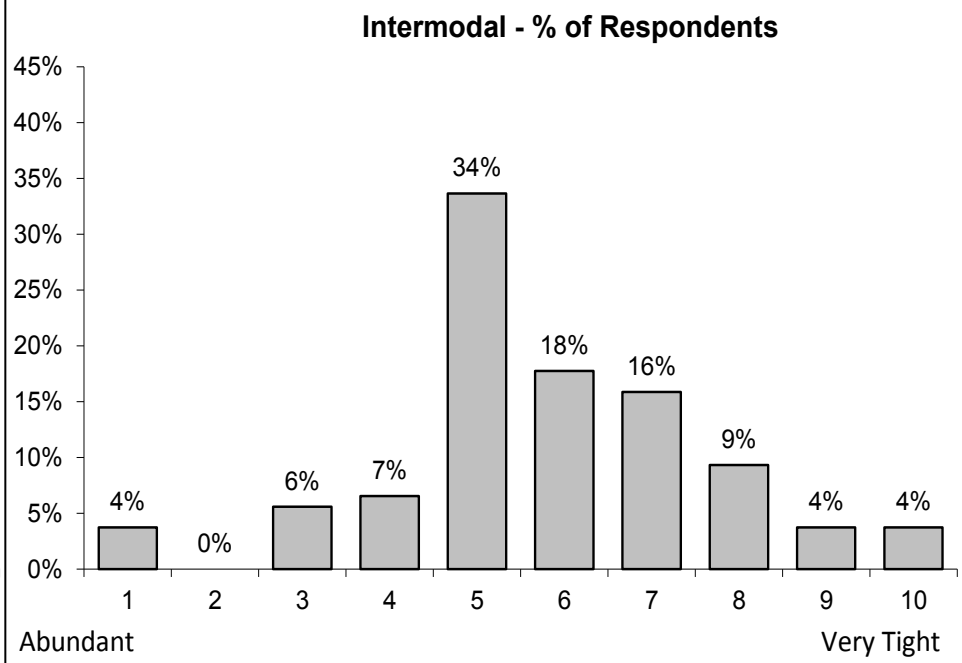
Capacity: Distribution of Intermodal Capacity Rankings

Current Capacity



Projected Capacity in 6 Months



*** Shipper rankings of available capacity where 1= Abundant and 10 = Very Tight**
Source: Morgan Stanley Freight Pulse Surveys

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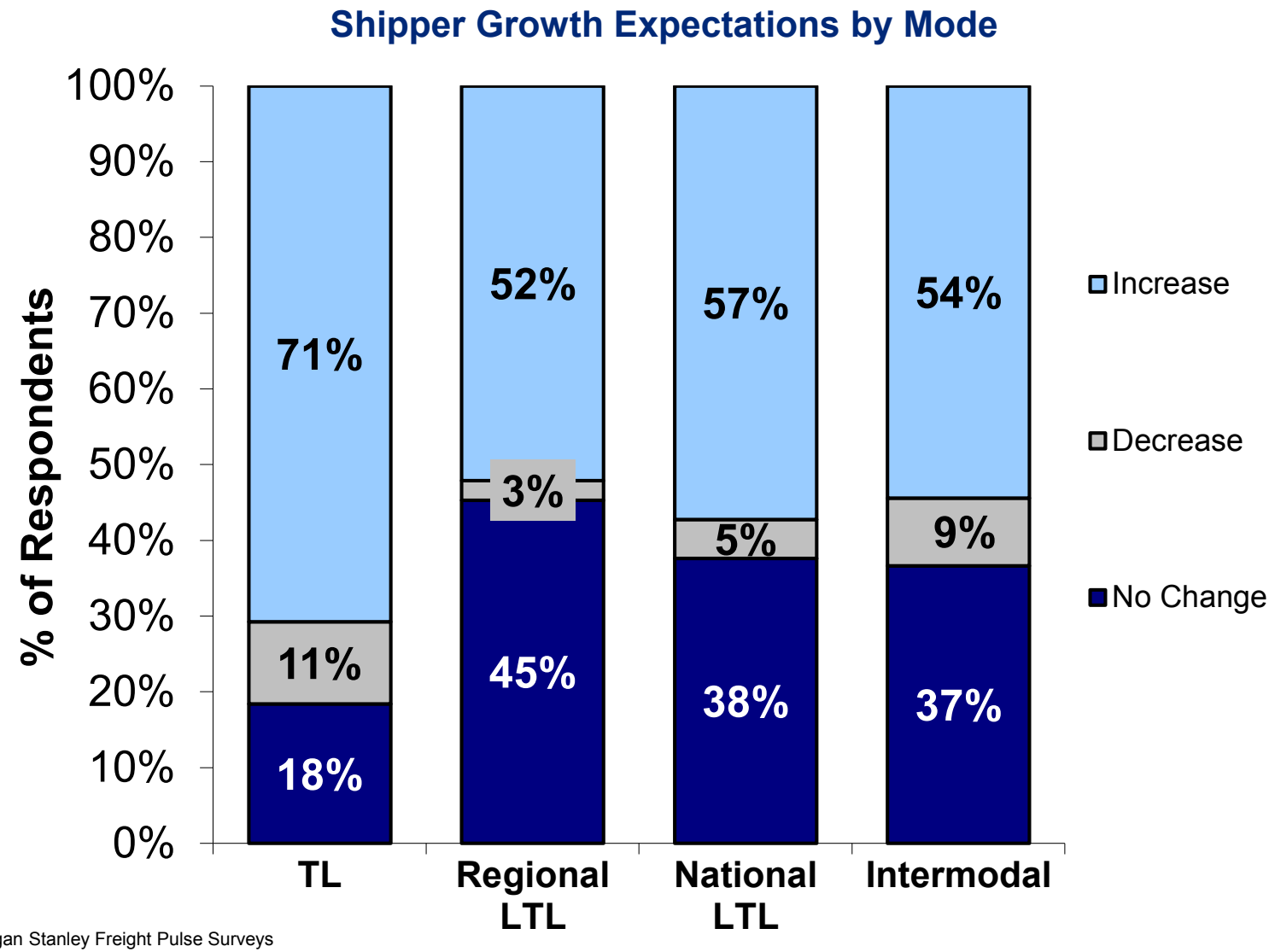
Truck Volume Outlook Over The Next 6 Months

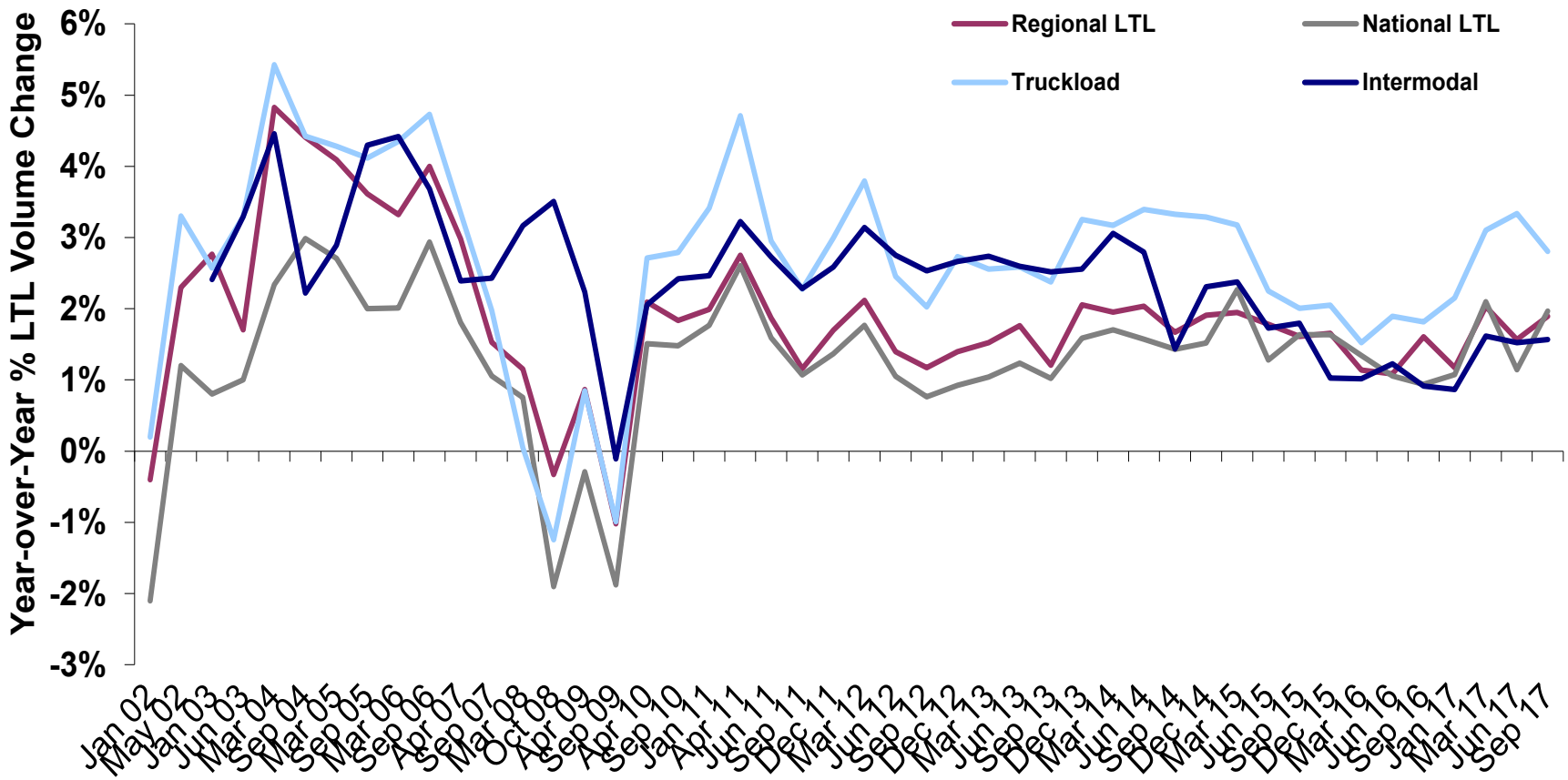


Source: Morgan Stanley Freight Pulse Surveys

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

Volume Response History

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

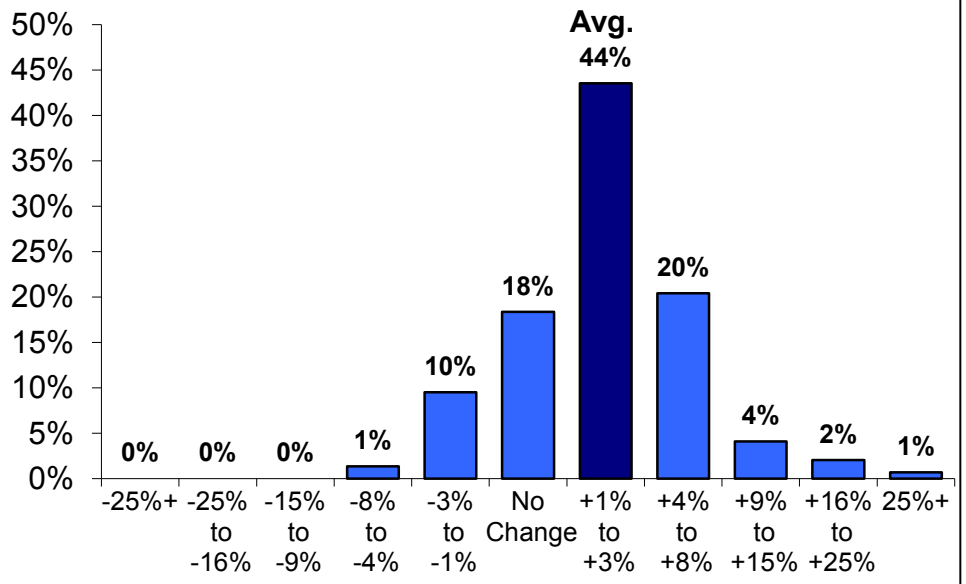


Source: Morgan Stanley Freight Pulse Surveys

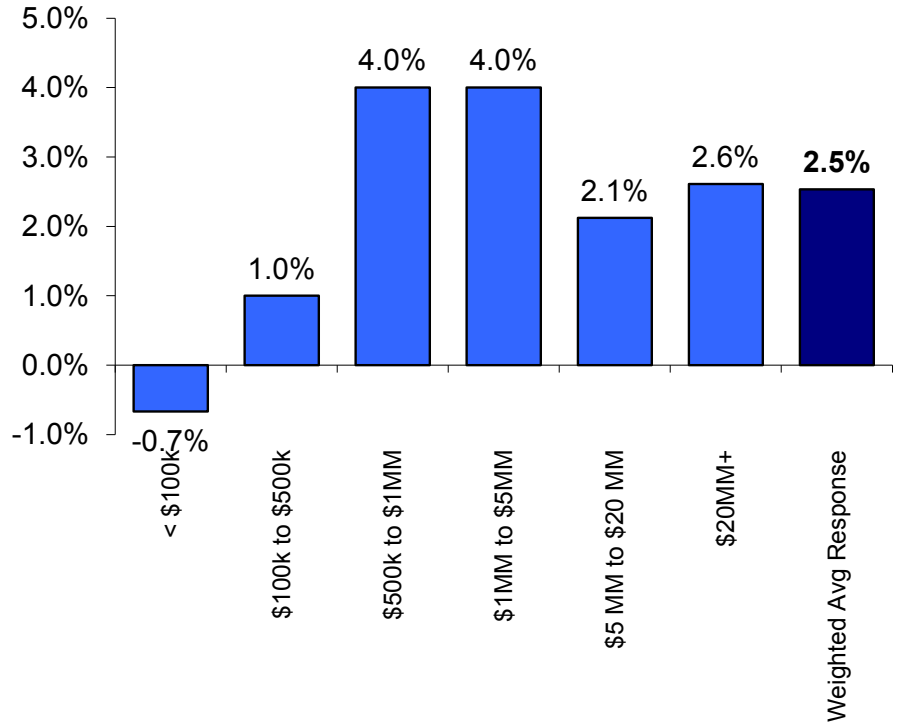
Ravi Shanker, (212) 761-6350, Ravi.Shanker@morganstanley.com

Truckload Volume Detail by Spend, Industry, and Response Skew

Truckload - Y/Y Volume Expectation by Range



Truckload - Avg Volume Change by Spend

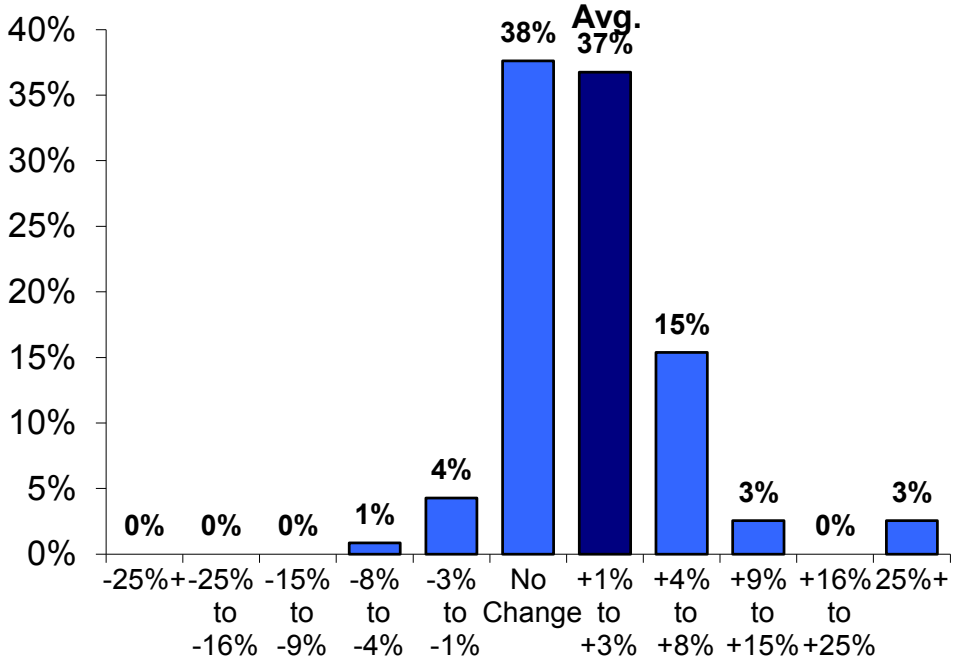


Source: Morgan Stanley Freight Pulse Surveys

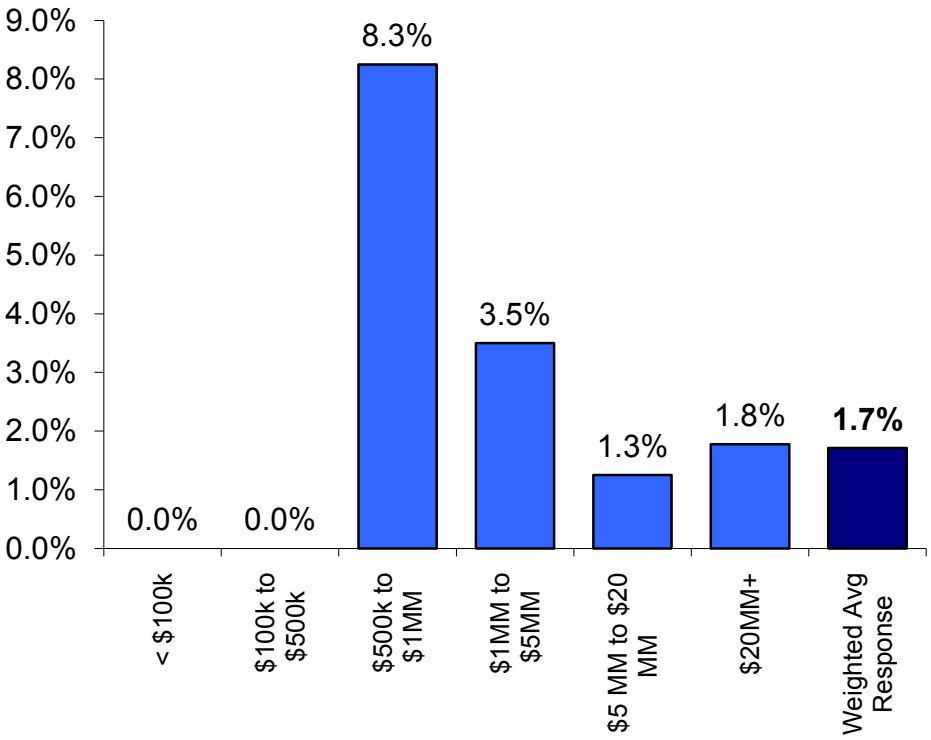
Ravi Shanker, (212) 761-6350, Ravi.Shanker@morganstanley.com

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

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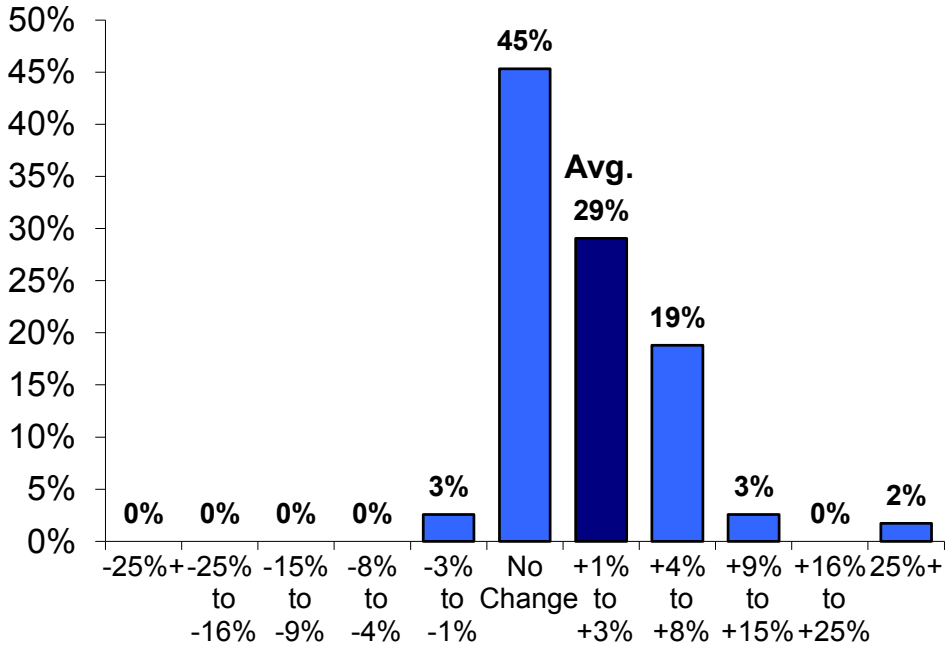
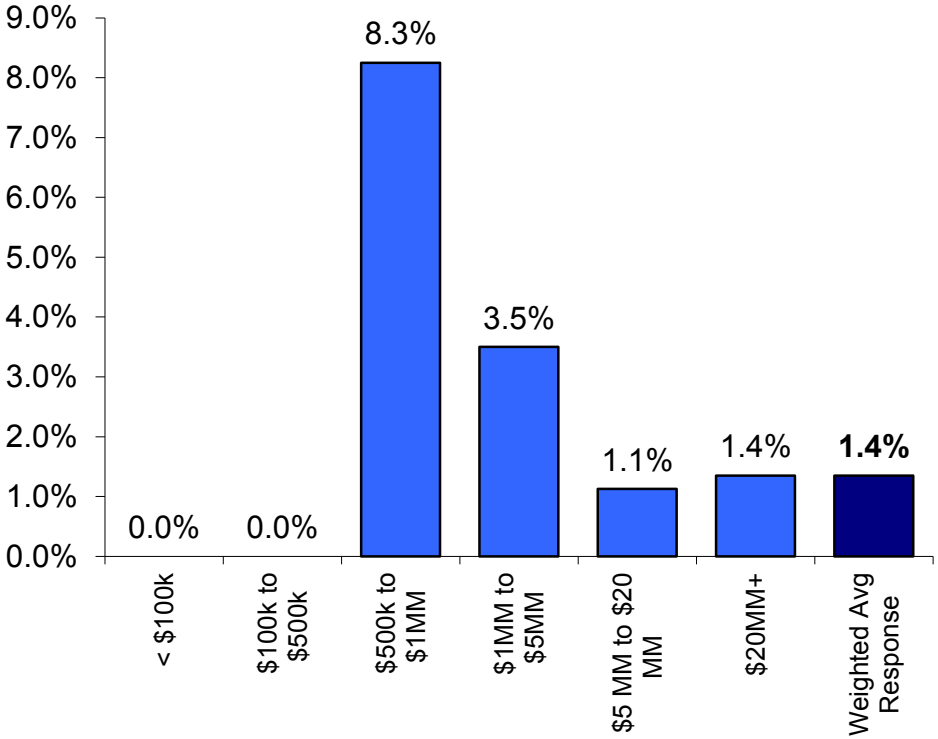
Regional LTL Volume Detail by Spend, Industry, and Response Skew

Regional LTL - Y/Y Volume Expectation by Range



Regional LTL - Avg Volume Change by Spend



Source: Morgan Stanley Freight Pulse Surveys

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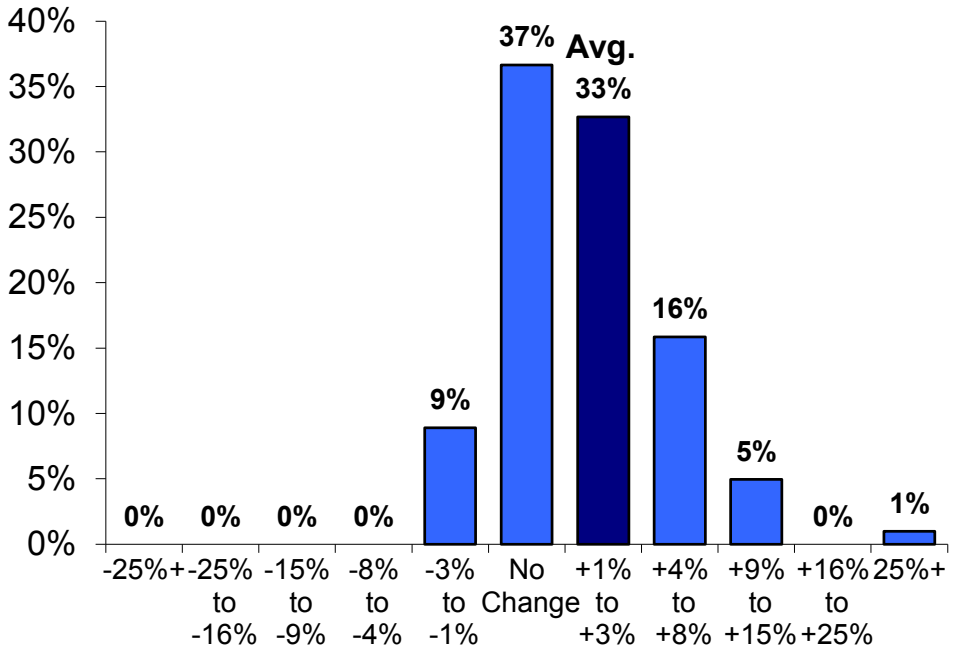
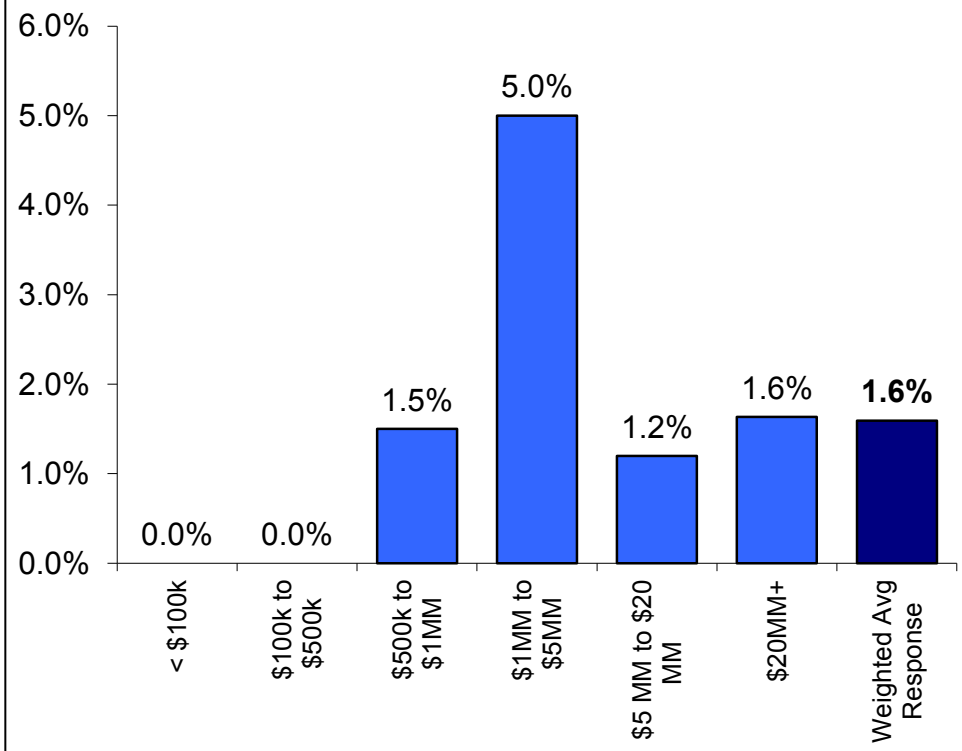
Intermodal Volume Detail by Spend, Industry, and Response Skew

Intermodal - Y/Y Volume Expectation by Range



Intermodal - Avg Volume Change by Spend



Source: Morgan Stanley Freight Pulse Surveys

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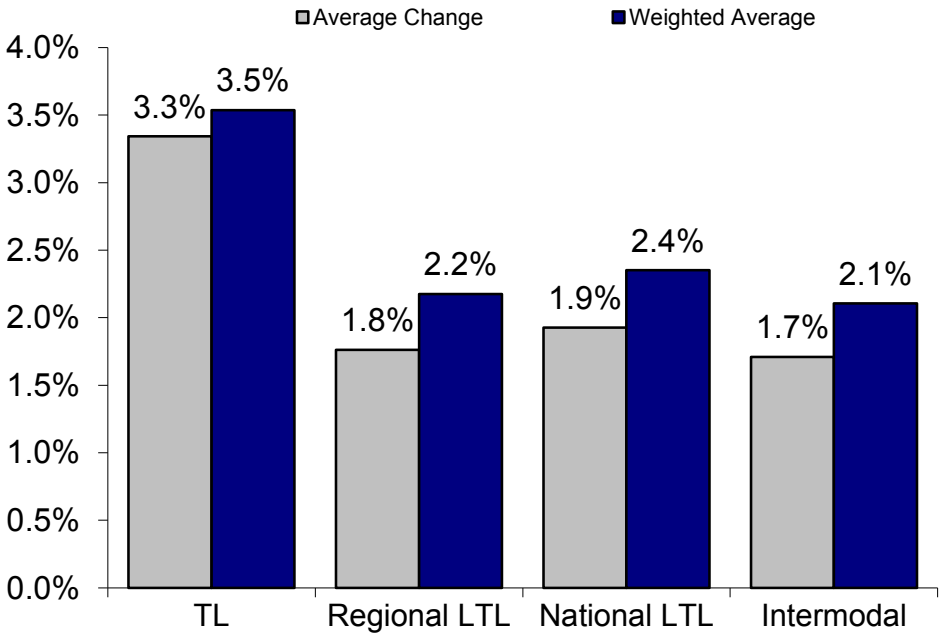
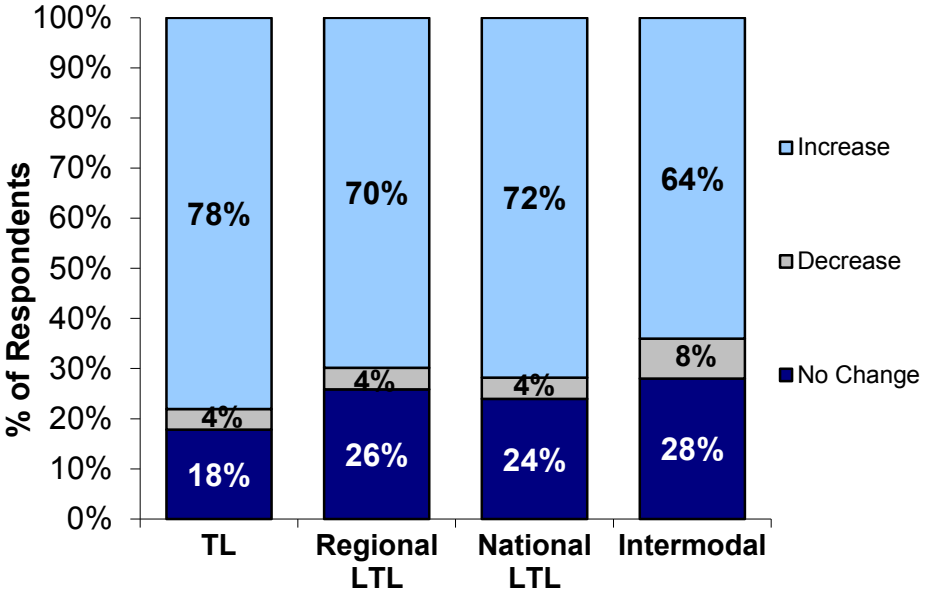
Truck Base Rates Outlook Over The Next 6 Months

Base Rates: Average vs. Weighted Average



Shipper Rate Expectations by Mode



Source: Morgan Stanley Freight Pulse Surveys

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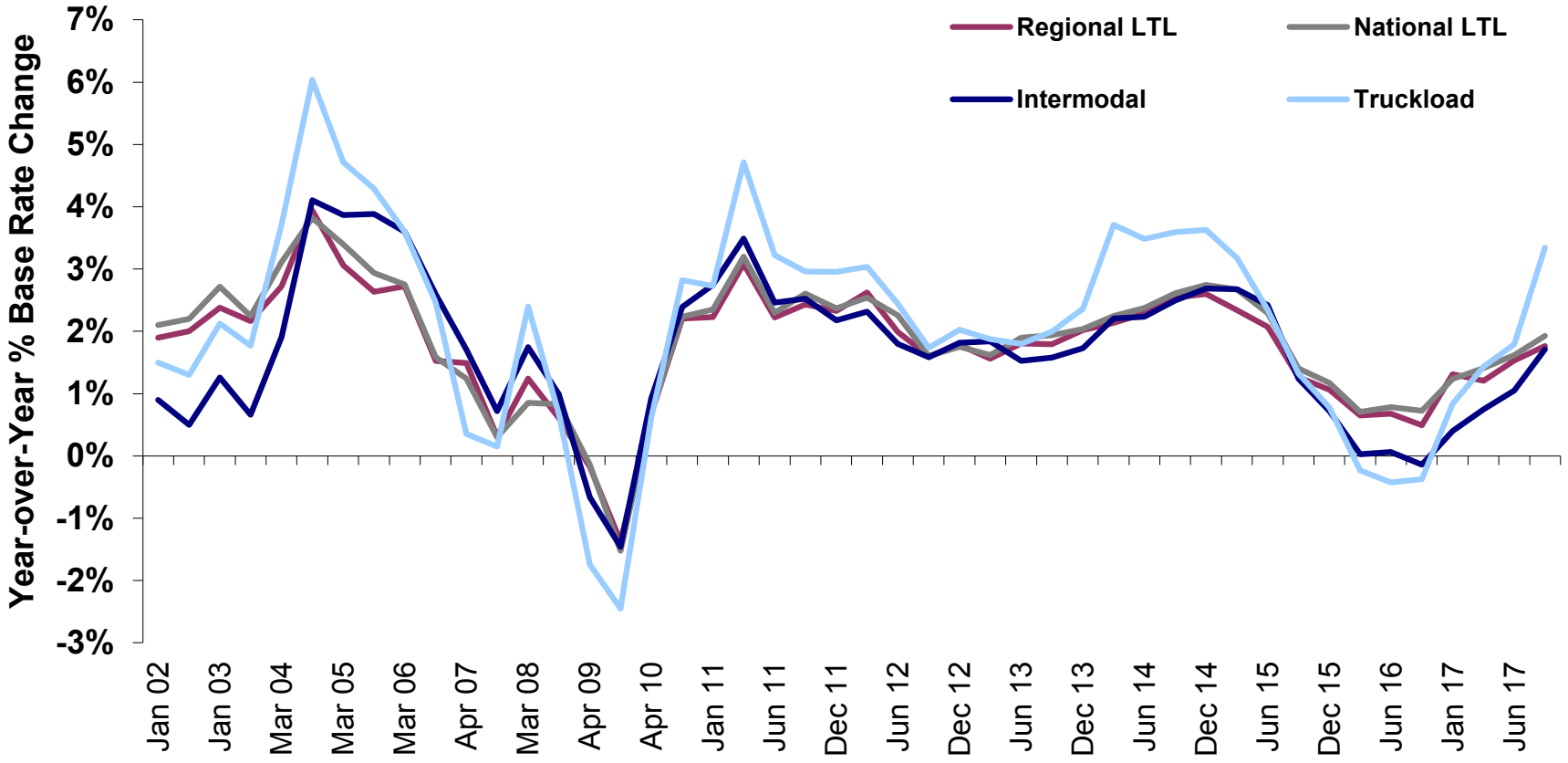
Base Rate Response History

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



Source: Morgan Stanley Freight Pulse Surveys

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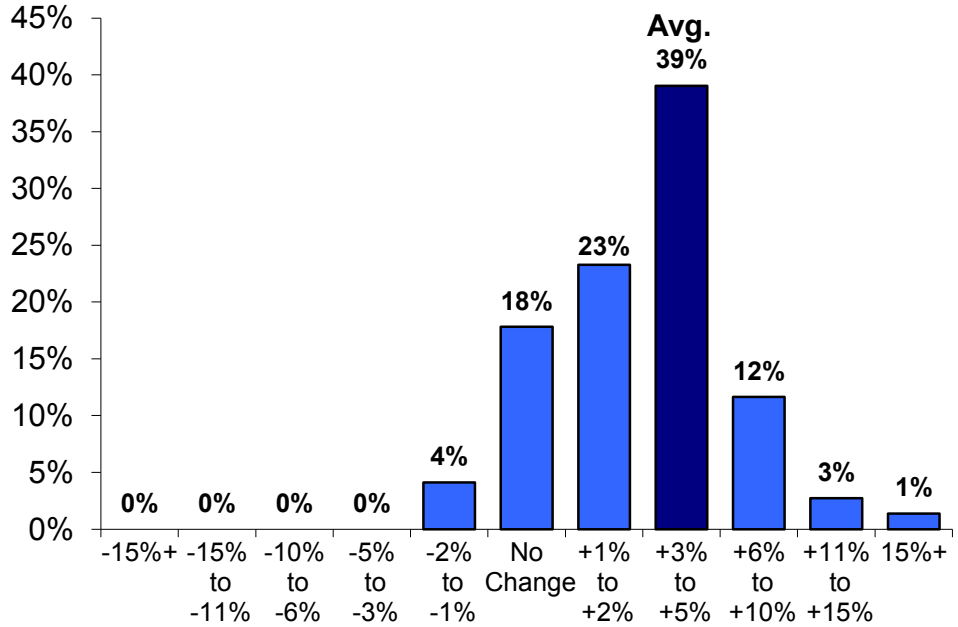
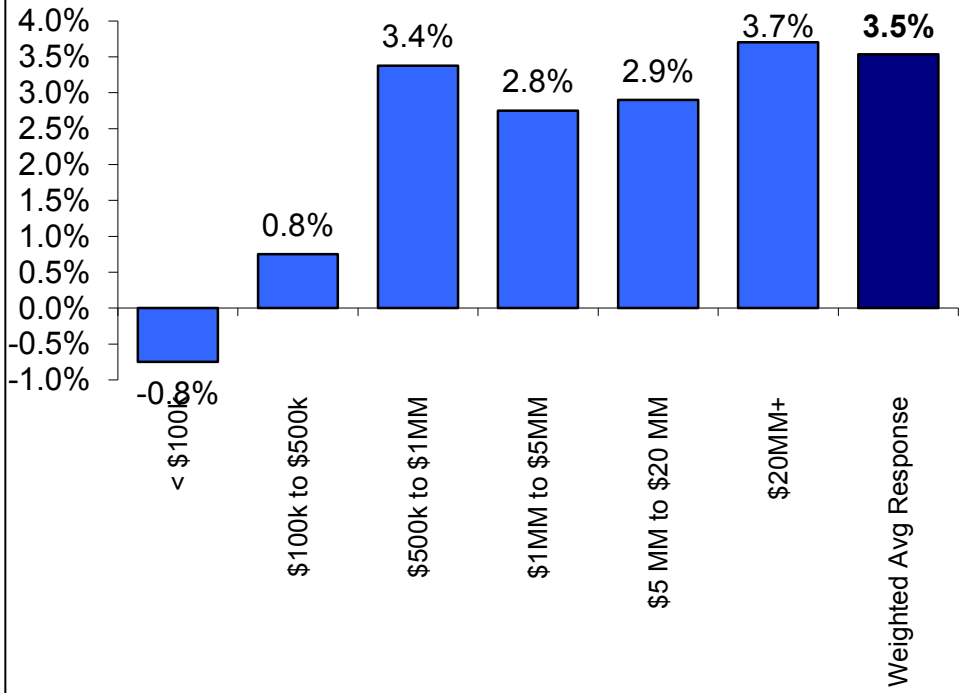
TL Base Rate Detail by Spend, Industry, and Response Skew

Truckload - Y/Y Base Rate Expectation by Range



TL - Avg Change by Spend



Source: Morgan Stanley Freight Pulse Surveys

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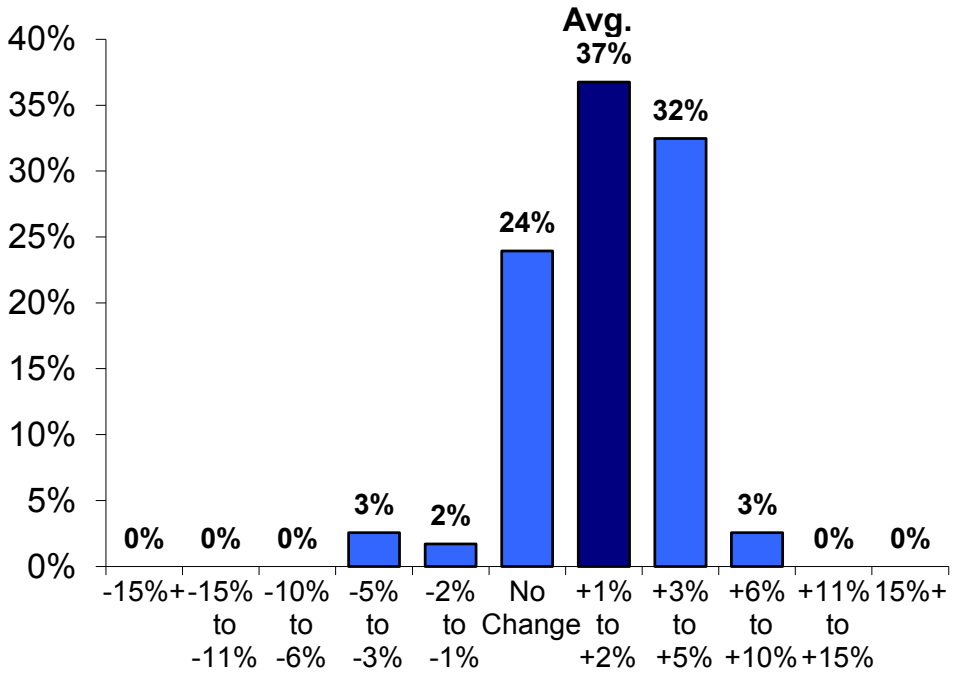
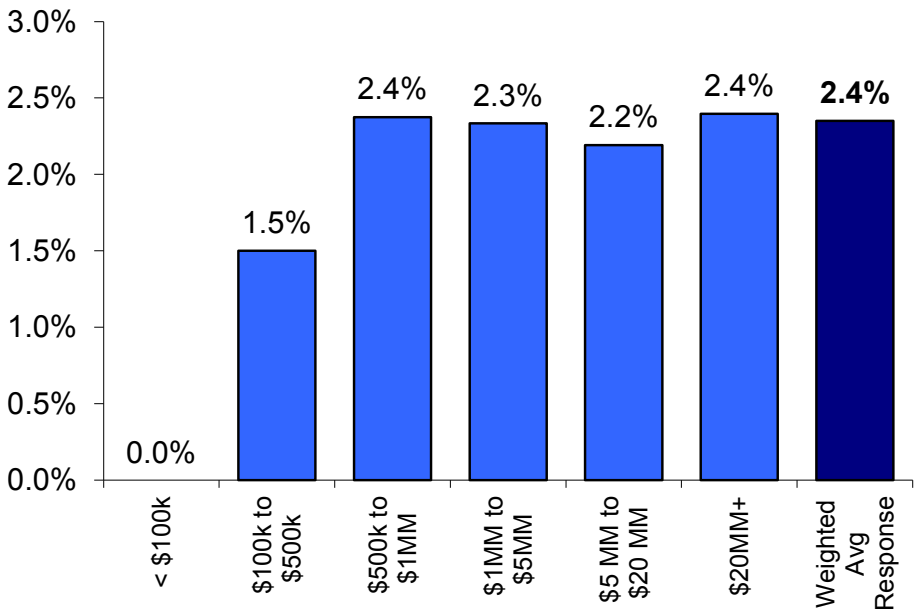
National LTL Base Rate Detail by Spend, Industry, and Response Skew

National LTL - Y/Y Base Rate Expectation by Range



National LTL - Avg Change by Spend



Source: Morgan Stanley Freight Pulse Surveys

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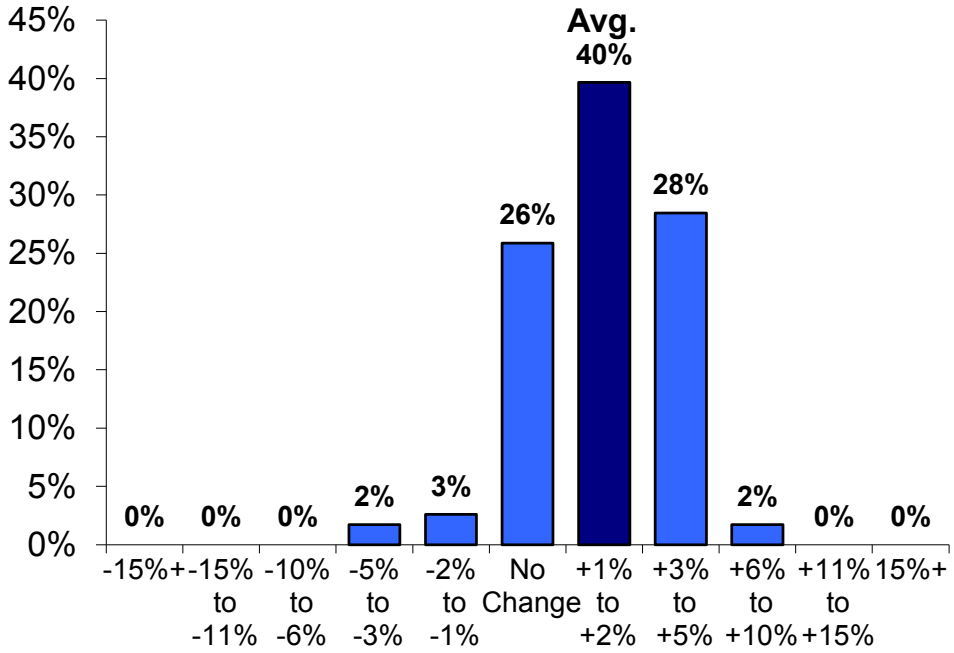
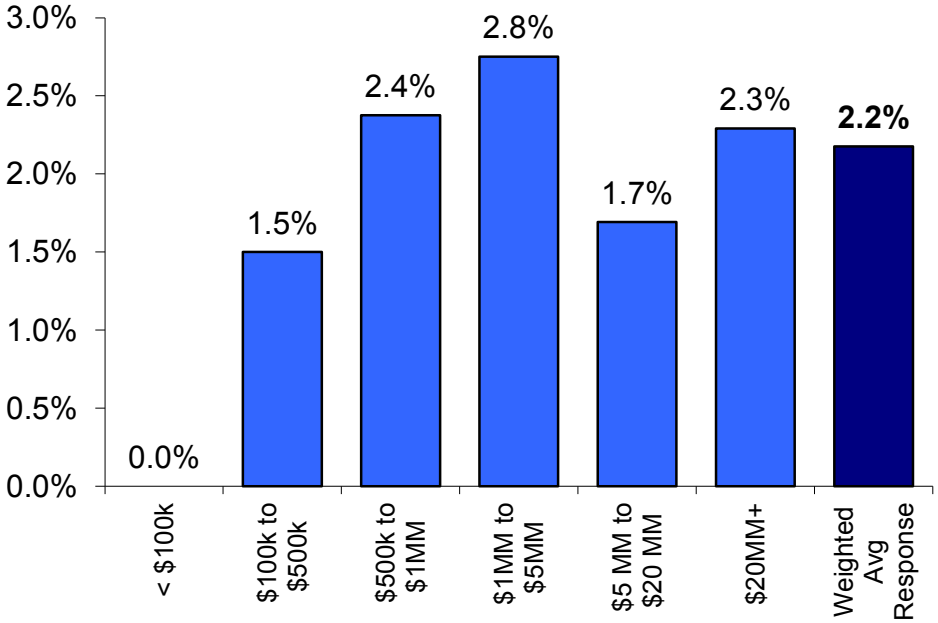
Regional LTL Base Rate Detail by Spend, Industry, and Response Skew

Regional LTL - Y/Y Base Rate Expectation by Range



Regional LTL - Avg Change by Spend



Source: Morgan Stanley Freight Pulse Surveys

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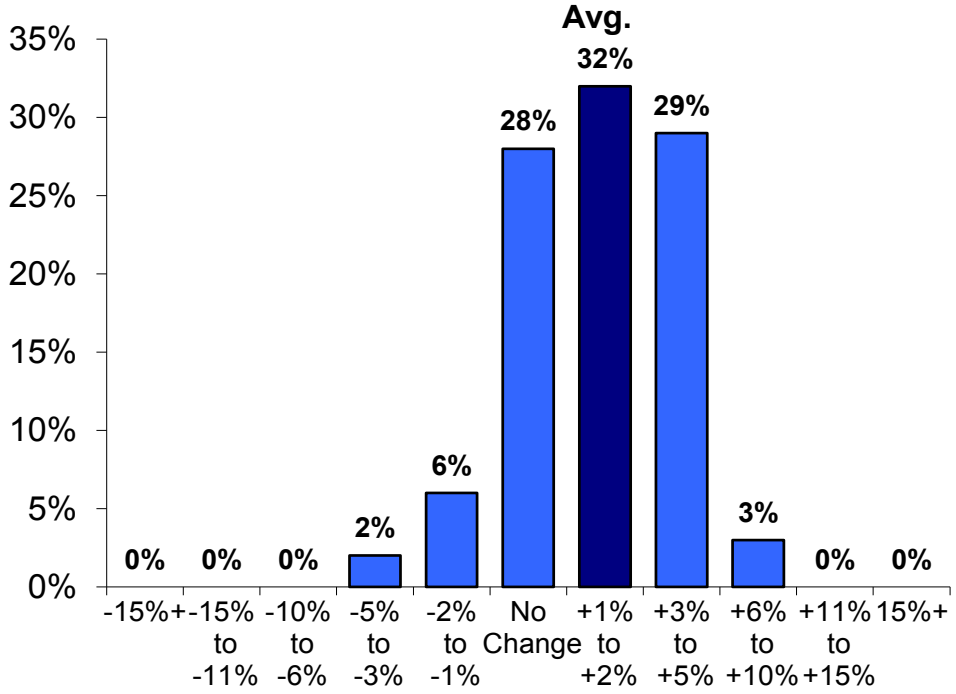
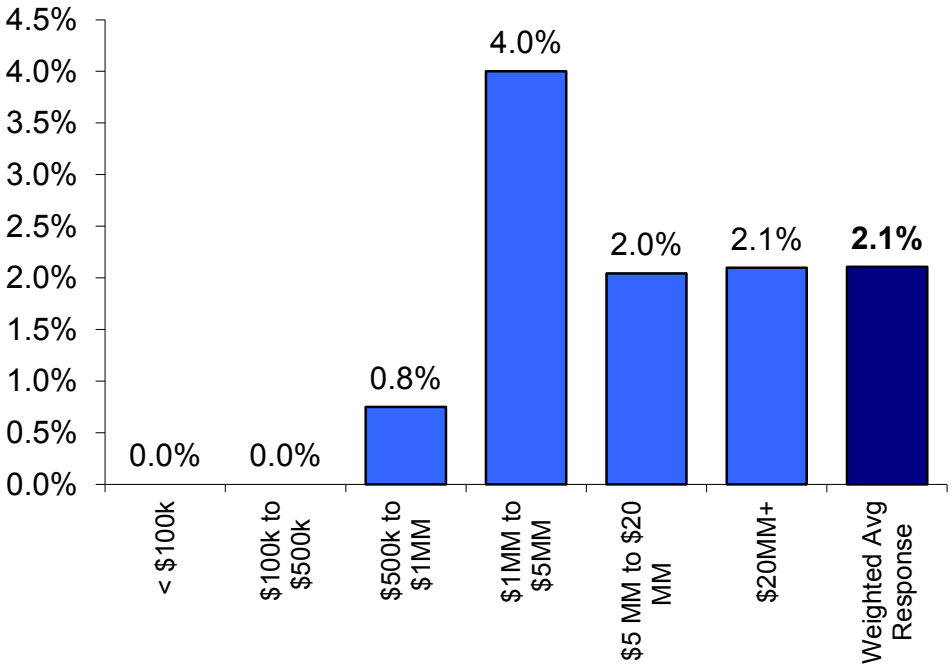
Intermodal Base Rate Detail by Spend, Industry, and Response Skew

Intermodal - Y/Y Base Rate Expectation by Range



Intermodal - Avg Change by Spend

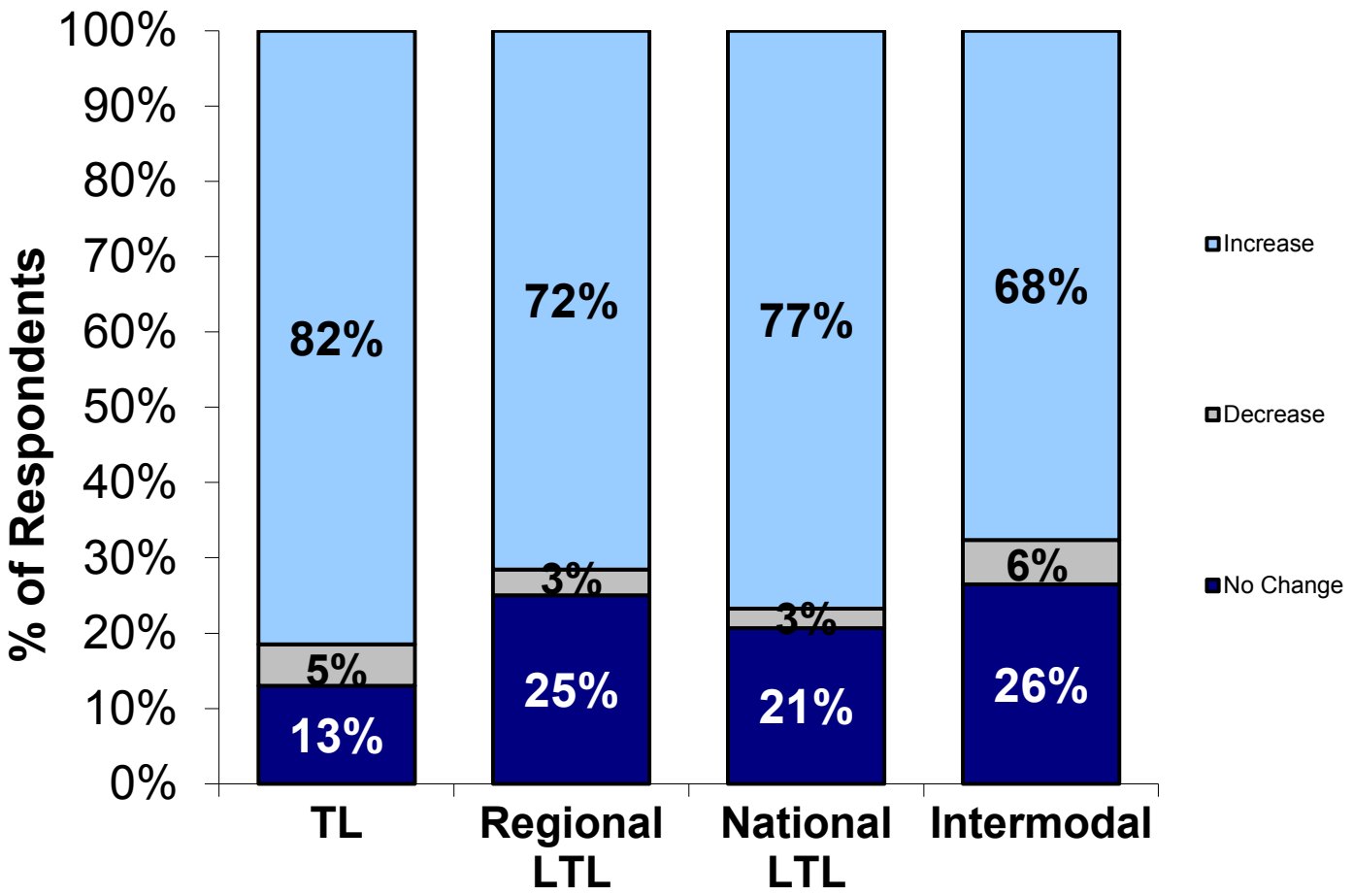


Source: Morgan Stanley Freight Pulse Surveys

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

Truck Spend Outlook Over The Next 6 Months

Shipper Spend Expectations by Mode



Source: Morgan Stanley Freight Pulse Surveys

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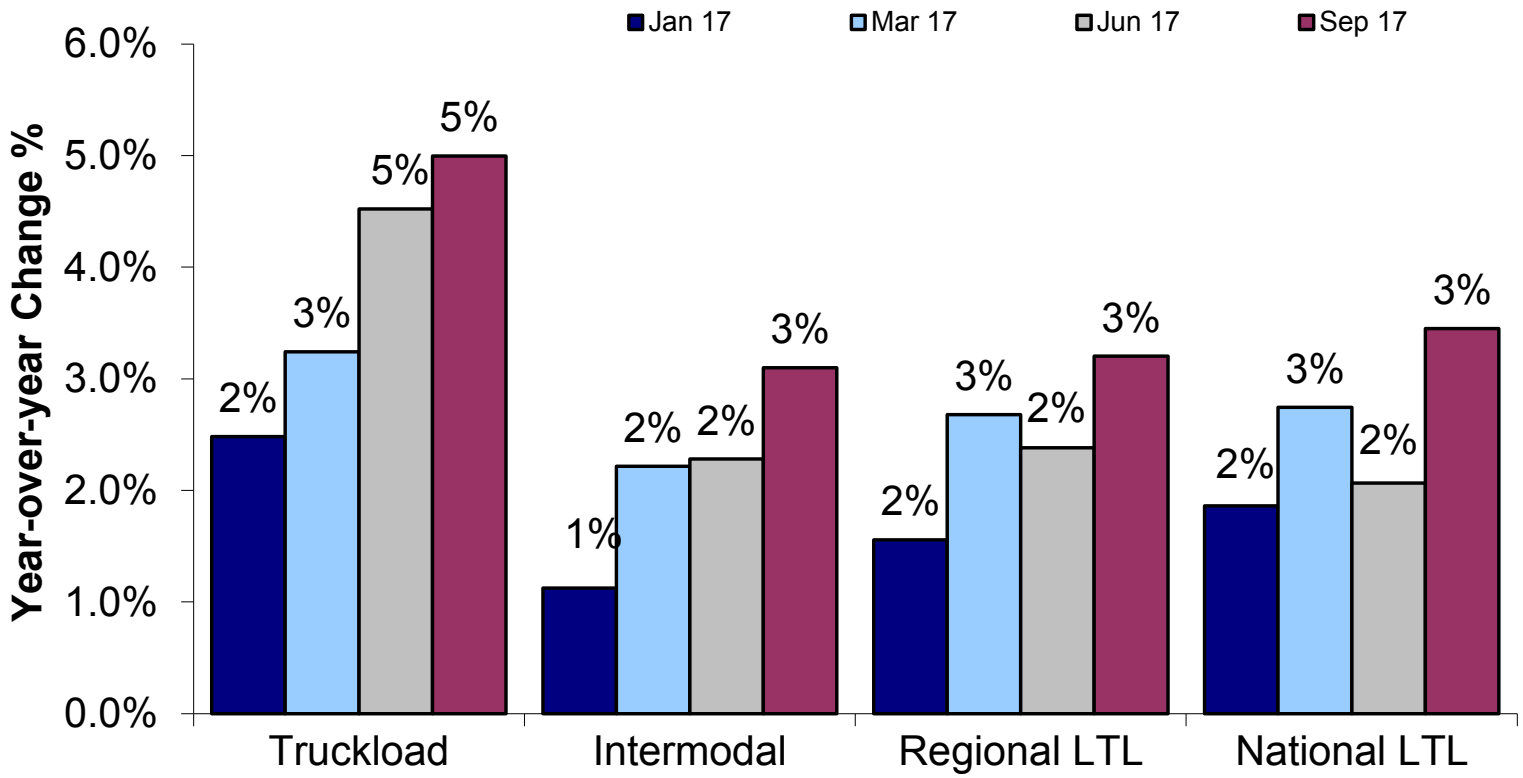
Truck Spend: Change vs. Prior Survey

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



Source: Morgan Stanley Freight Pulse Surveys

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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

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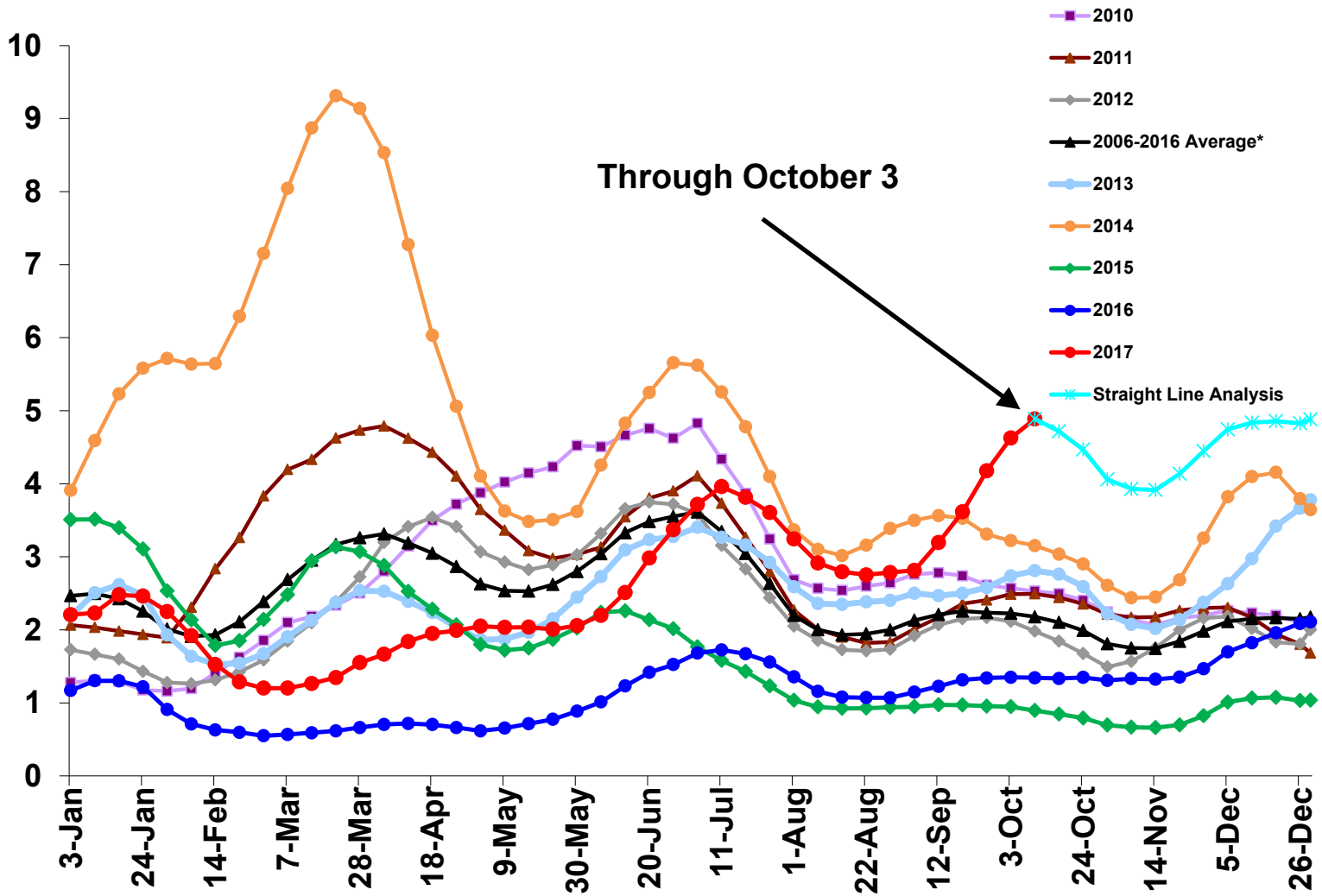
Morgan Stanley Truckload Freight Index With Straight-Line Forecast



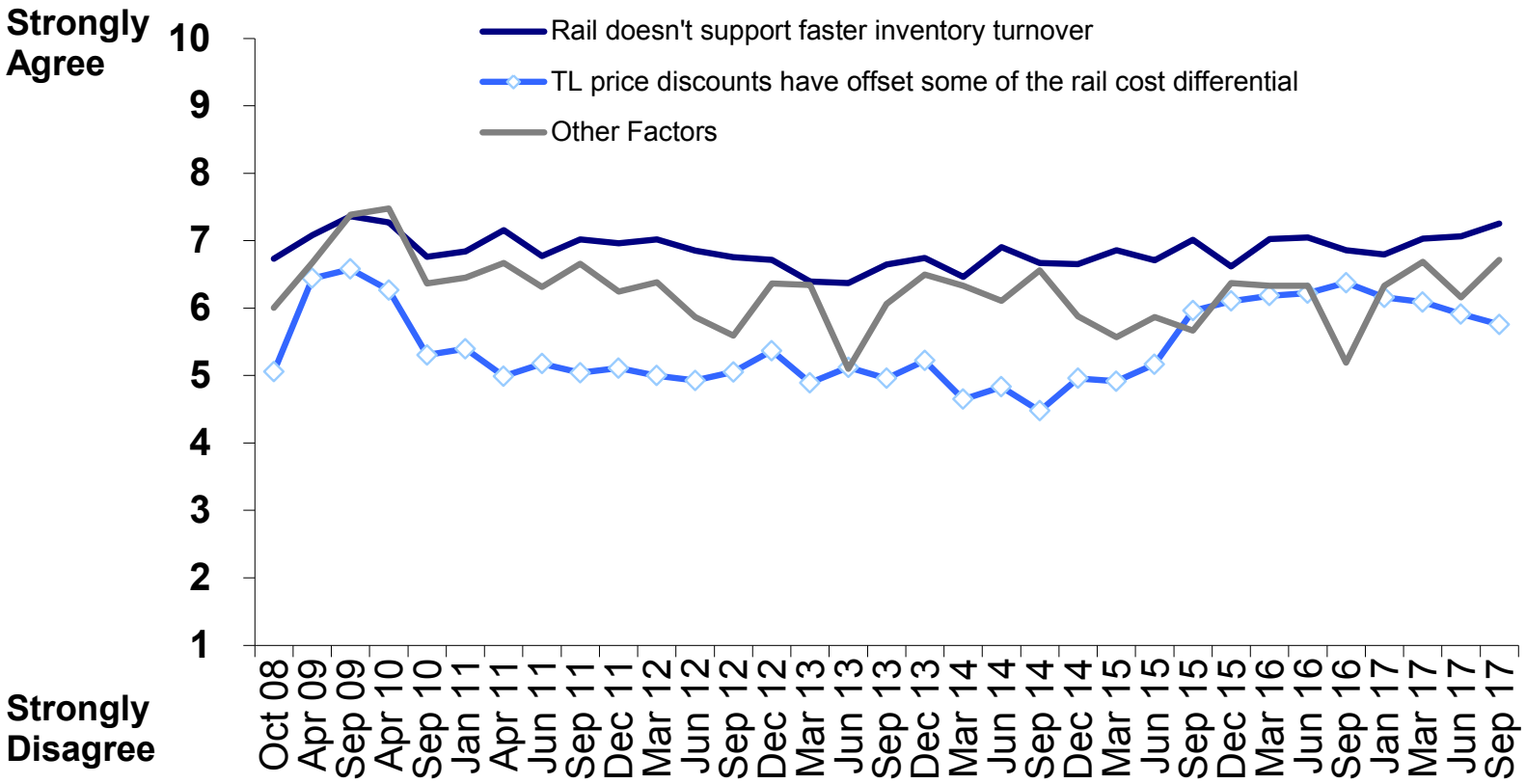
The index measures the demand for Dry-Van Truckload services compared to the number of Dry-Van trucks on the road. The index begins in April 1994. When a given reading is above prior years' level, it means there is more freight demand relative to available capacity. When a given reading is below prior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

Source: Morgan Stanley Research

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

Truckload Fuel Surcharge Concession History

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



Source: Morgan Stanley Freight Pulse Surveys

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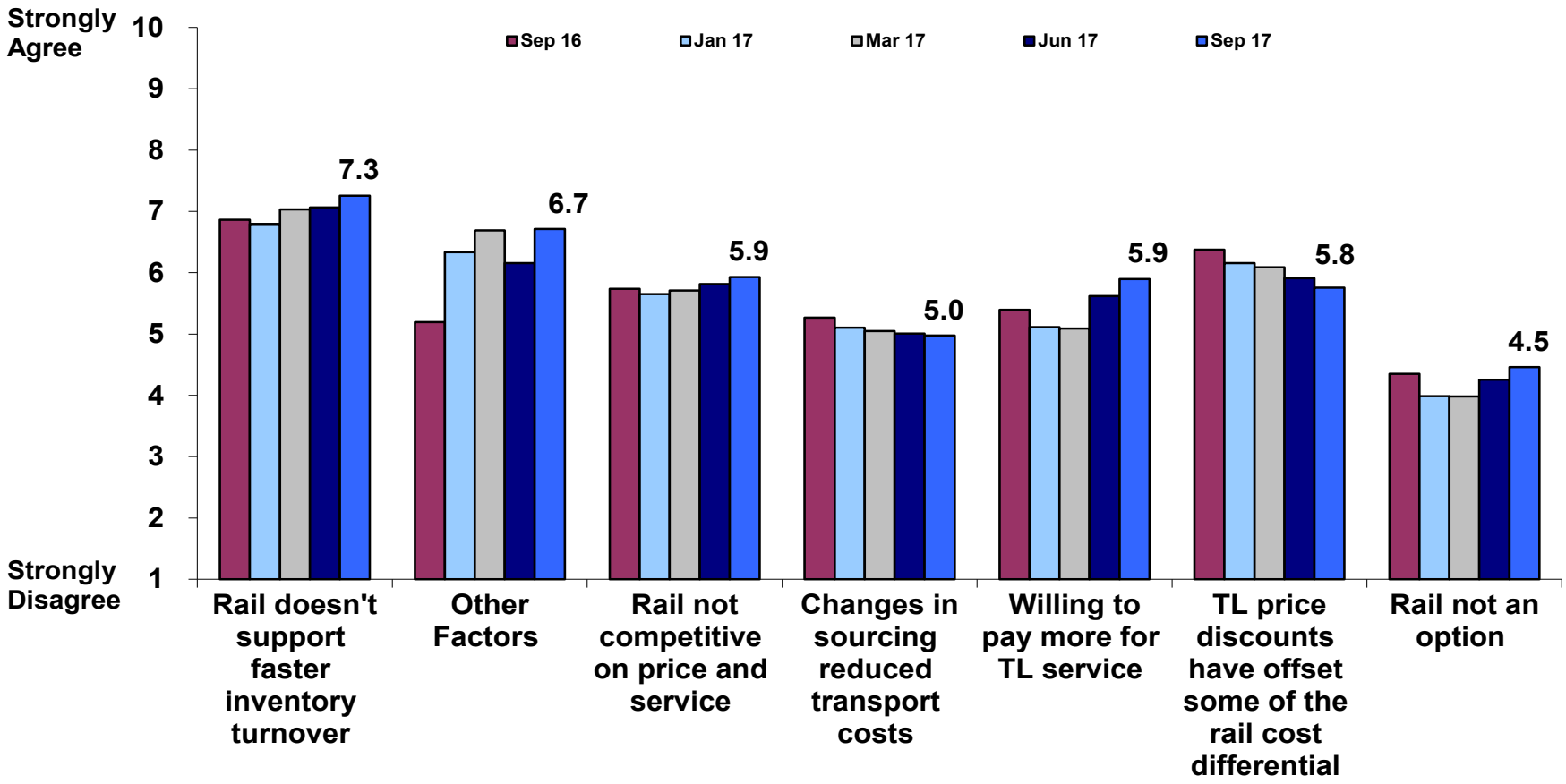
Truck to Rail Conversion: Key Obstacles to Overcome

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



Source: Morgan Stanley Freight Pulse Survey

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1. Service Reliability Rankings
2. Value of Service Rankings

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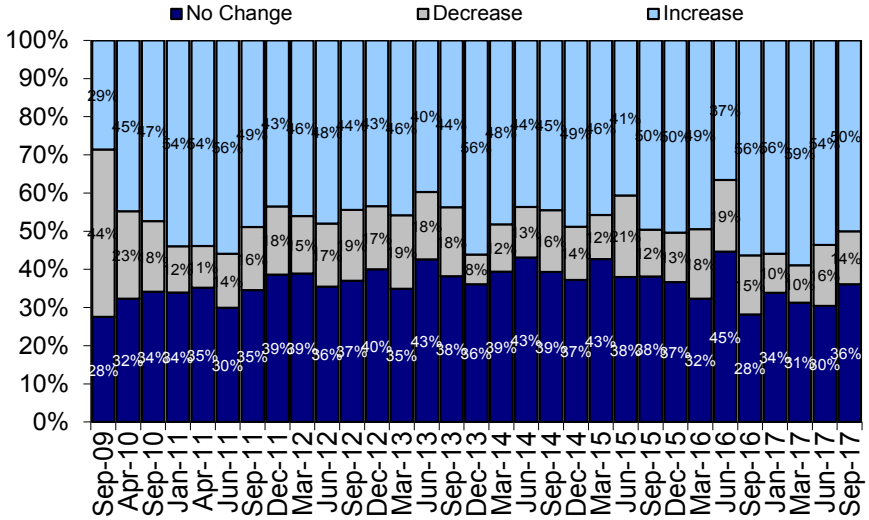
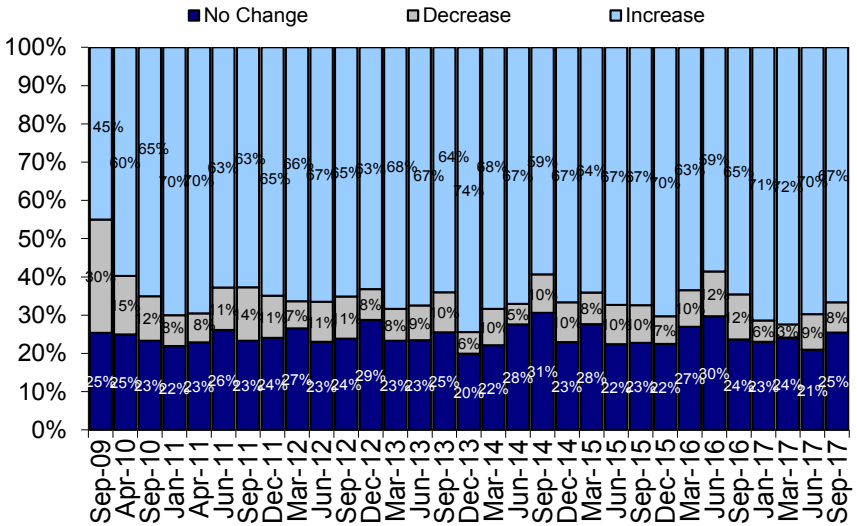
Parcel Volume Outlook Over the Next 6 Months

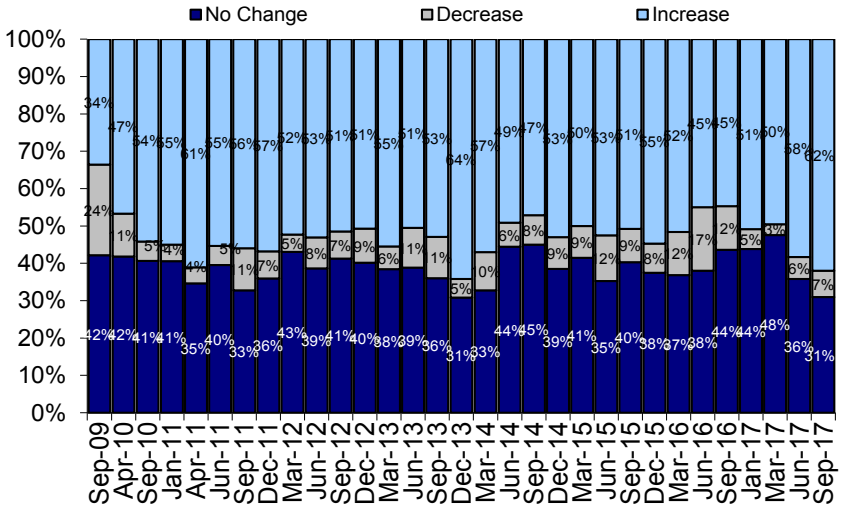
% of Shippers Expecting Air to:



% of Shippers Expecting Ground to:



% of Shippers Expecting International to:

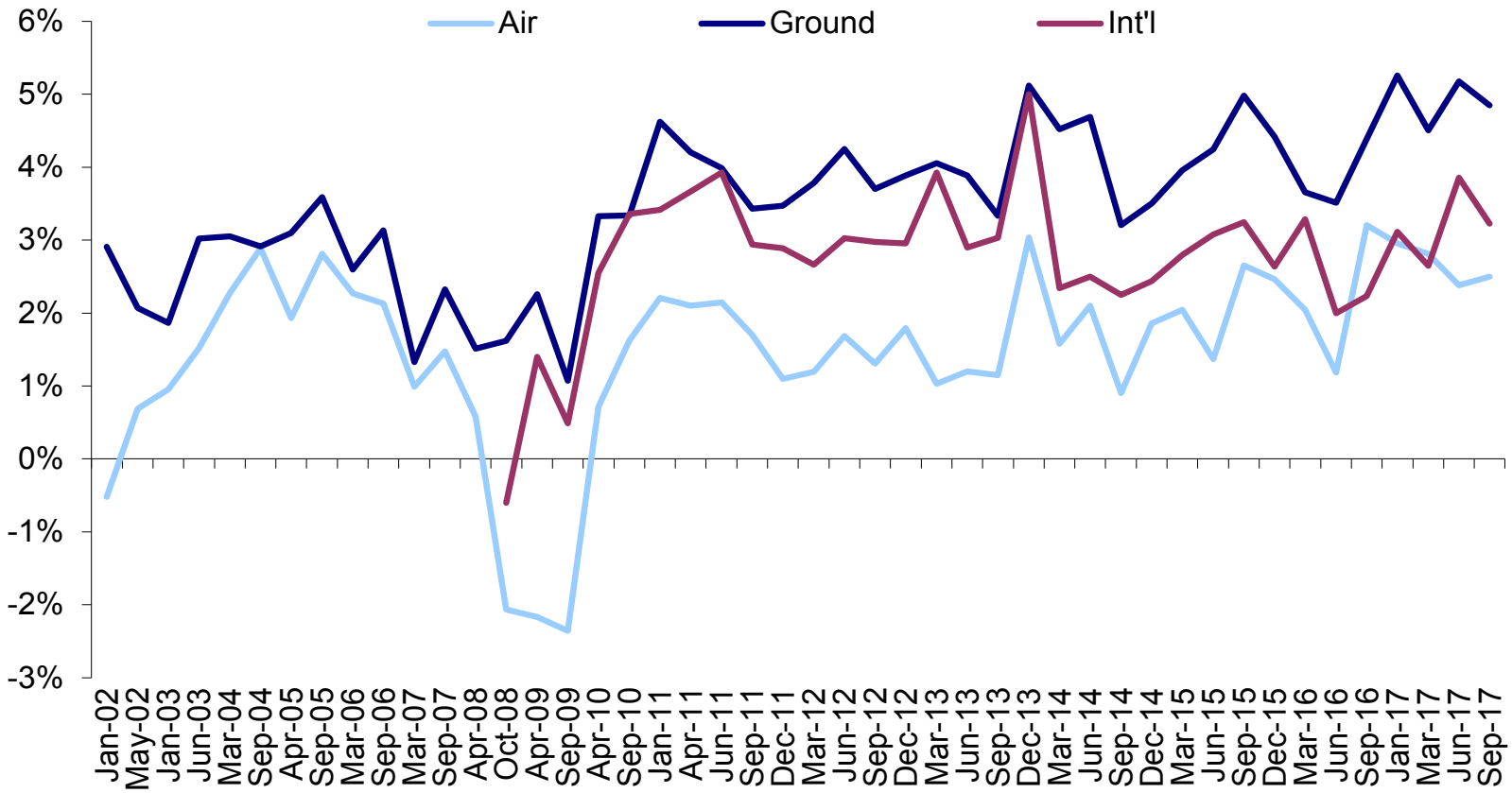


Source: Morgan Stanley Parcel Survey

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

Volume Trends by Product

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



Source: Morgan Stanley Parcel Survey

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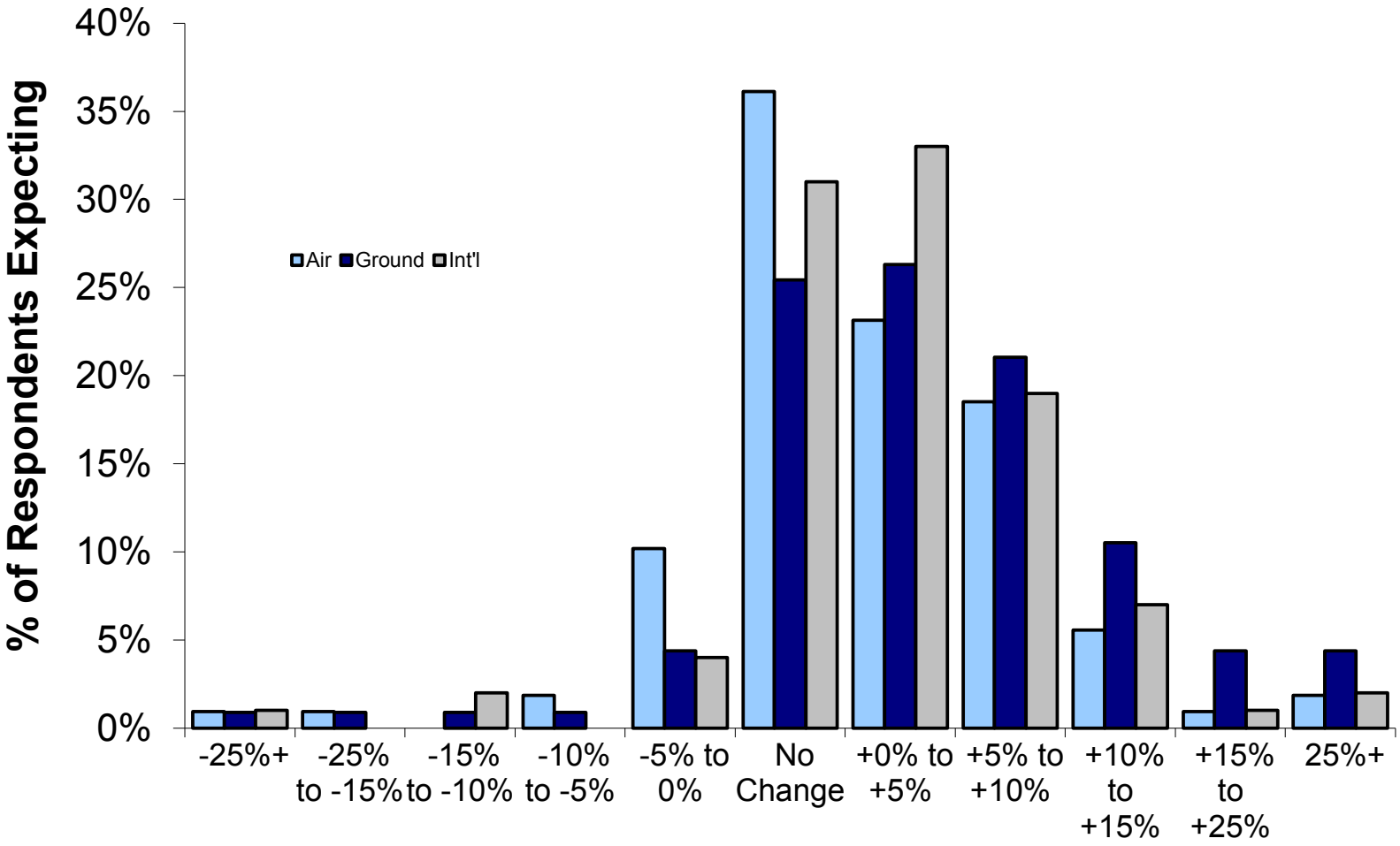
Volume Response Skew – All Shippers

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



Source: Morgan Stanley Parcel Survey

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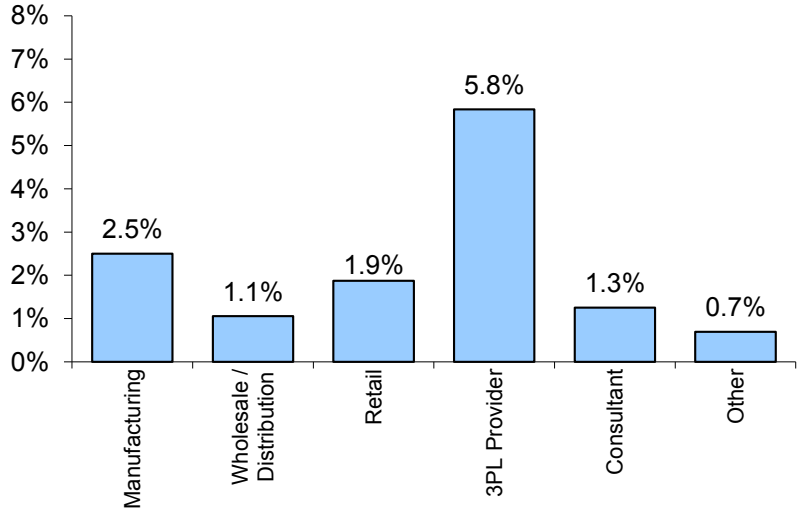
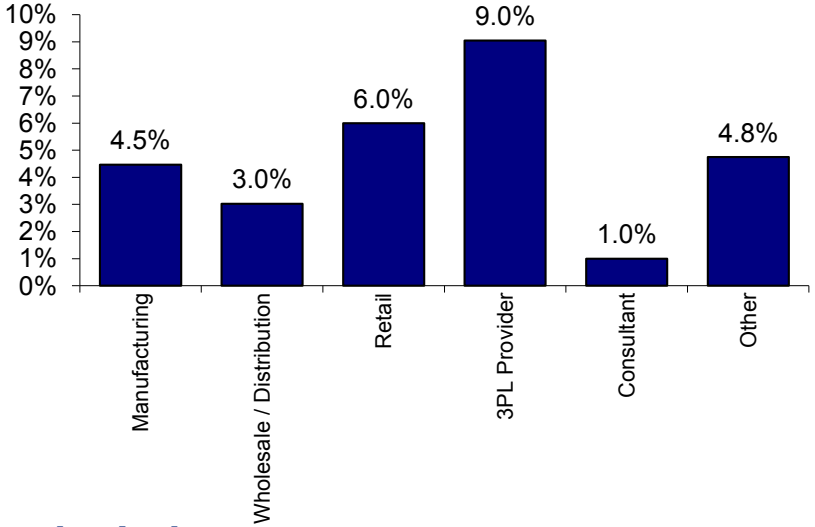
Volume Growth Outlook by Industry

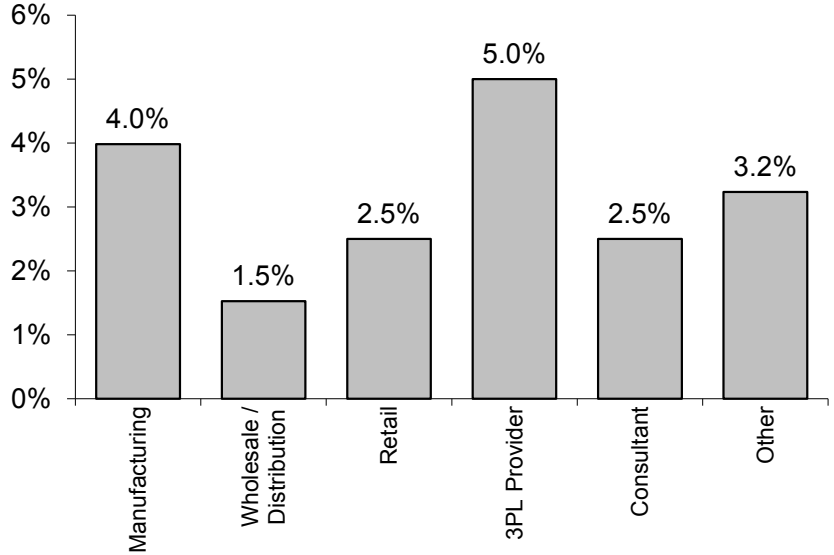
Air - Avg Change by Industry



Ground - Avg Change by Industry



International - Avg Change by Industry

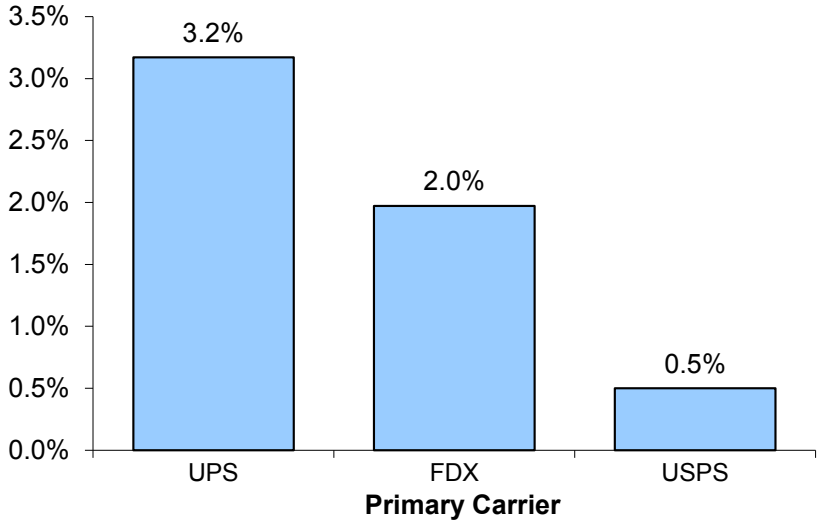


Source: Morgan Stanley Parcel Survey

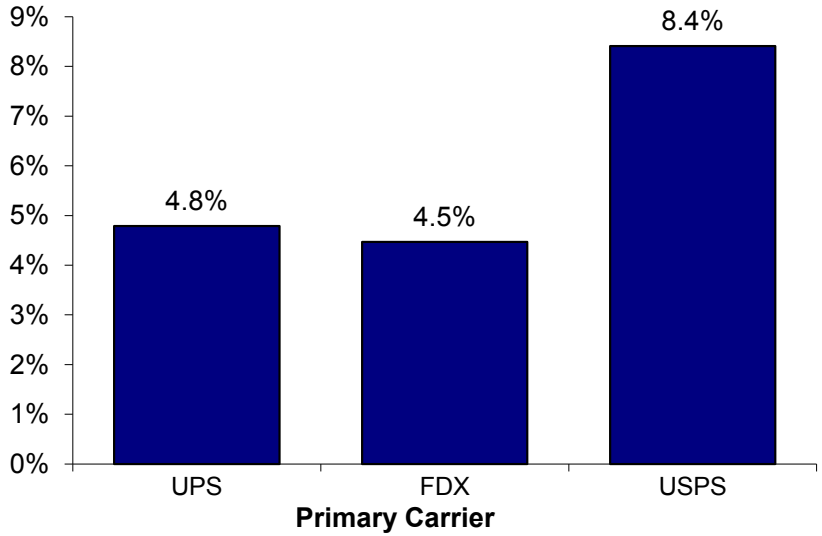
Ravi Shanker, (212) 761-6350, Ravi.Shanker@morganstanley.com

Volume Growth Outlook by Listed Primary Carrier

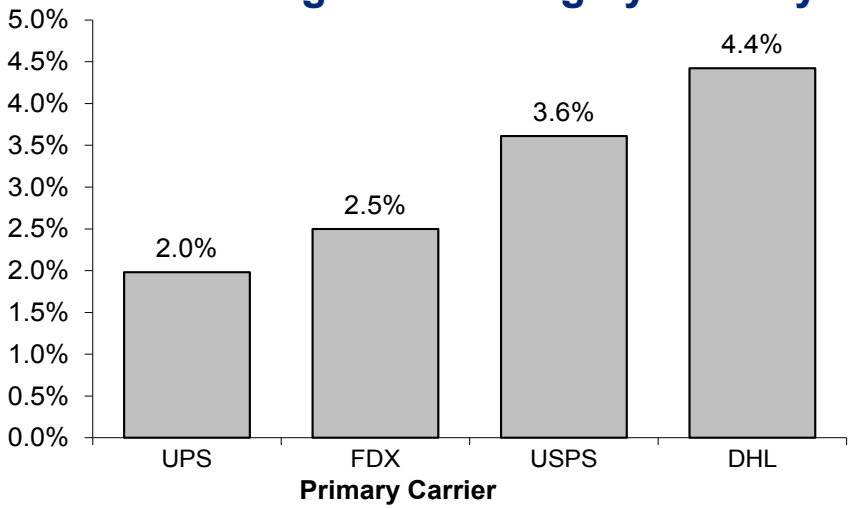
Air - Avg Volume Change by Primary Carrier



Ground - Avg Volume Change by Primary Carrier



International - Avg Volume Chg by Primary Carrier

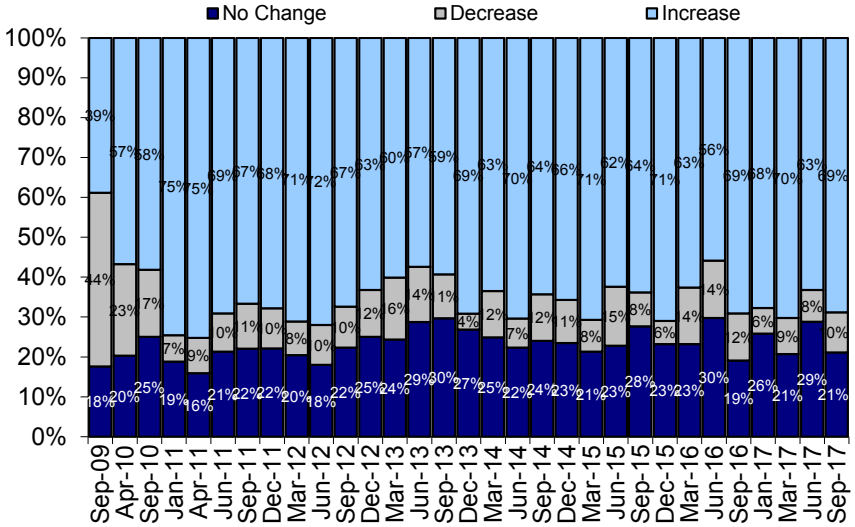


Source: Morgan Stanley Parcel Survey

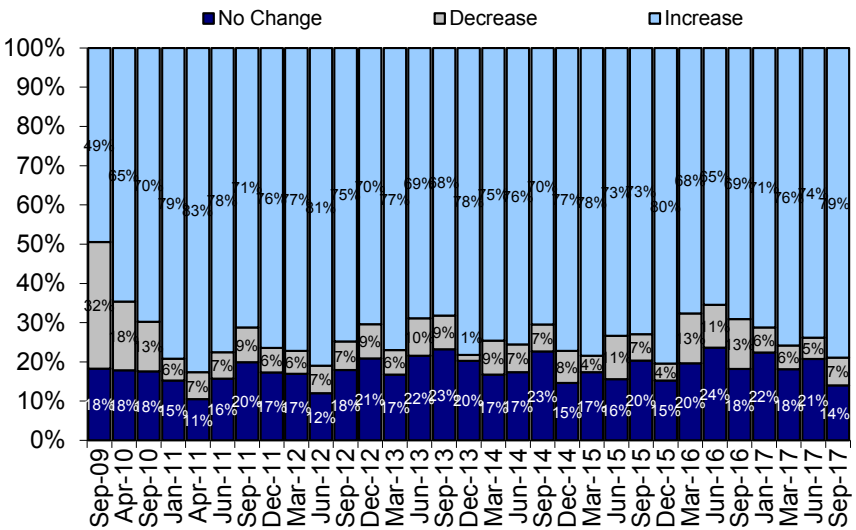
Ravi Shanker, (212) 761-6350, Ravi.Shanker@morganstanley.com

Parcel Spend Outlook Over the Next 6 Months

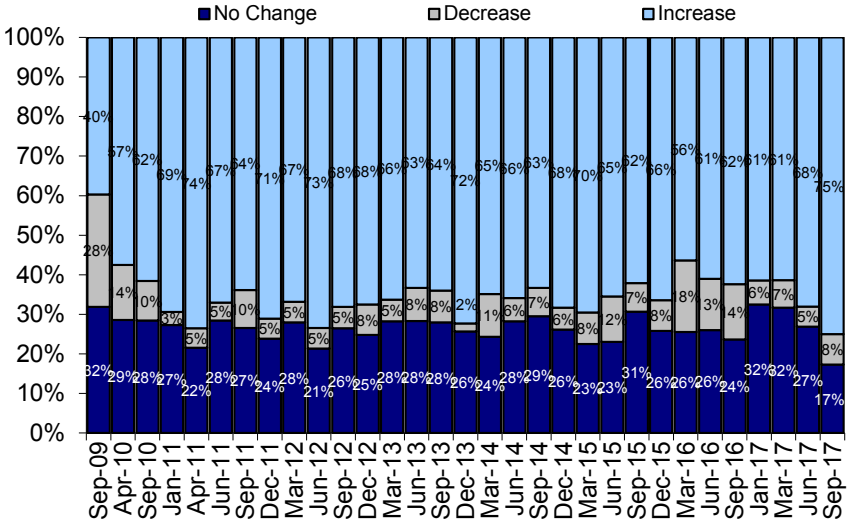
% of Shippers Expecting Air to:



% of Shippers Expecting Ground to:



% of Shippers Expecting International to:

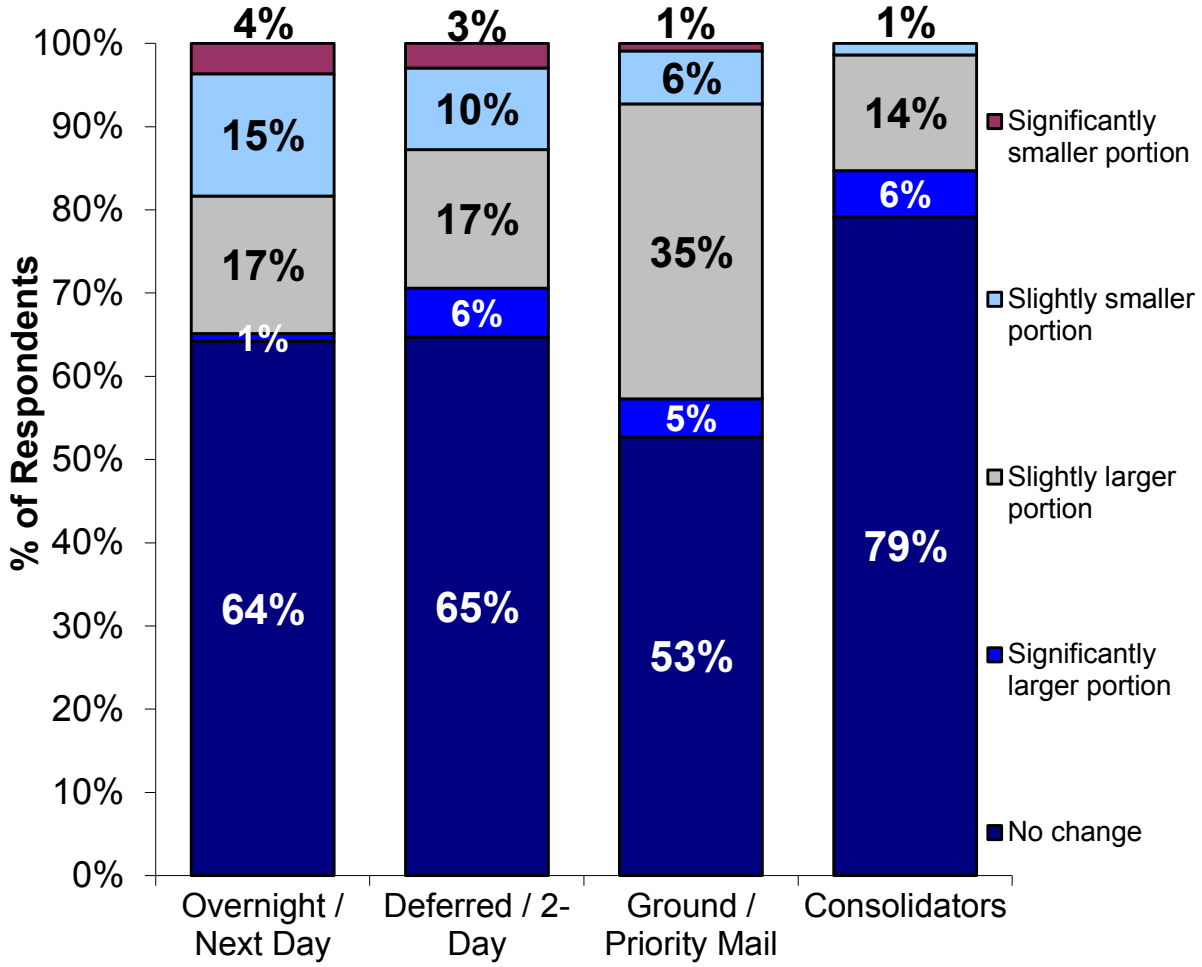


Source: Morgan Stanley Parcel Survey

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

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?



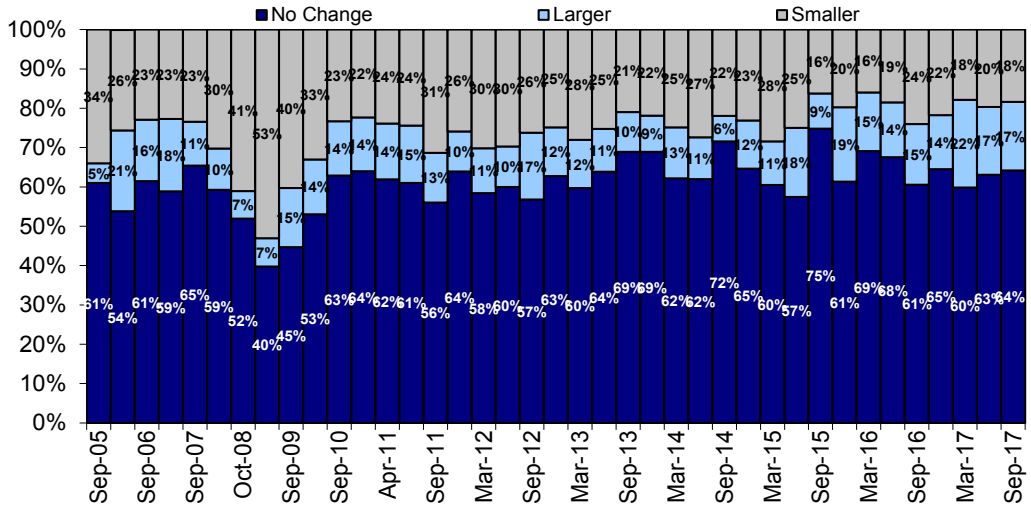
Source: Morgan Stanley Parcel Survey

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

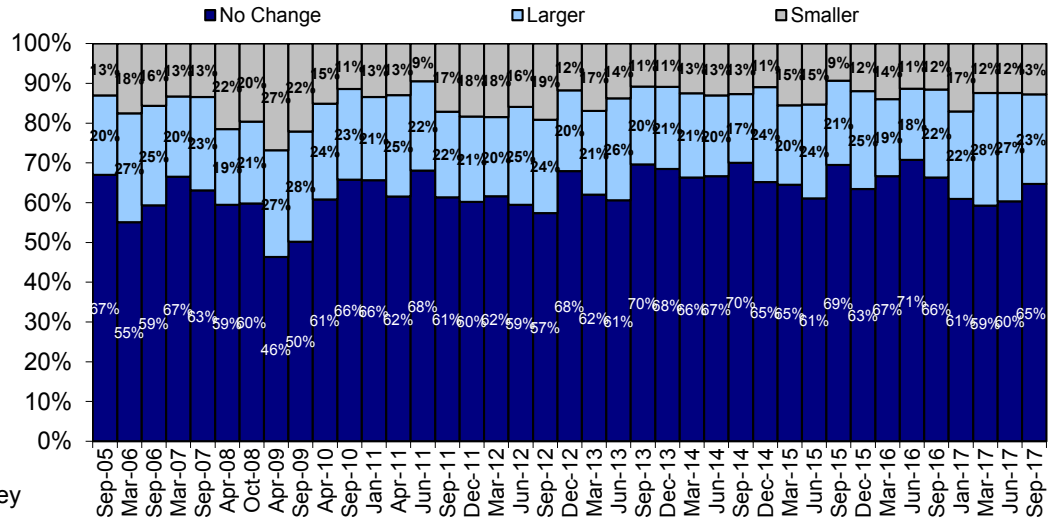
Historical Expected Change in Use of Air Products

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



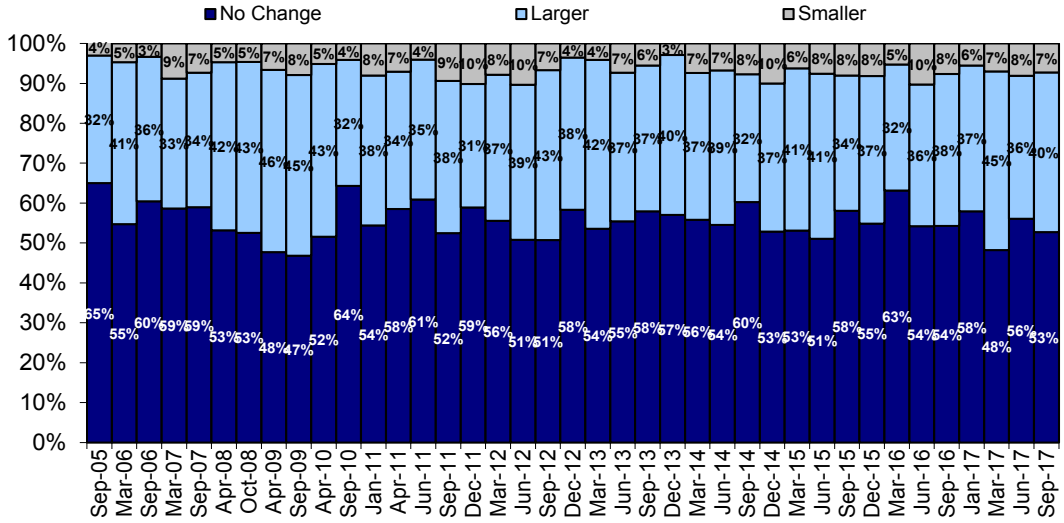
Source: Morgan Stanley Parcel Survey

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

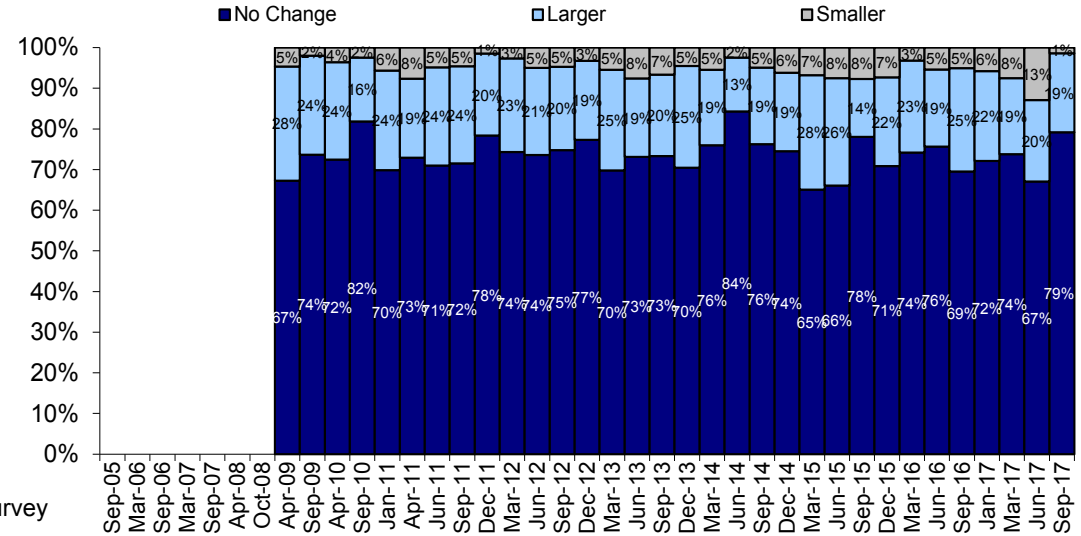
Historical Expected Change in Use of Ground and Consolidators

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



Source: Morgan Stanley Parcel Survey

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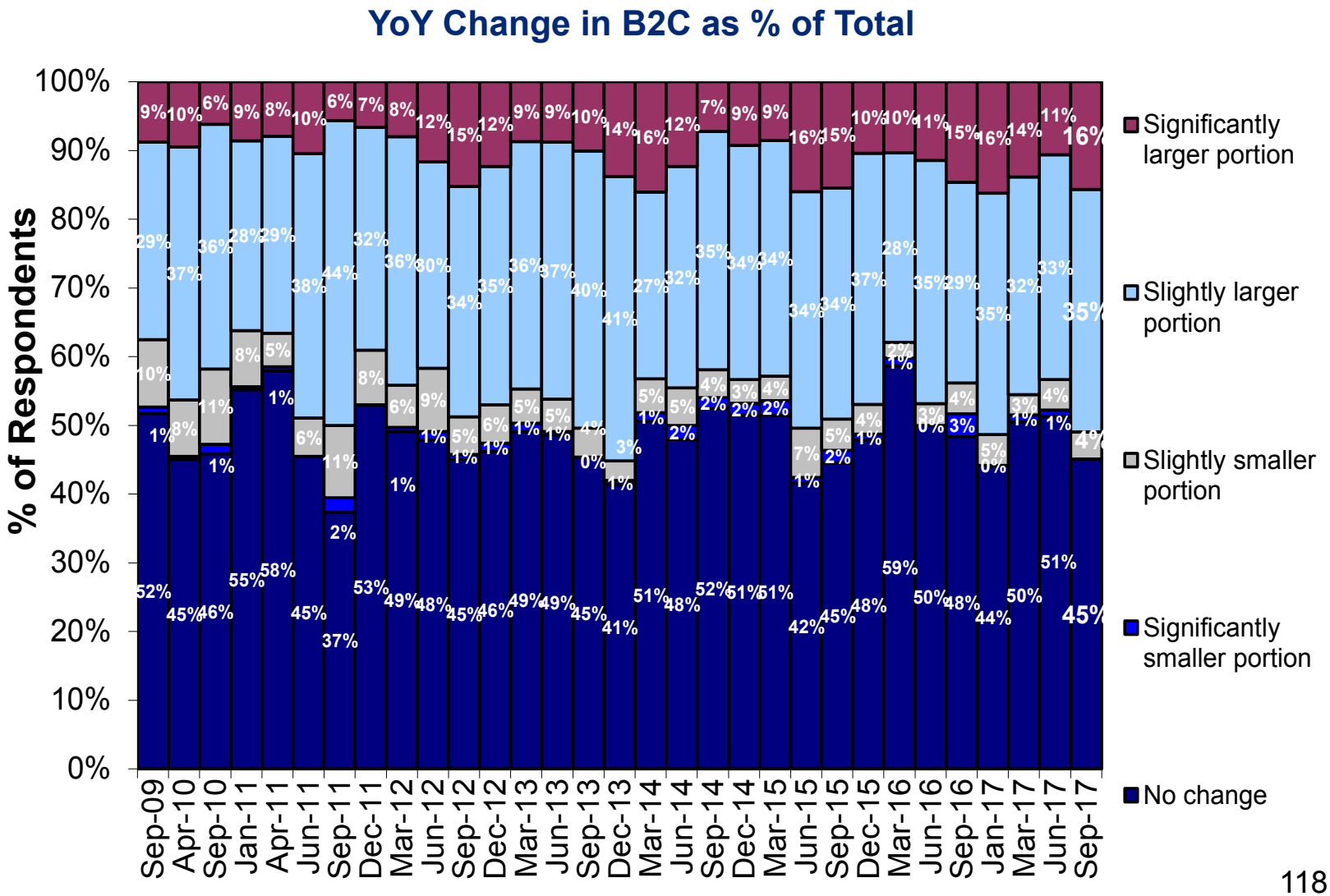
Expected Trends in B2C



Source: Morgan Stanley Parcel Survey

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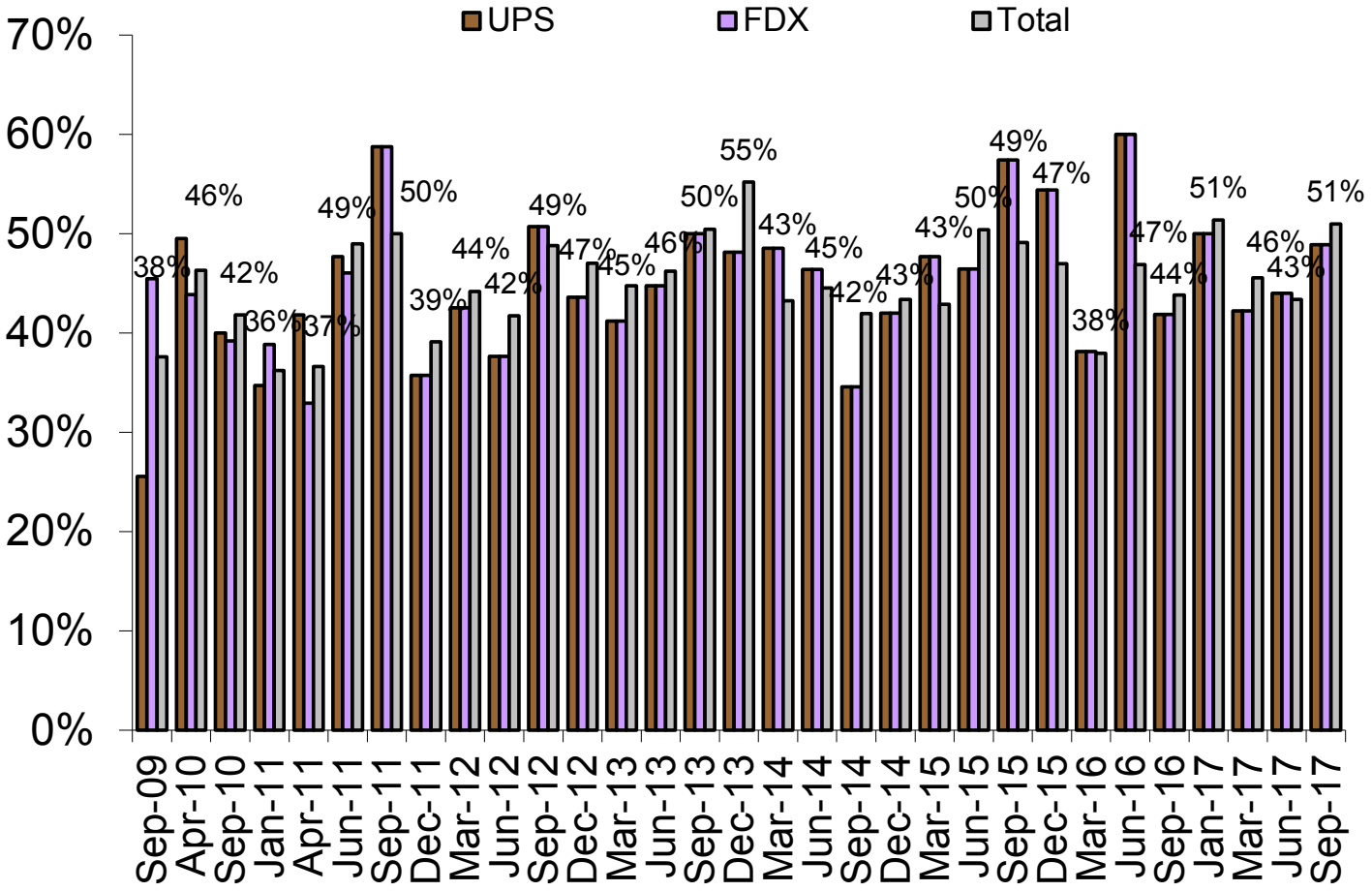
Expected Trends in B2C

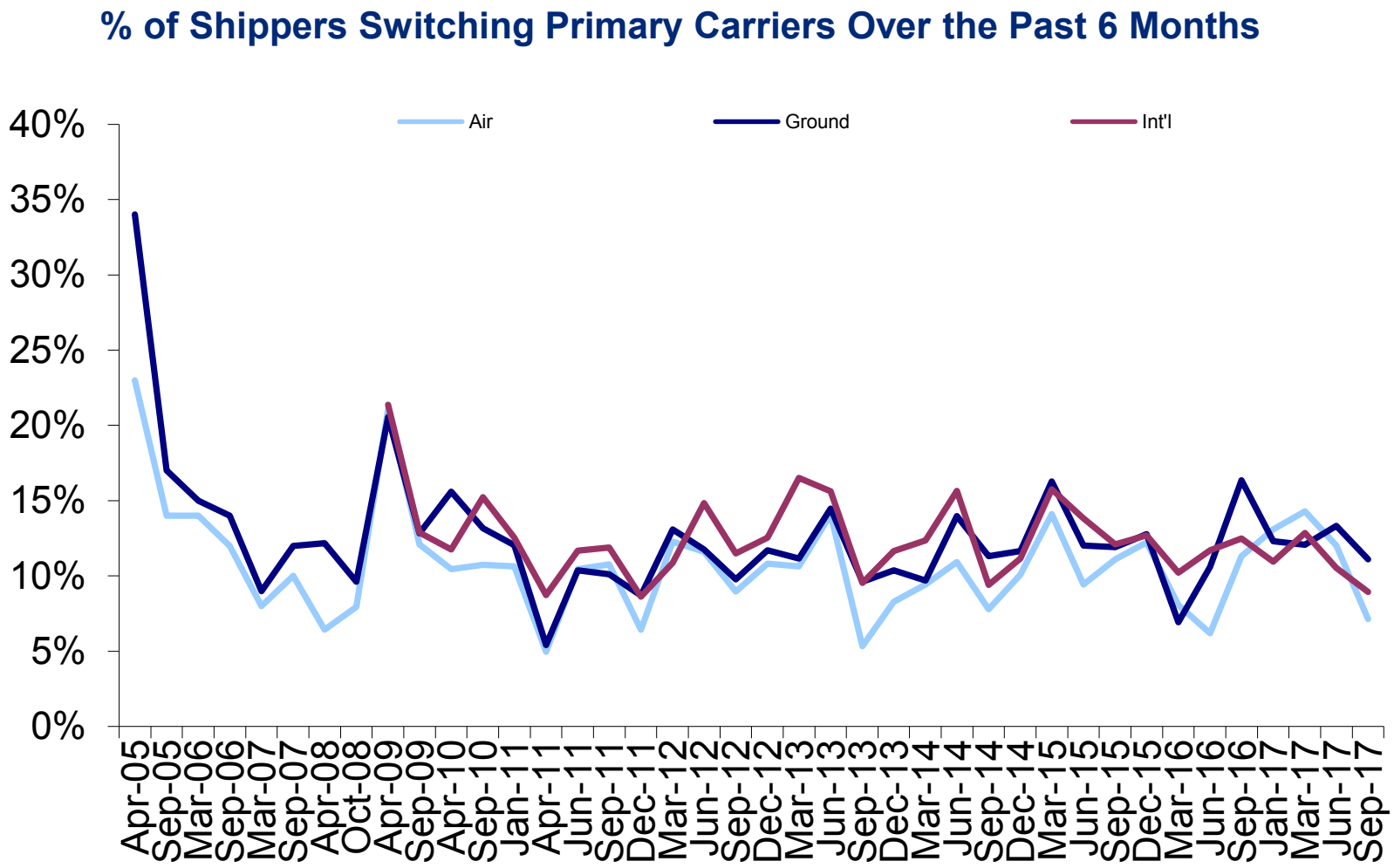
% of Respondents Indicating Increase in B2C Shipping as % of Total



Source: Morgan Stanley Parcel Survey

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

% of Respondents Switching Primary Carriers Over Time



Source: Morgan Stanley Parcel Survey

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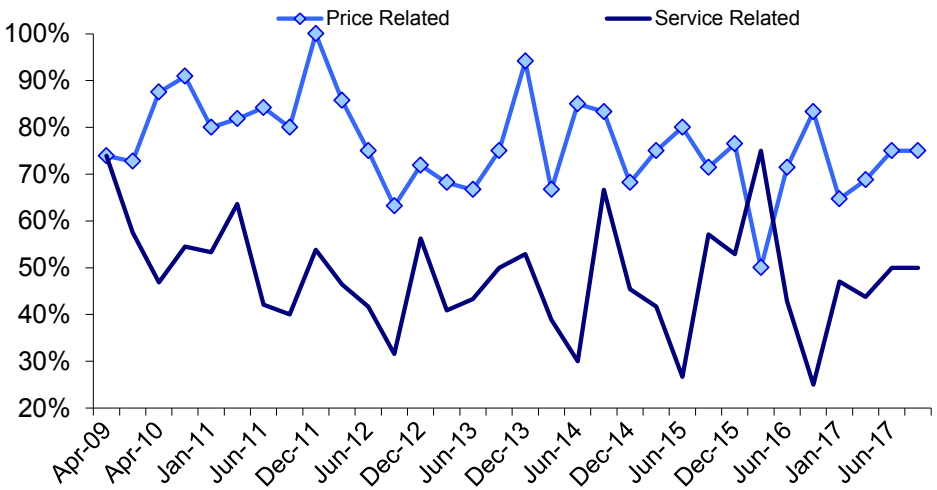
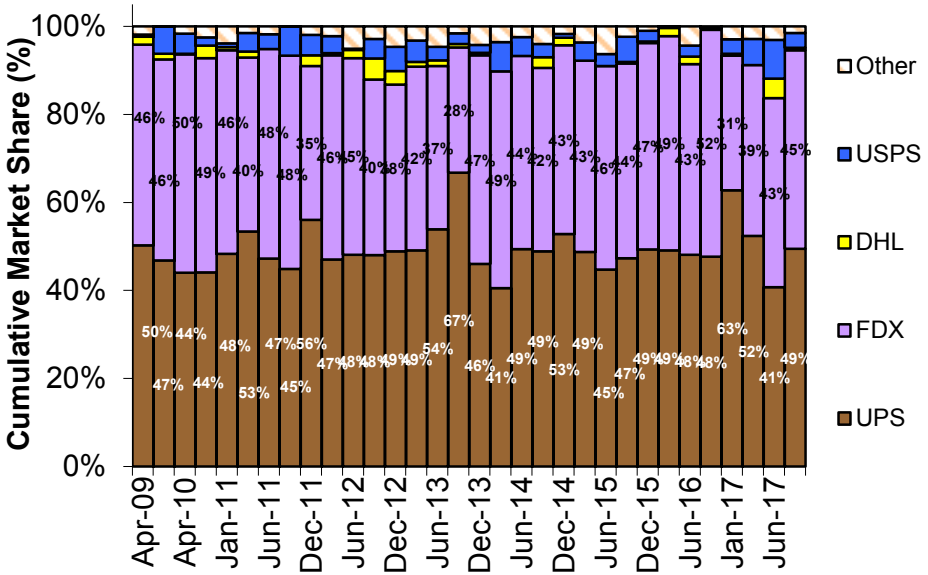
Air Switching: Reasons for Switch and Primary Carrier

Air: Reason for Switching Primary Carriers



Air: Dollar-weighted Market Share



Source: Morgan Stanley Parcel Survey

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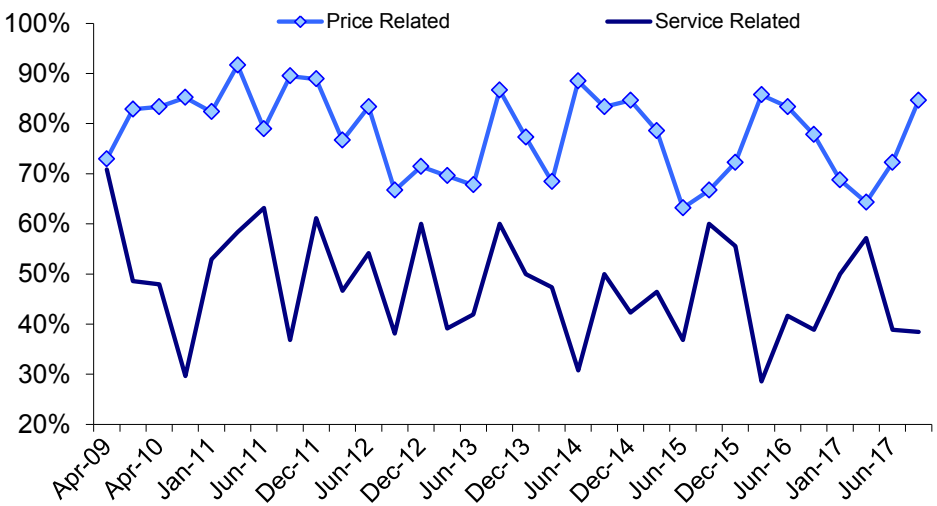
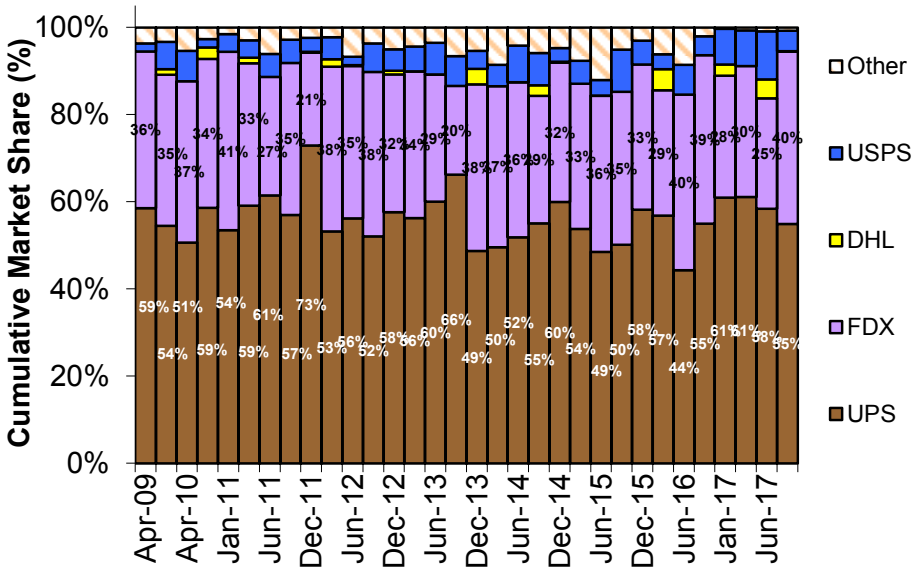
Ground Switching: Reasons for Switch and Primary Carrier

Ground: Reason for Switching Primary Carriers



Ground: Dollar-weighted Market Share



Source: Morgan Stanley Parcel Survey

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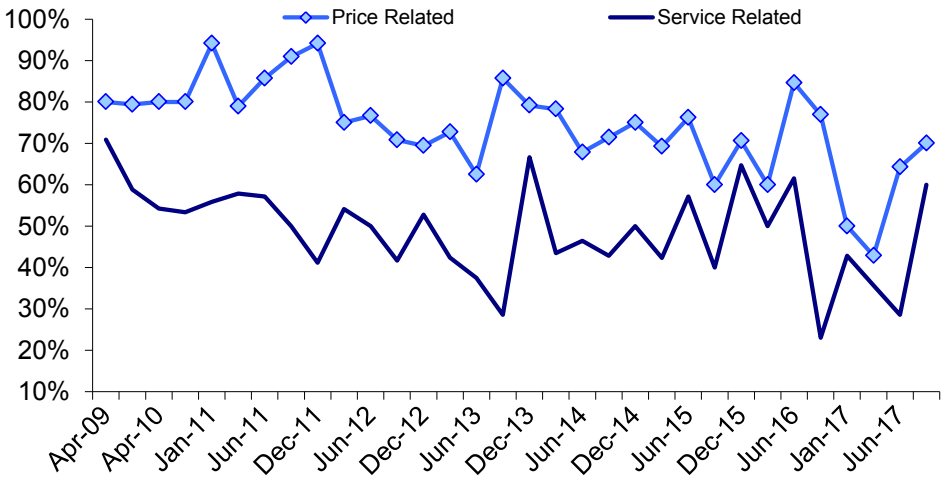
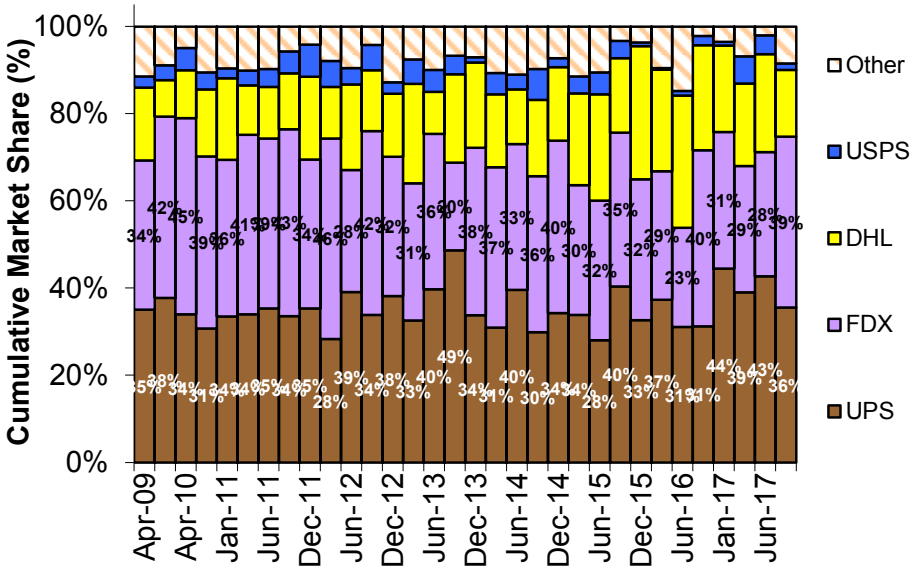
International Switching: Reasons for Switch and Primary Carrier

International: Reason for Switching Primary Carriers



International: Dollar-weighted Market Share



Source: Morgan Stanley Parcel Survey

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

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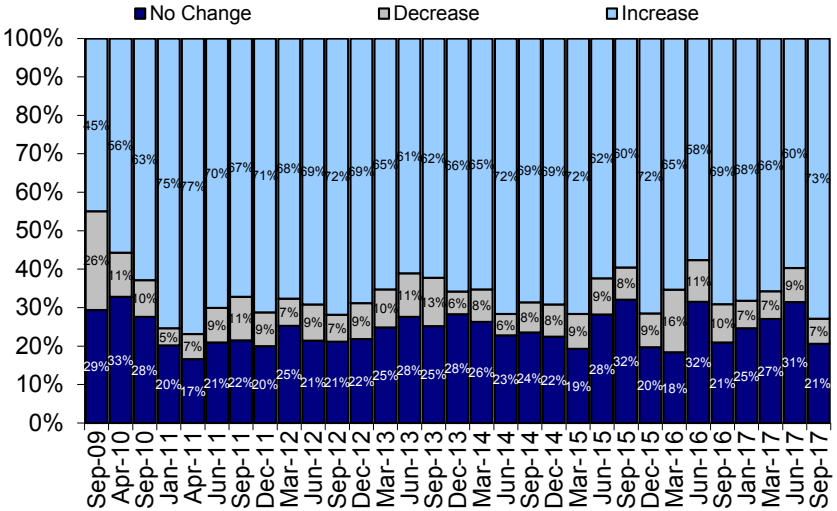
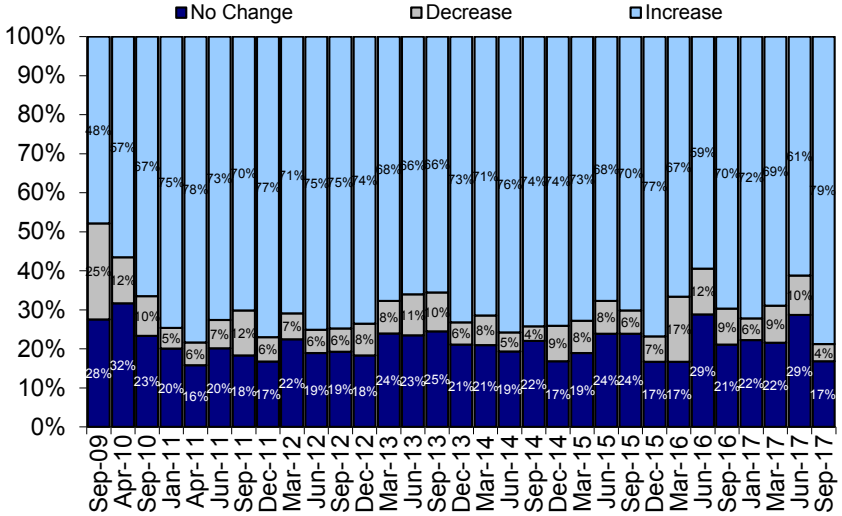
Parcel Pricing Outlook Over the Next 6 Months

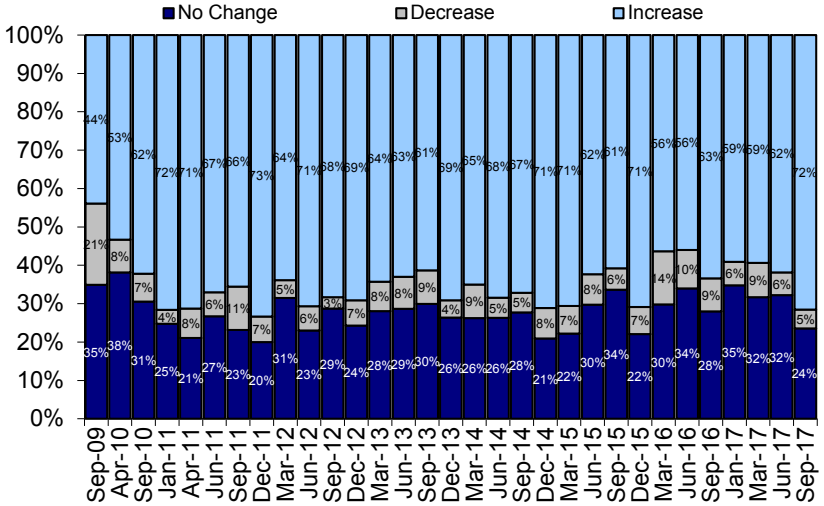
% of Shippers Expecting Air to:



% of Shippers Expecting Ground to:



% of Shippers Expecting International to:

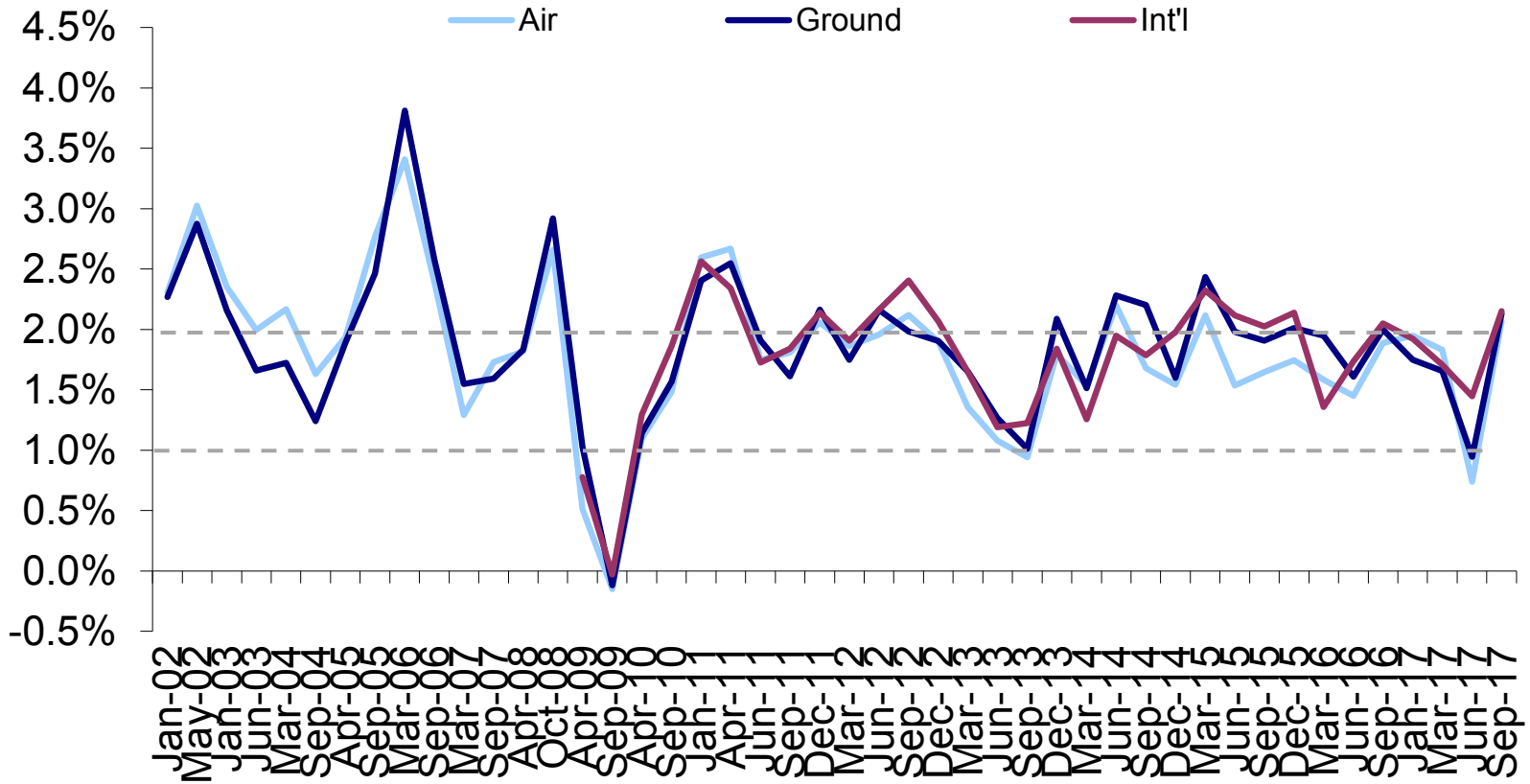


Source: Morgan Stanley Parcel Survey

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

Pricing Trends by Product: Large vs. Small Shipper

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

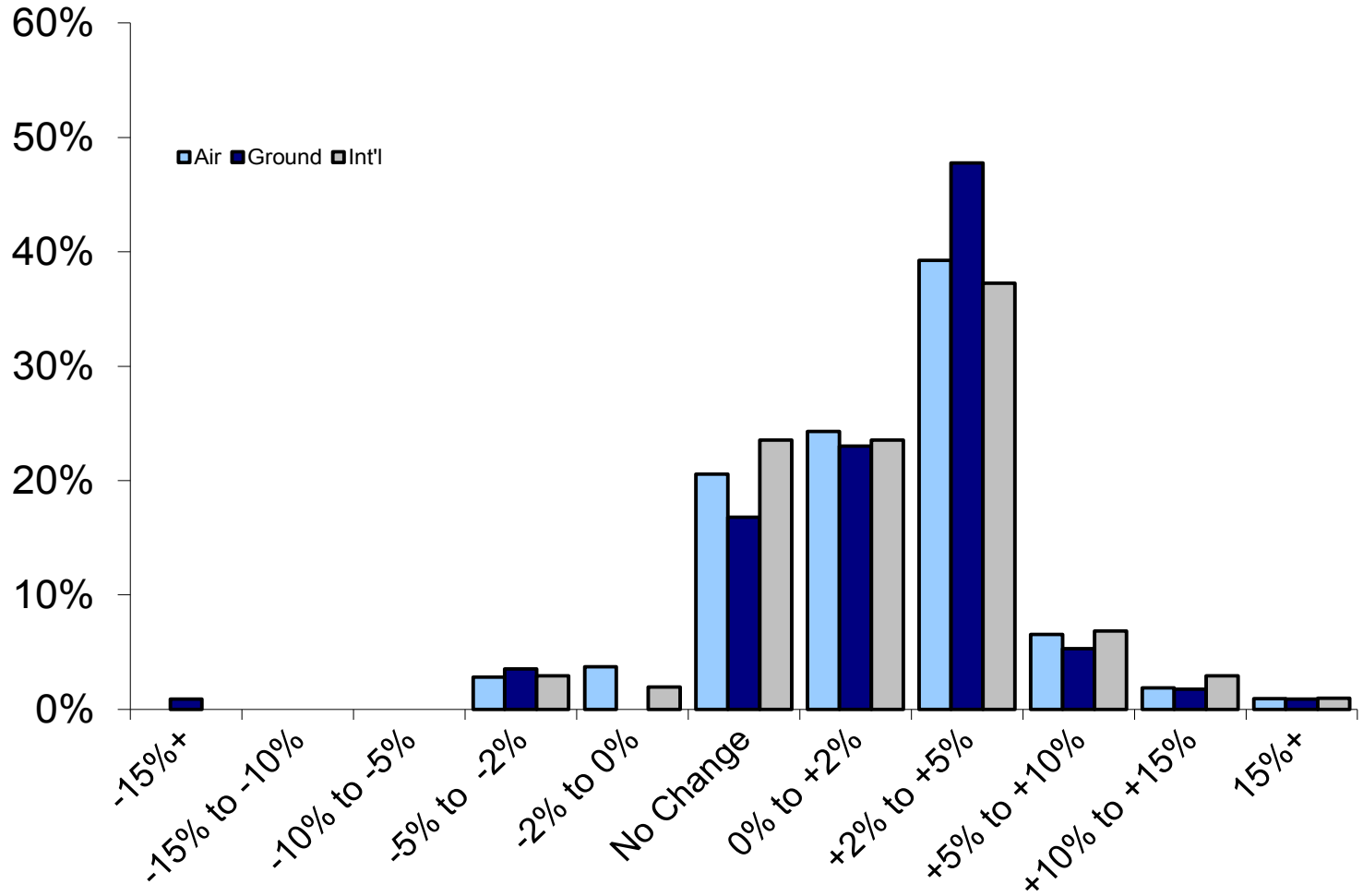


Source: Morgan Stanley Parcel Survey

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

Base Rate Response Skew – All Shippers

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

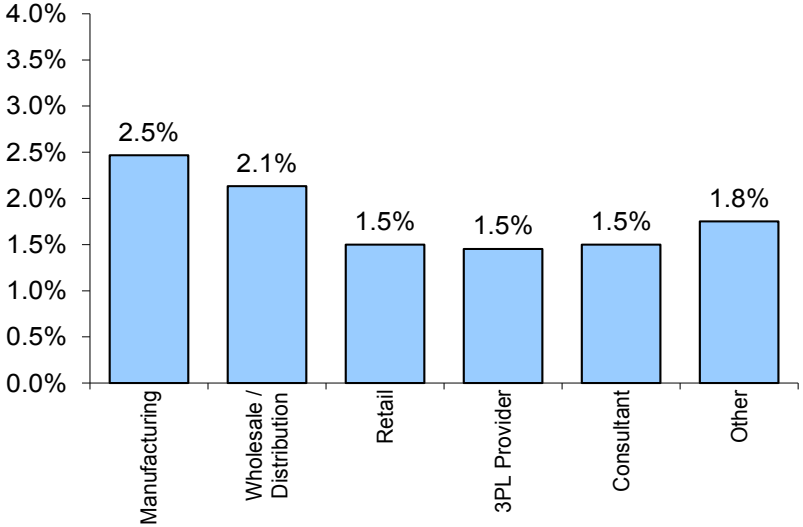


Source: Morgan Stanley Parcel Survey

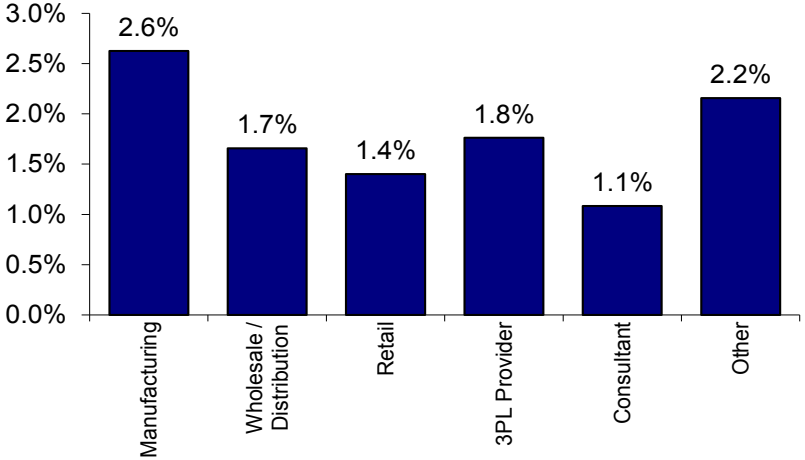
Ravi Shanker, (212) 761-6350, Ravi.Shanker@morganstanley.com

Pricing Outlook by Industry

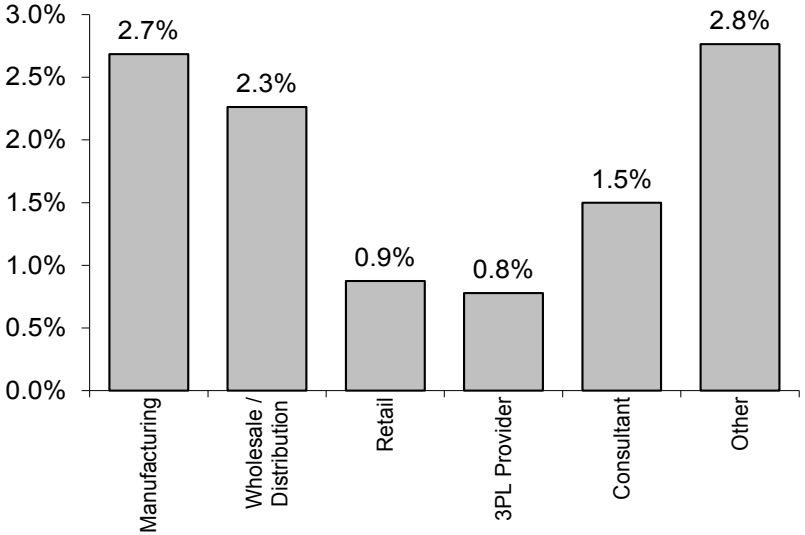
Air - Avg Change by Industry



Ground - Avg Change by Industry



International - Avg Change by Industry

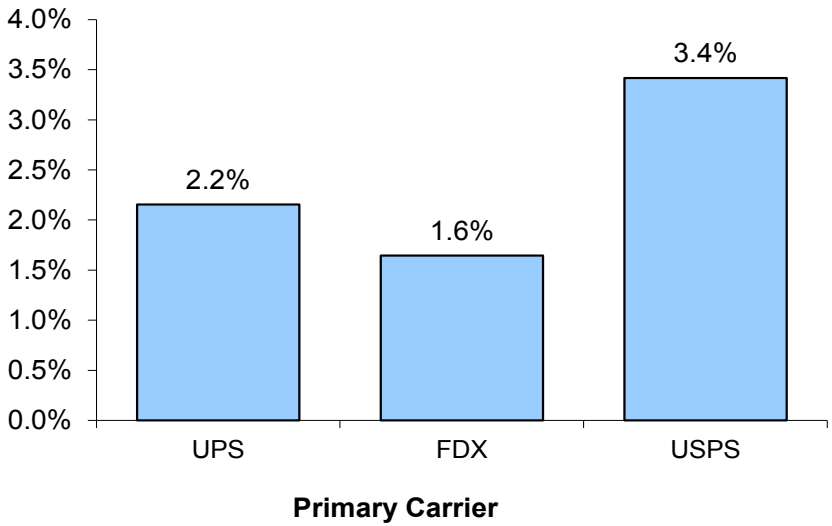


Source: Morgan Stanley Parcel Survey

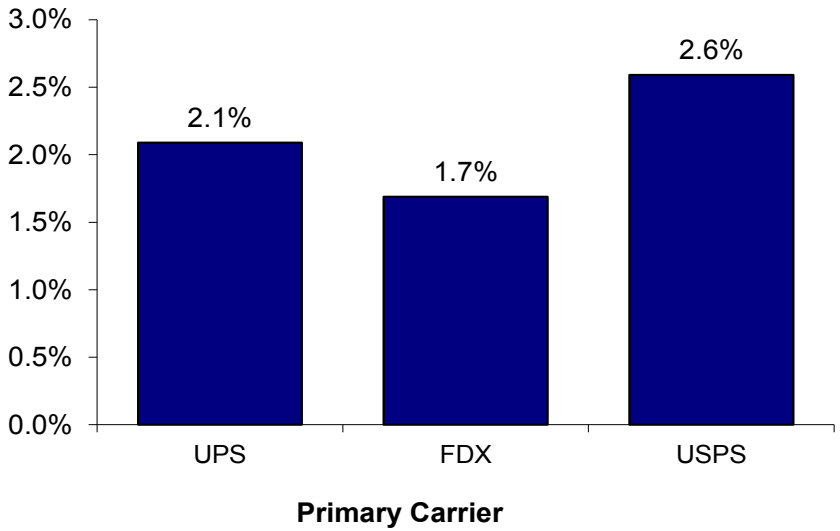
Ravi Shanker, (212) 761-6350, Ravi.Shanker@morganstanley.com

Pricing Outlook by Listed Primary Carrier

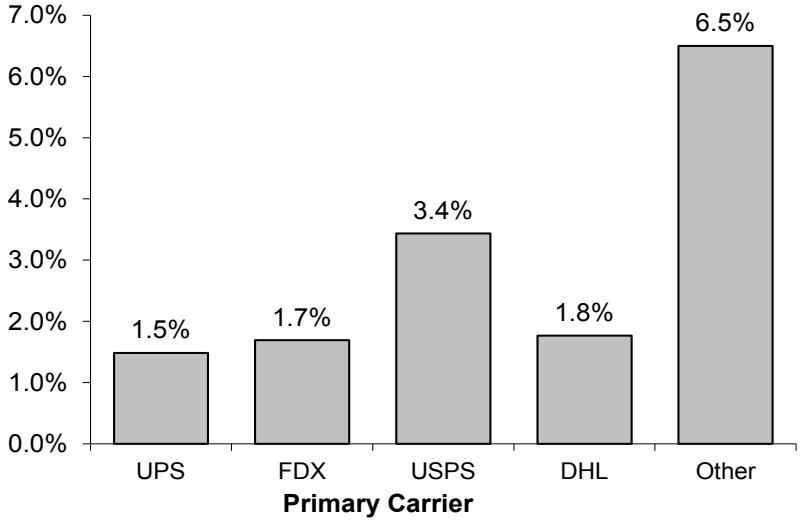
Air - Avg Change by Carrier



Ground - Avg Change by Carrier



International - Avg Change by Carrier

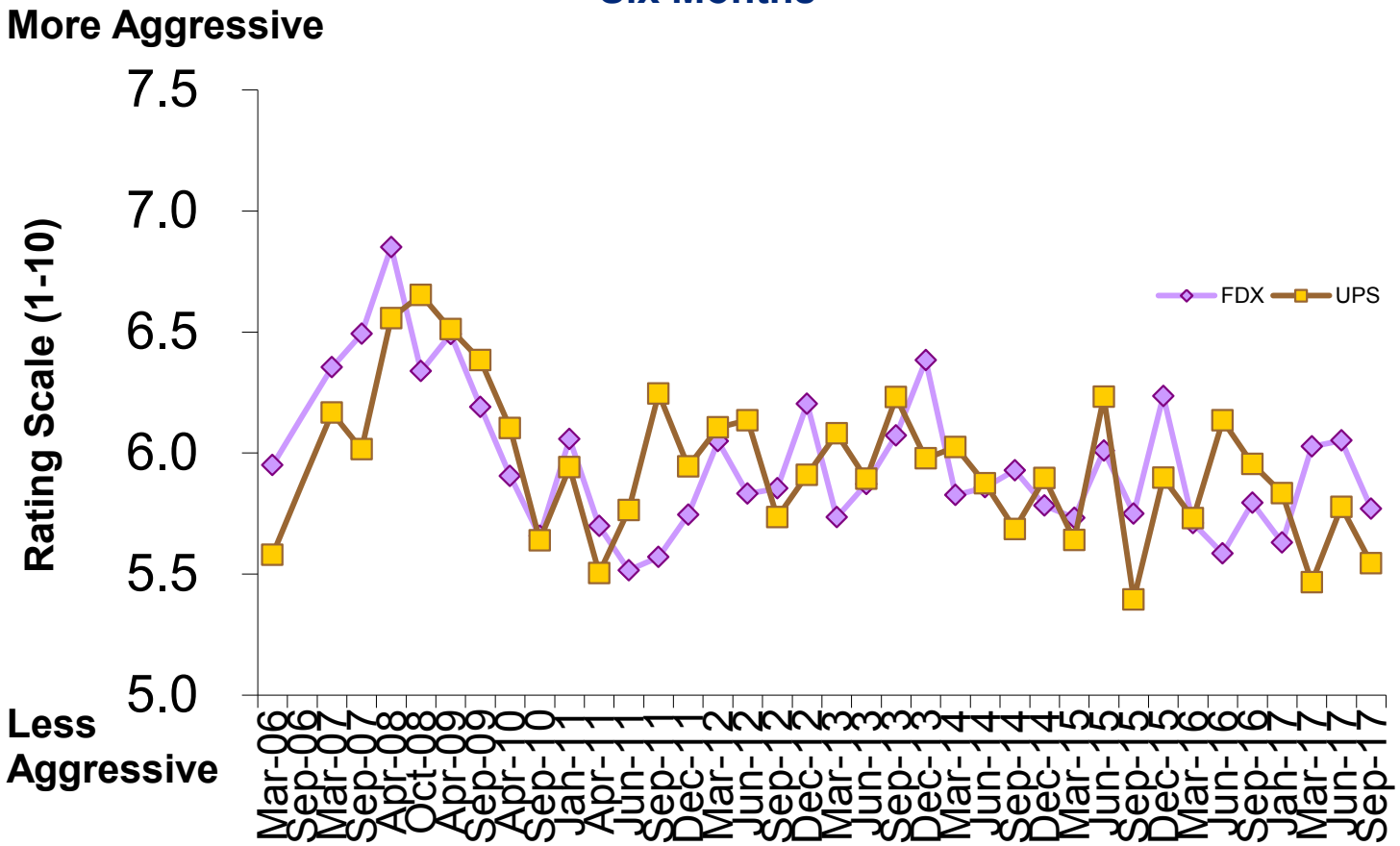


Source: Morgan Stanley Parcel Survey

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

Level of Aggressiveness in Trying to Win New Business

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

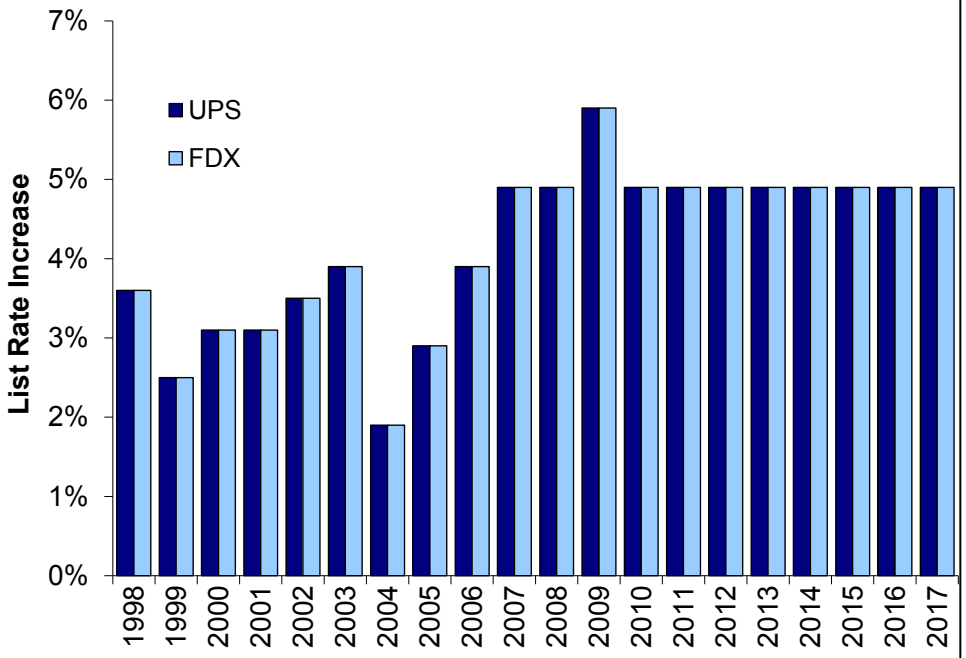


Source: Morgan Stanley Parcel Survey

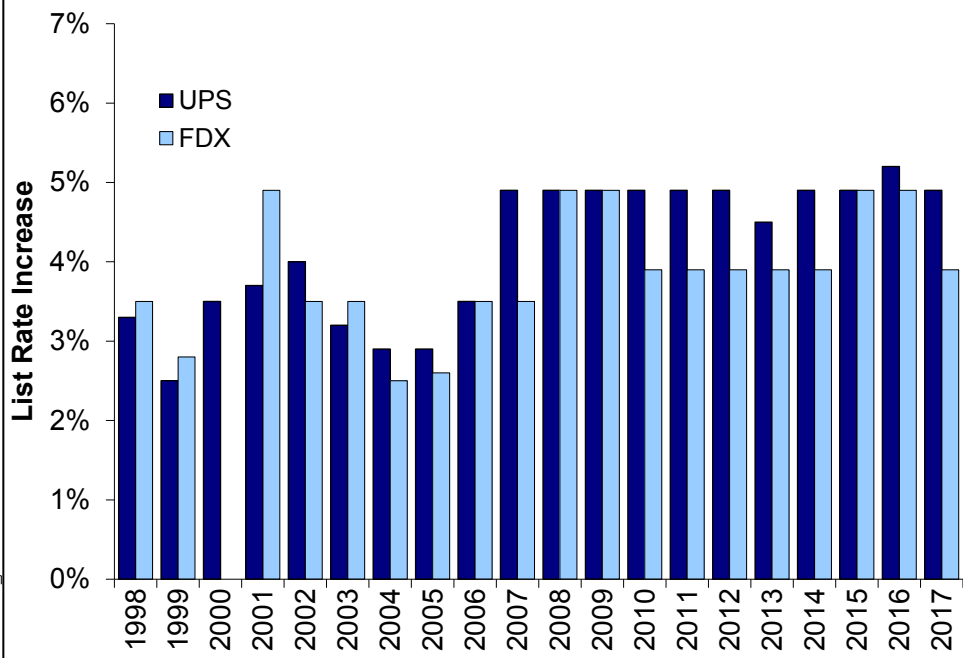
Ravi Shanker, (212) 761-6350, Ravi.Shanker@morganstanley.com

List Rate Increases

Ground List Rate Increase



Air List Rate Increase

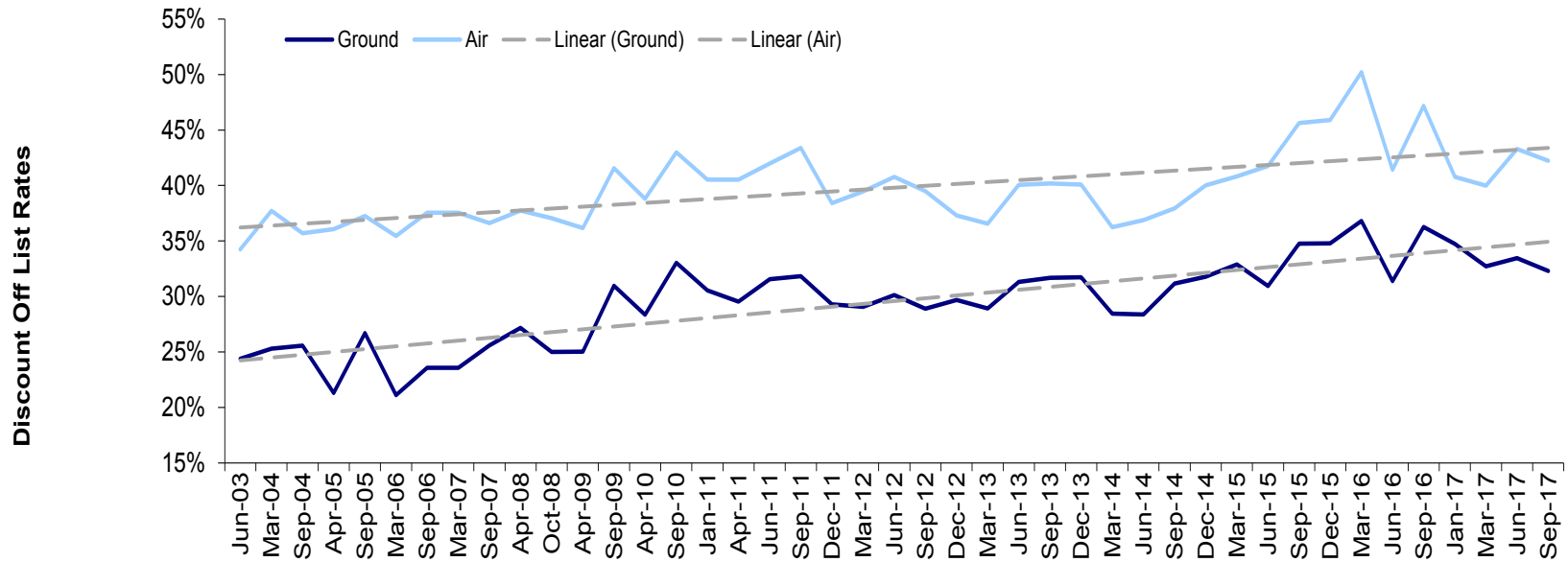


Source: Company data, Morgan Stanley Research

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

Percentage Discount Off of List Rates

Average List Rate Discount



Source: Morgan Stanley Parcel Survey

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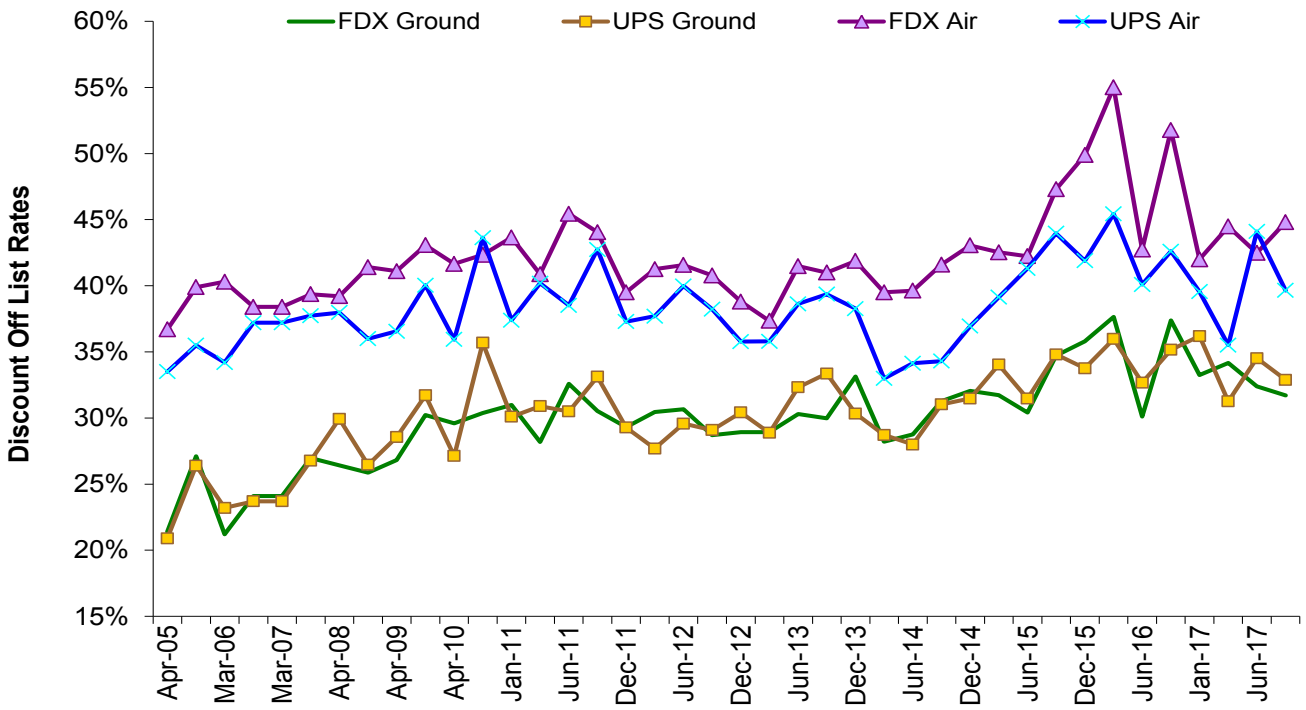
Percentage Discount Off of List Rates

Average Discount by Carrier and Product



Source: Morgan Stanley Parcel Survey

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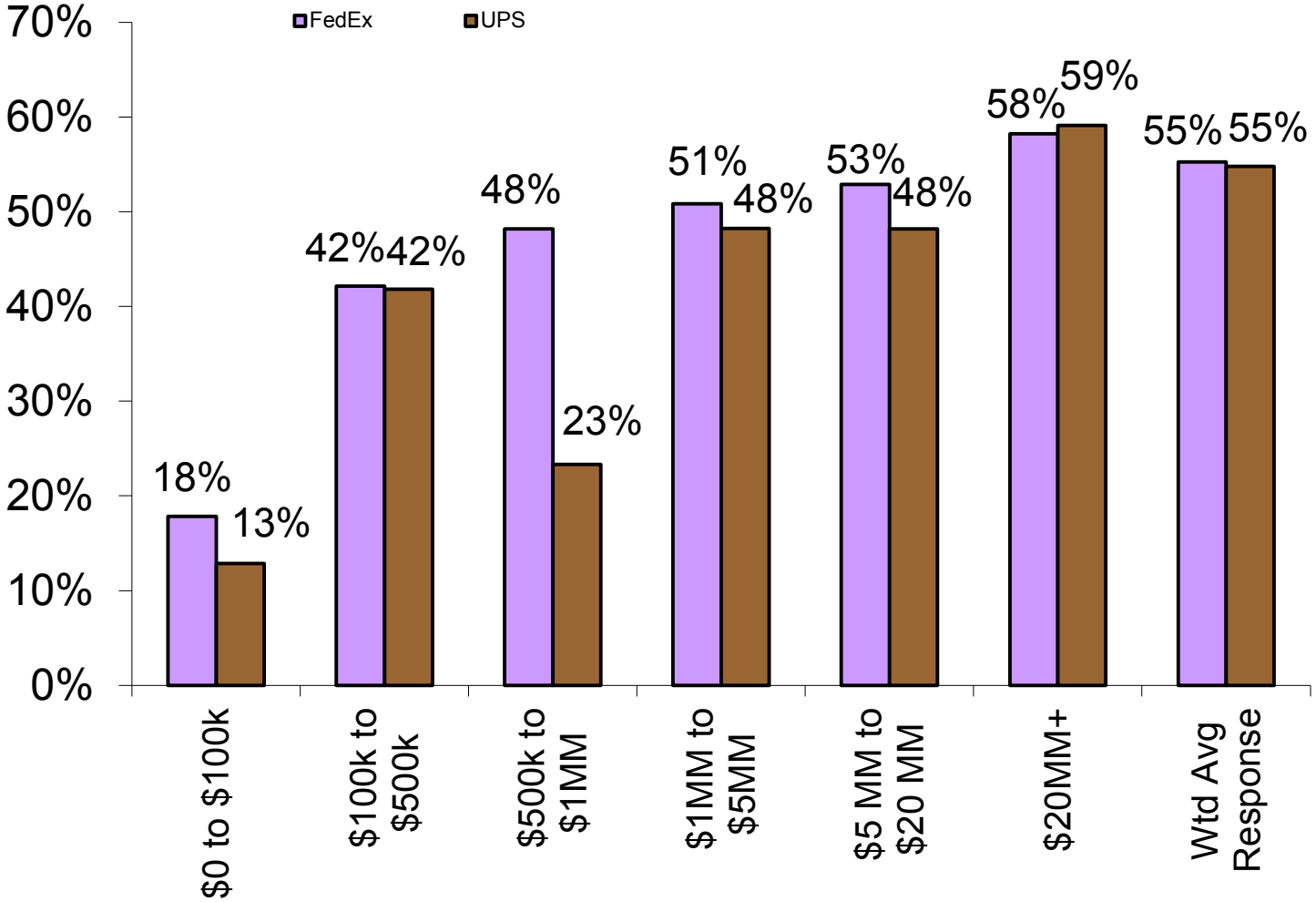
Air List Rate Discount by Spend

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

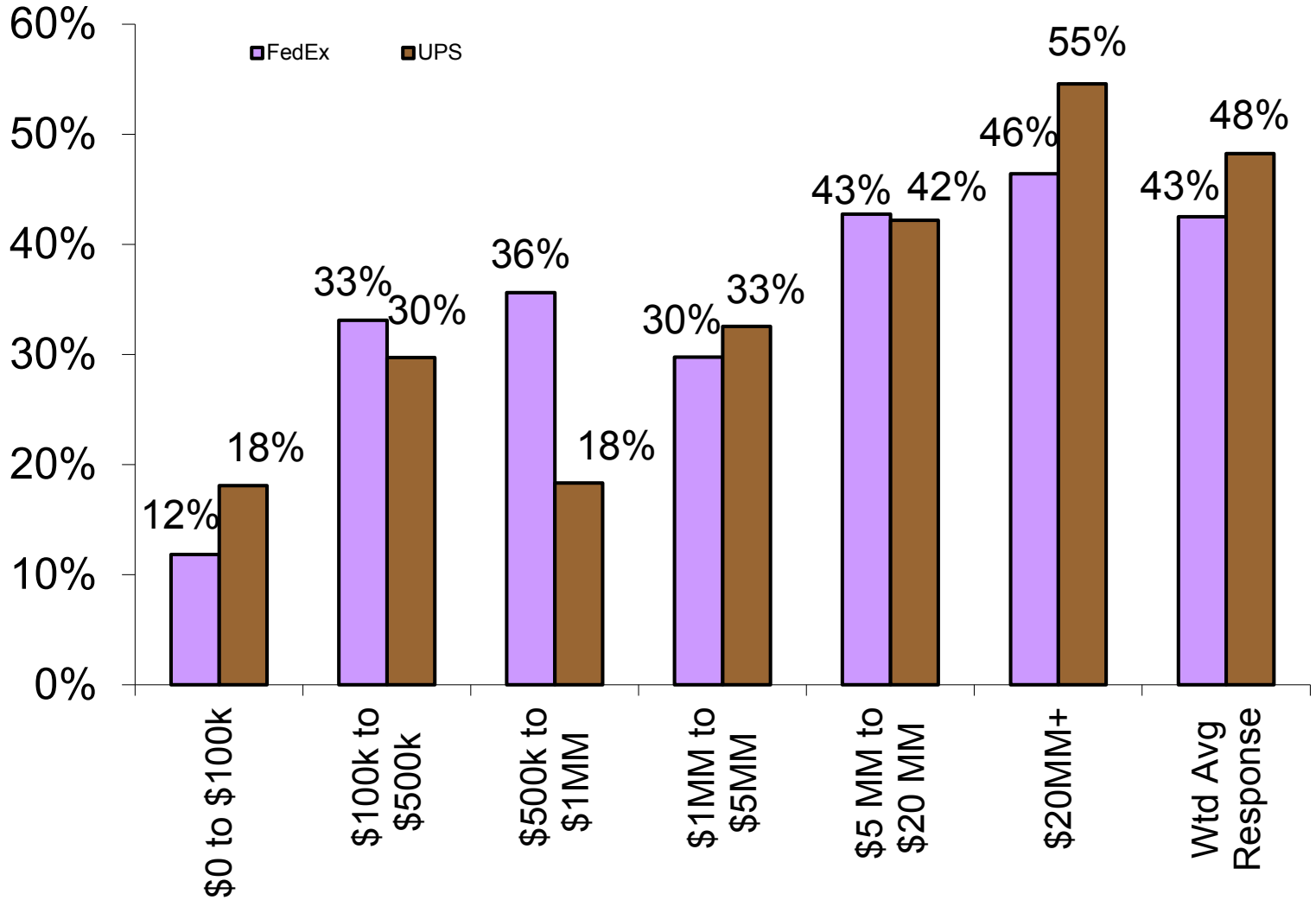


Source: Morgan Stanley Parcel Survey

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

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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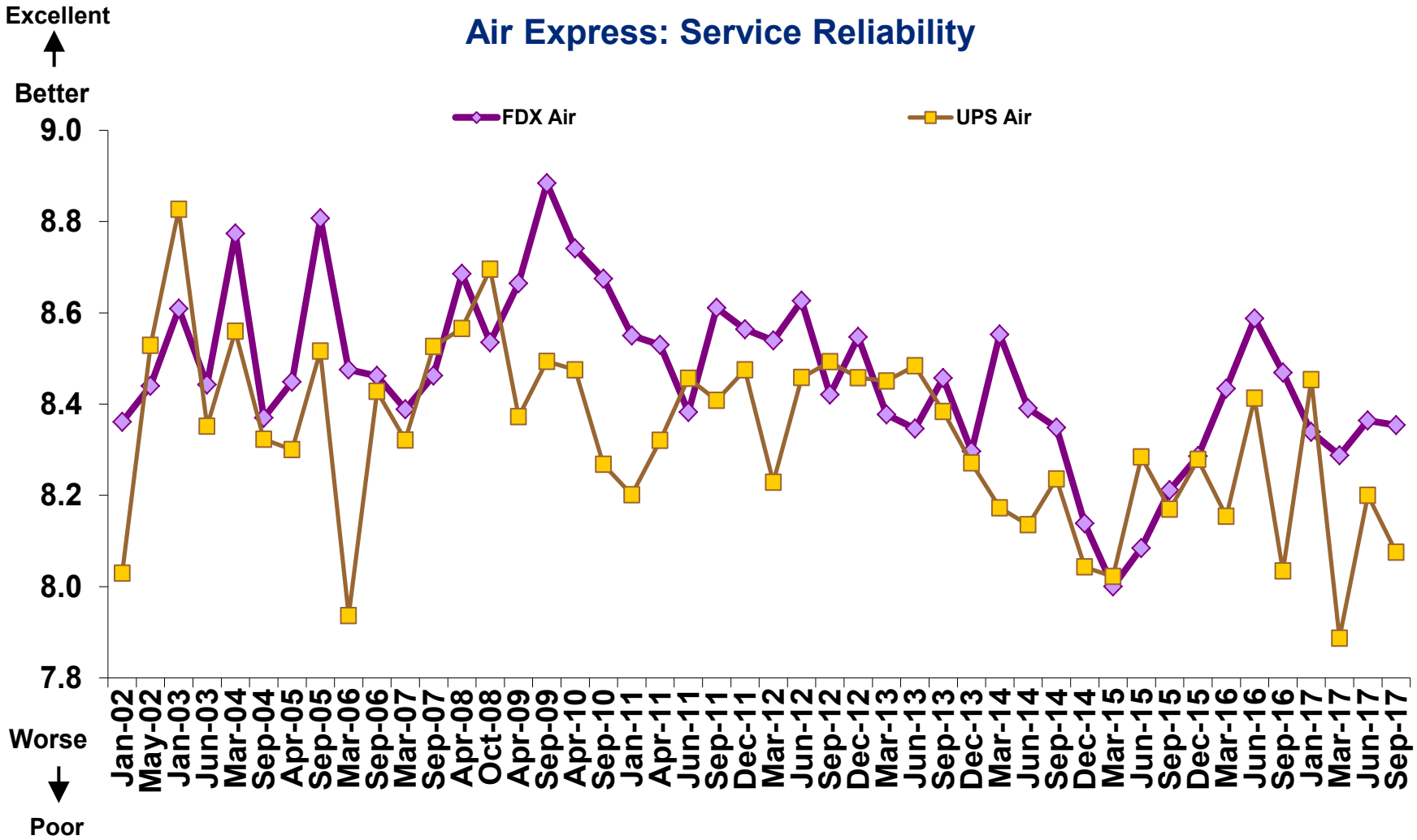
Service Reliability Rankings: Historical Trends



Source: Morgan Stanley Parcel Survey

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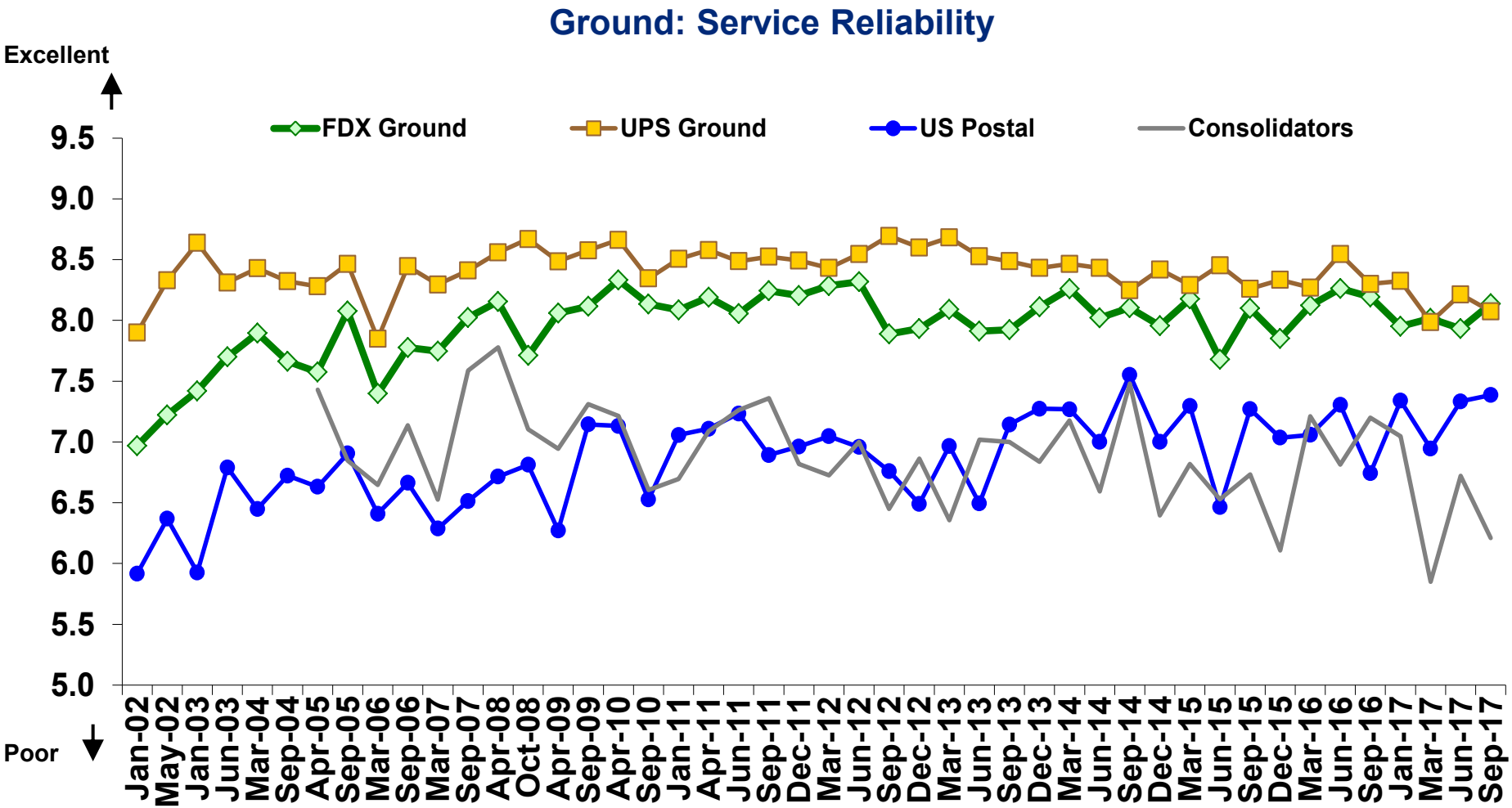
Service Reliability Rankings: Historical Trends



Source: Morgan Stanley Parcel Survey

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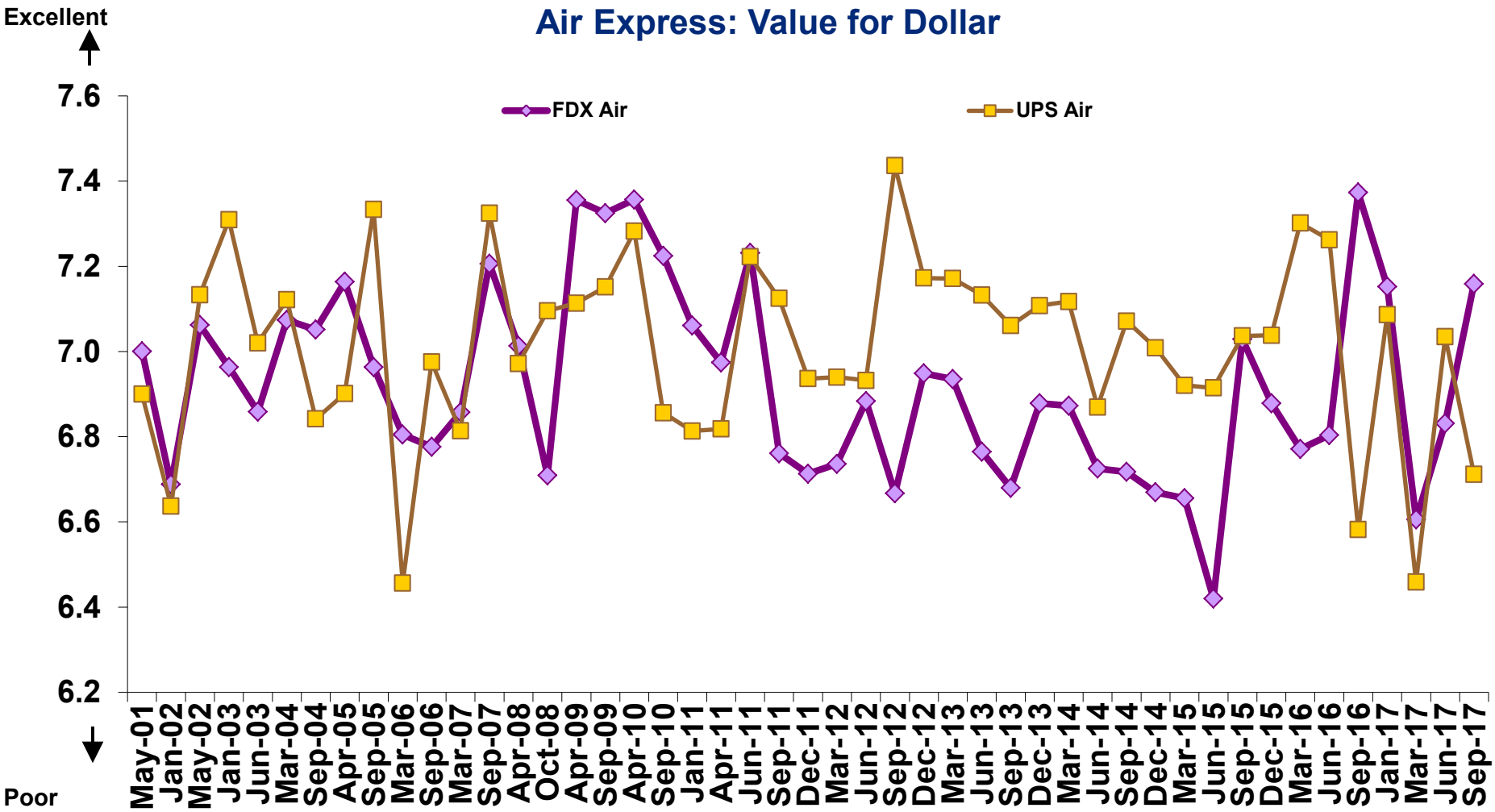
Value for Dollar Rankings: Historical Trends



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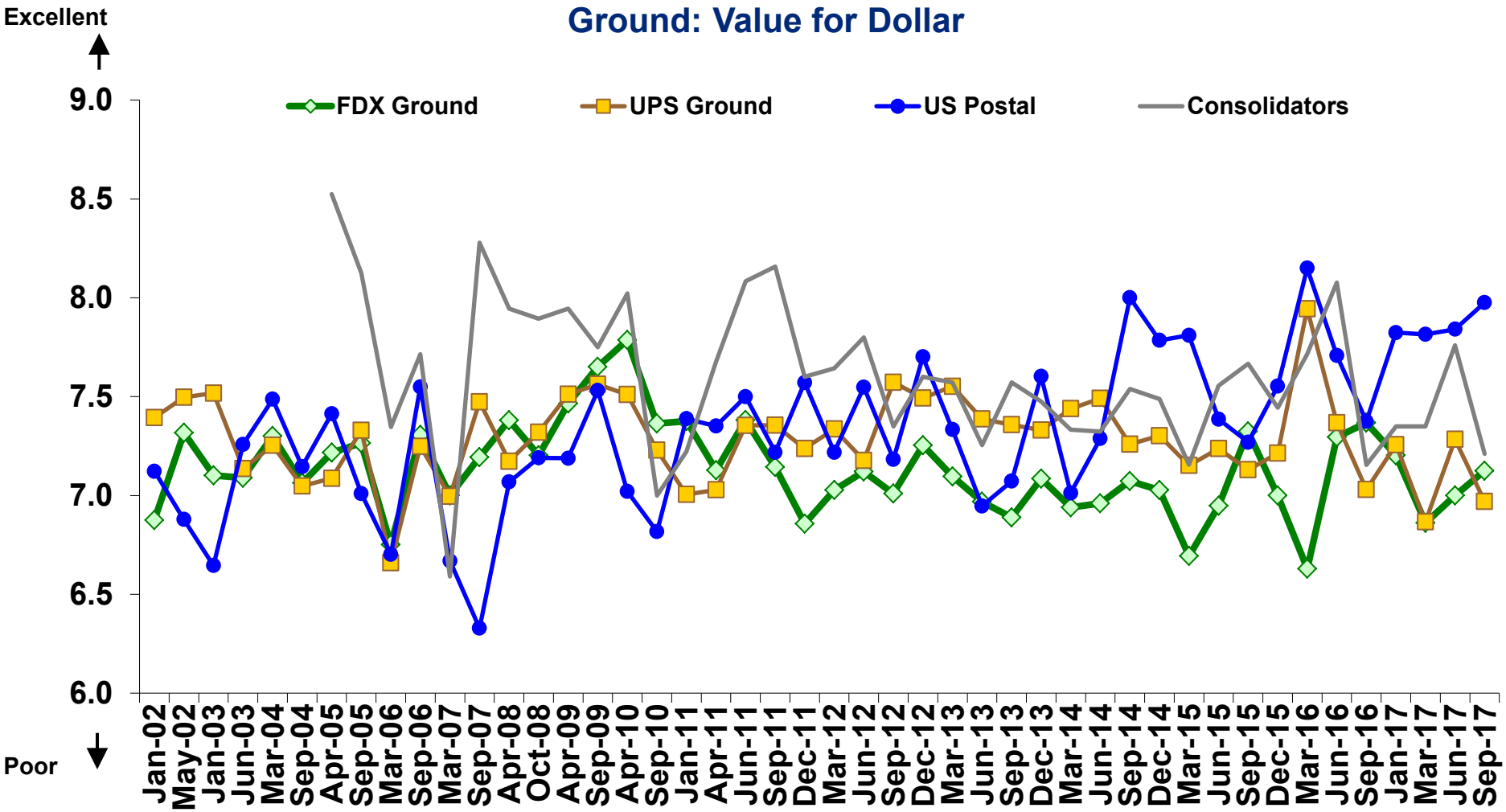

Source: Morgan Stanley Parcel Survey

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•(as of September 30, 2017)

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	Coverage Universe		Investment Banking Clients (IBC)		
Stock Rating Category	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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COMPANY (TICKER)	RATING (AS OF)	PRICE* (10/05/2017)
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. (SNDR.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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