MAY2020

CONSUMER PACKAGED GOODS SUPPLY CHAIN REPORT

ECHO
Transportation Simplified™

FREIGHTWAVES FREIGHTINTEL RESEARCH

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What are consumer packaged goods (CPG)?

FreightWaves conducted a survey of consumer packaged goods (CPG) shippers in April to gauge sentiment, transportation trends and current dynamics in the CPG supply chain. On the whole, our CPG survey respondents expect the remainder of 2020 to be challenging due to COVID-19 (though CPG should solidly outperform on a relative basis), with transportation costs expected to be down year-over-year.

As we enter a COVID-19-inspired recession in the U.S., CPGs are one of a few safe havens in the economy, and therefore in transportation. According to Investopedia.com, CPG are products “used daily by average consumers that require routine replacement or replenishment, such as food, beverages, clothes, tobacco, makeup, and household products”. Familiar everyday CPG items include coffee, toothpaste, diapers, potato chips, soda, toilet paper and more.

Products vary from perishable with a short shelf life to long-lasting items such as cleaning supplies. As the name suggests, CPG items are “packaged” (usually in aluminum, paper or plastic) and then shipped in bulk on pallets. A great deal of attention, focus and money are put into the packaging, as it tends to convey a lot of information to consumers, whether consciously or not. When one thinks of CPG, Costco may spring to mind, as much of what it sells is CPG items — frequently in abnormally large containers. Packaging is often iconic and easily recognized by millions or even billions of consumers around the world.

Figure 1: Example of iconic CPG product — Tide

Source: Procter & Gamble

The CPG industry in the U.S. is said to be about $815 billion (U.S. Census Bureau, McKinsey), which would account for approximately 3.8% of total U.S. GDP of $21.5 trillion in 2019. Given a category size of more than $800 billion, we estimate that $40 billion is spent annually transporting these goods, assuming 5% of revenue spent on transportation. This, in turn, would imply that CPG accounts for about 5% of the $800 billion trucking industry (both for-hire and private fleets) in the U.S. Given its inherent economic resiliency, huge size, widespread distribution and replenishment nature, CPG products make for desirable freight. And because of the CPG industry's huge size but a low average selling price for products — generally under $20 and accessible to the masses given that they are essentials — this implies billions of units that are individually packaged and transported through the supply chain.

"At Echo, we move over 16,000 loads per day, and our logistics experts understand the unique transportation challenges that CPG companies face. Our team ensures a safe and on time pick-up and delivery by using our extensive carrier network. As we've seen, the transportation of CPG products is critical during the COVID-19 situation as consumer packaged goods remain vitally important. Stores need to remain stocked with necessities like food and cleaning supplies to ensure individuals and businesses have the goods they need. We're proud to manage the transportation of our clients' products to make sure essential goods are available to consumers across the country."

— Dave Menzel, President and Chief Operating Officer, Echo Global Logistics

Titans with household names — think Nestle, Procter & Gamble , Kimberly-Clark, Coca-Cola, Unilever, Kraft Foods, PepsiCo — dominate the CPG industry. Many CPG giants have multiple brands under their umbrella. For instance, according to Procter & Gamble's website, the company currently has 65 brands organized into 10 product categories. These 10 categories exemplify how wide-ranging CPG products can be: fabric care (laundry), home care (cleaning products), baby care, feminine care, family care (toilet paper and paper towels), grooming (shaving needs), oral care, personal health care, hair care, and skin and personal care. Scale matters for CPG companies so that they can have enough size to negotiate with often substantially larger retailers and enough money to have a competitive advantage via shelf space negotiations and the size of their marketing budget.

Consumer packaged goods are typically sold wholesale to brick-and-mortar retailers (such as Tide at Walmart), but this is changing as CPG companies increasingly go direct-to-consumer (DTC) to boost margins and control more of the customer economics and experience. Given their replenishment characteristics, subscription models are starting to flourish so that companies can capture recurring revenue and higher valuations in financial markets. The best examples of DTC and subscription CPG business models recently include Dollar Shave Club and Warby Parker (eyeglasses retailer), which have been very successful in laying the groundwork for this category.

CPG is a hypercompetitive category in which brands are very important, but social media and grassroots marketing are weakening legacy brands' competitive advantages

Historically, CPG is a category in which brands are paramount. For example, many people choose the same deodorant, washing detergent, toothpaste and soda brands consistently and do not switch frequently simply for cheaper pricing or promotions. Switching costs are low in terms of availability of competitive offerings, but consumers tend to have a loyalty to one brand in most categories, if only out of habit. This is not always the case in categories where consumers prefer variety (e.g., potato chips or candy), but it is mostly true.

But just because the CPG industry is recession-resistant does not mean it is not competitive — it is intensely so. CPG companies are constantly fighting for limited shelf space and a limited share of consumers' attention and dollars. This element is magnified by the fact that private label has been gaining considerable market share on a secular basis in the U.S., yet private label penetration levels remain far below those in Europe, where private label penetration often approaches 50% or more. Private label offers much cheaper, similar versions of the same product and can be appealing, particularly on commodity items or to consumers on a tight budget. Branding, packaging and taste/product formulas can be an effective barrier to private label intrusion. For example, soft drinks (Coca-Cola) and ketchup (Heinz) have proved notoriously difficult and nearly impossible categories for private label brands to take market share.

Furthermore, CPG companies do not just compete with each other and private label; they also experience margin and top-line pressure from their brick-and-mortar and online retail customers (e.g., Walmart, Target, Costco, Amazon). Top retailers where CPG companies obtain a great deal of their sales are often considerably bigger, have limited shelf space and therefore typically have more negotiating leverage than the CPG companies. We estimate that the top 10 retailers in the U.S. that obtain a material percentage of their sales from CPG collectively account for over $1 trillion in sales (U.S. sales only), or about 20% of total retail sales in the U.S. This swamps the top 10 CPG companies' sales in the U.S. of about $250 billion (assuming 50% of CPG sales are domestic — a roughly accurate percentage in our experience), tipping the negotiating leverage in favor of the Walmarts, Amazons and Costcos of the world.

Figure 2: FreightWaves' estimate of the top 10 retailers in the U.S. (U.S. sales only)

		2019 Sales ($ Billions)	
	Total US Retail Sales	$5,460	Market Share of Total US Retail
1	Walmart	$391	7.2%
2	Amazon	$171	3.1%
3	Costco	$130	2.4%
4	Kroger	$120	2.2%
5	Target	$80	1.5%
6	Albertson's	$61	1.1%
7	Publix	$38	0.7%
8	Aldi	$30	0.5%
9	Dollar General	$27	0.5%
10	Dollar Tree	$23	0.4%
	Total	**$1,071**	**19.6%**

Source: Kantar, National Retail Federation (NRF), FreightWaves calculations

Figure 3: FreightWaves' estimate of the top 10 CPG companies in the U.S. (U.S. sales estimated at 50% of total)

		2019 Sales ($ Billions)		
	Total CPG Sales (USD)	$815	US @ 50% of Sales	Market Share of Total US CPG
1	Nestle	$95	$48	5.9%
2	Procter & Gamble	$70	$35	4.3%
3	Pepsico	$67	$34	4.1%
4	Unilever	$58	$29	3.6%
5	Anheuser-Busch InBev	$52	$26	3.2%
6	Tyson Foods	$43	$22	2.6%
7	Coca-Cola	$37	$19	2.3%
8	Philip Morris	$30	$15	1.8%
9	Mondelez International	$26	$13	1.6%
10	Kraft Heinz	$25	$12	1.5%
	Total	**$504**	**$252**	**31.0%**

Source: Statista, consumergoods.com, company filings, Koyfin, FreightWaves calculations

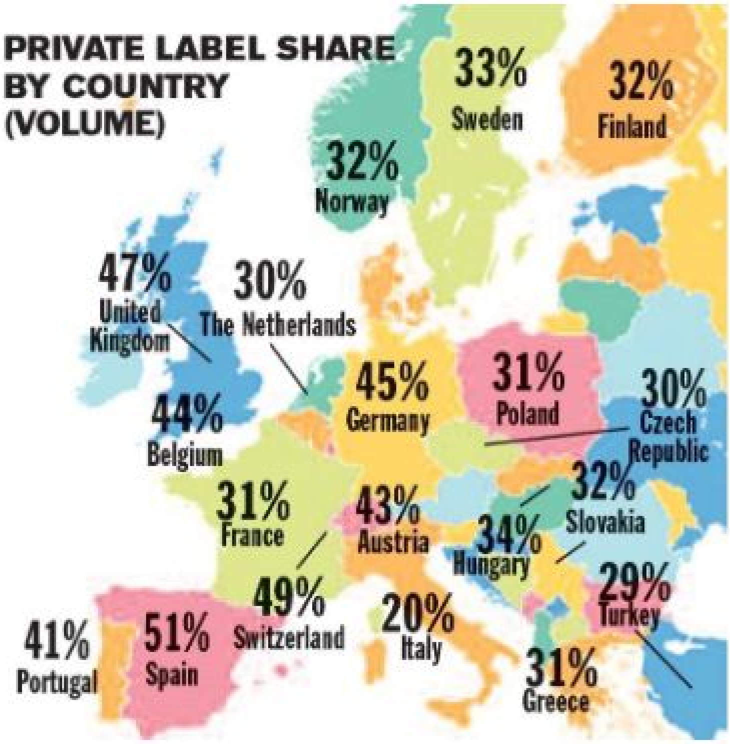
Private label is taking market share, a trend that should continue and may hurt CPG industry margins

Private label products are generally about 50% cheaper than national, branded products and actually have superior gross margins for the retailers (despite the lower price points) due to not having to share margin with a middleman such as the CPG companies. Private label also tends to have high customer loyalty; Costco's Kirkland brand is the gold standard in private label and does billions of dollars in sales per year. Given these attributes, there is a strong economic incentive for retailers to push their own private label brands where appropriate.

According to Statista, as of 2018, private label penetration in the United States was 19.3%. However, private label has been growing at nearly a 6% annual rate in the U.S. in recent years, about four times faster than national brands (according to Coresight Research). Therefore, we expect private label's penetration rate to continue to increase on a secular basis, likely not matching European penetration but closing a material portion of the gap.

The 19.3% penetration for private label in the U.S. represents a huge disparity with nearly every country in Europe and particularly with Spain, where private label market share is approximately 51%, the highest in Europe and one of the highest penetration rates in the world, according to the Private Label Manufacturers Association (PLMA). Europe's second-largest economy, the U.K., has 47% private label market share. In Europe's largest economy, Germany, where Aldi and Lidl dominate the grocery market and whose product mix is typically 95% or more private label, private label penetration is about 45%.

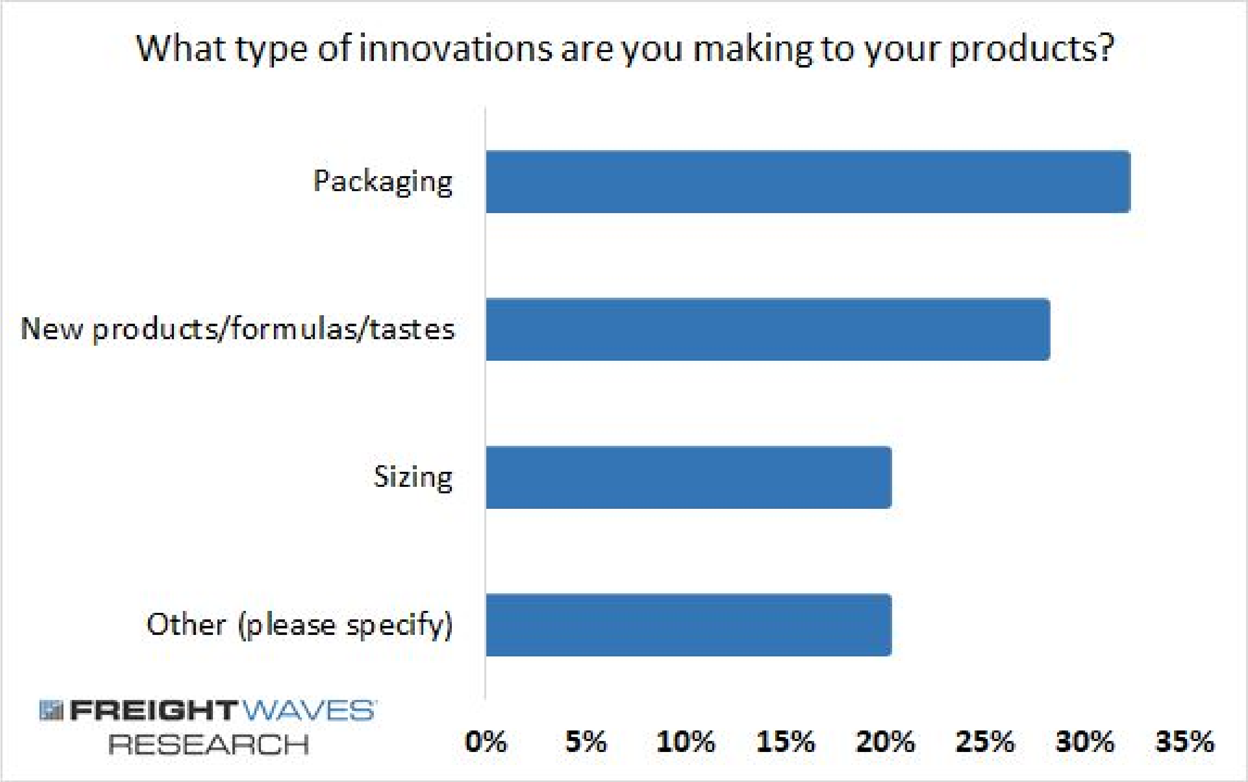
Figure 4: Private label penetration/market share by country in Europe (by volume)



Source: Private Label Manufacturers Association (PLMA)

There are a couple of noteworthy developments regarding private label taking market share in the U.S. First, big national CPG brands are fighting back. While the competition may have the advantage on price, national brands can focus on innovation, including new products/tastes/formulas and packaging, as our survey respondents attested. Twenty percent to 30% of respondents noted they are changing packaging, introducing new products/formulas/tastes, and changing sizing options to make their products more appealing to consumers.

Figure 5: Survey — What type of innovations are you making to your products?



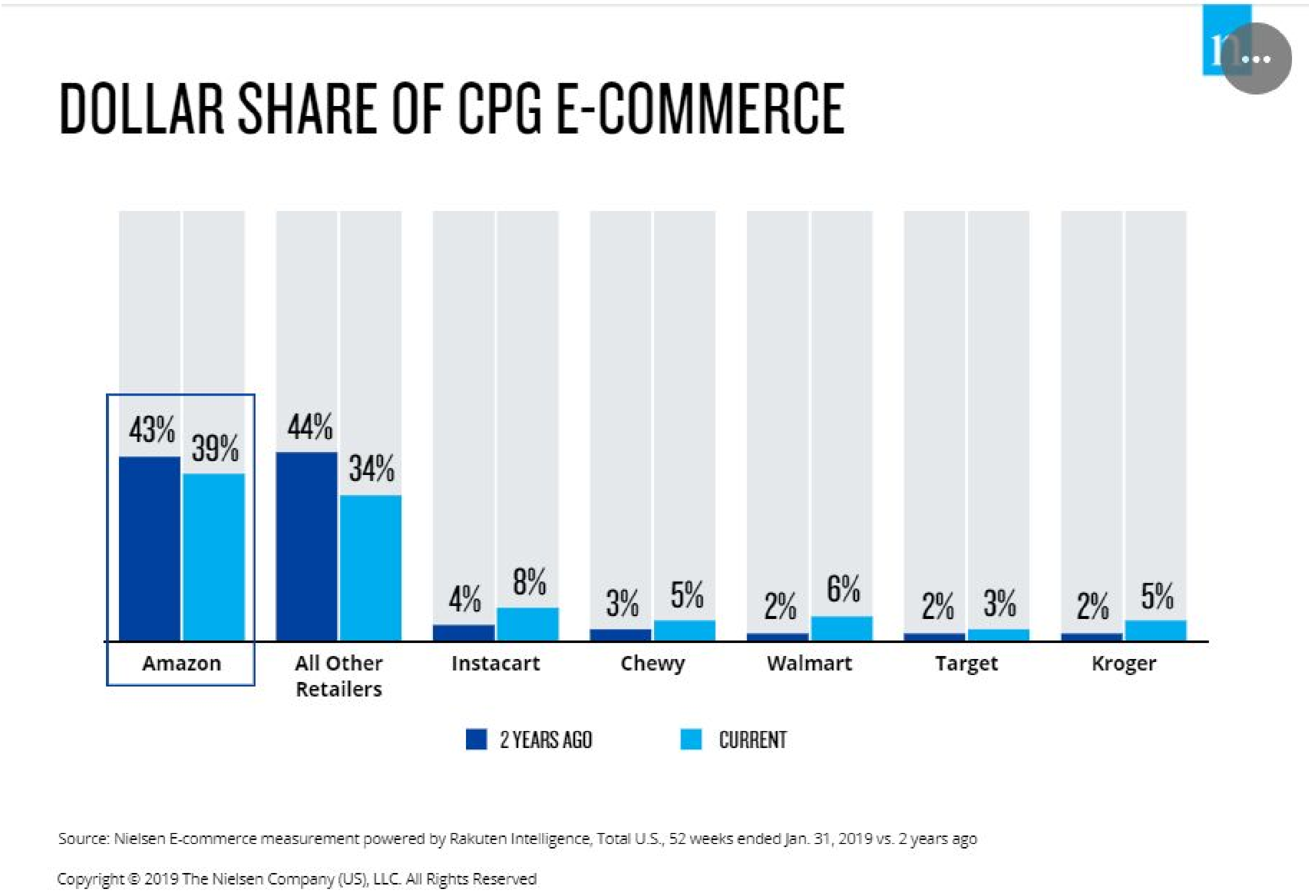
Online is growing much faster than overall CPG sales

According to Nielsen and IRI, the online CPG industry grew 35% in 2018 to reach $65 billion, which implies about a 7% penetration rate based on $815 billion in annual CPG sales in the U.S. This $65 billion figure is up from just $37 billion two years earlier, suggesting that online CPG continues to grow at a very rapid rate, with the low penetration implying plenty of room for continued robust growth. More importantly, the online CPG industry's dollar gains represent about two-thirds of the total CPG industry's growth in the U.S.

Nonfood items like personal care and home care products are the most popular CPG goods sold online; however, food and beverage have been growing their momentum and market share off of a small base. Consumables (food and beverage) now represent $1 out of every $3 spent online after growing at a 46% compound annual growth rate the past two years. IRI notes that the most popular individual items are pet food and supplies, vitamins, and skin care products.

Amazon is far and away the leader in the online CPG industry, with 39% market share. However, Amazon's share has slipped in the past two years from 43% to 39%, while Instacart's has doubled, from 4% to 8%, and Walmart's has tripled, from 2% to 6%. This suggests that competition is increasingly present and the game has not yet been won as it is still early in the battle for market share dominance.

Figure 6: Nielsen — Dollar market share of U.S. CPG e-commerce



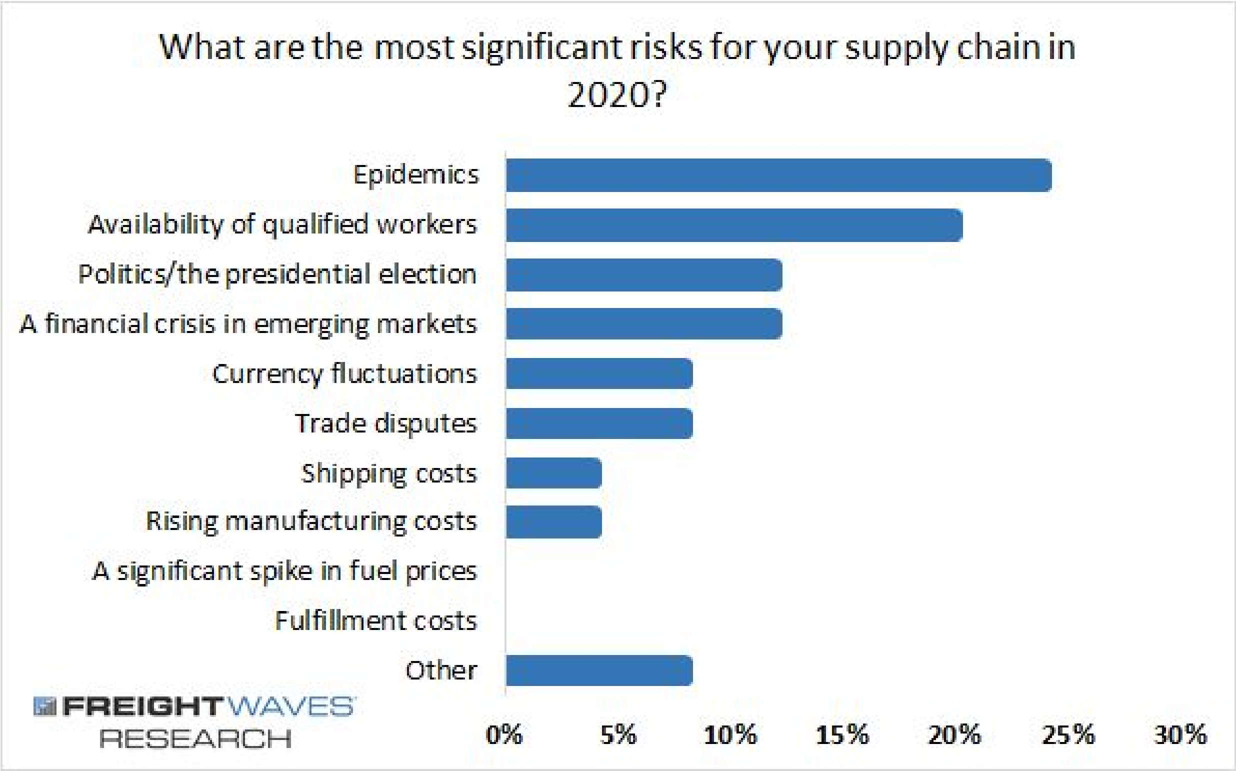
Source: Nielsen.com

What are the transportation dynamics of CPG?

CPG freight is characterized by regular lanes, regular customers and contract freight, given CPG are predictable replenishment products. Due to the products' replenishment nature, companies must manufacture and restock them continuously, which leads to steady transportation demand.

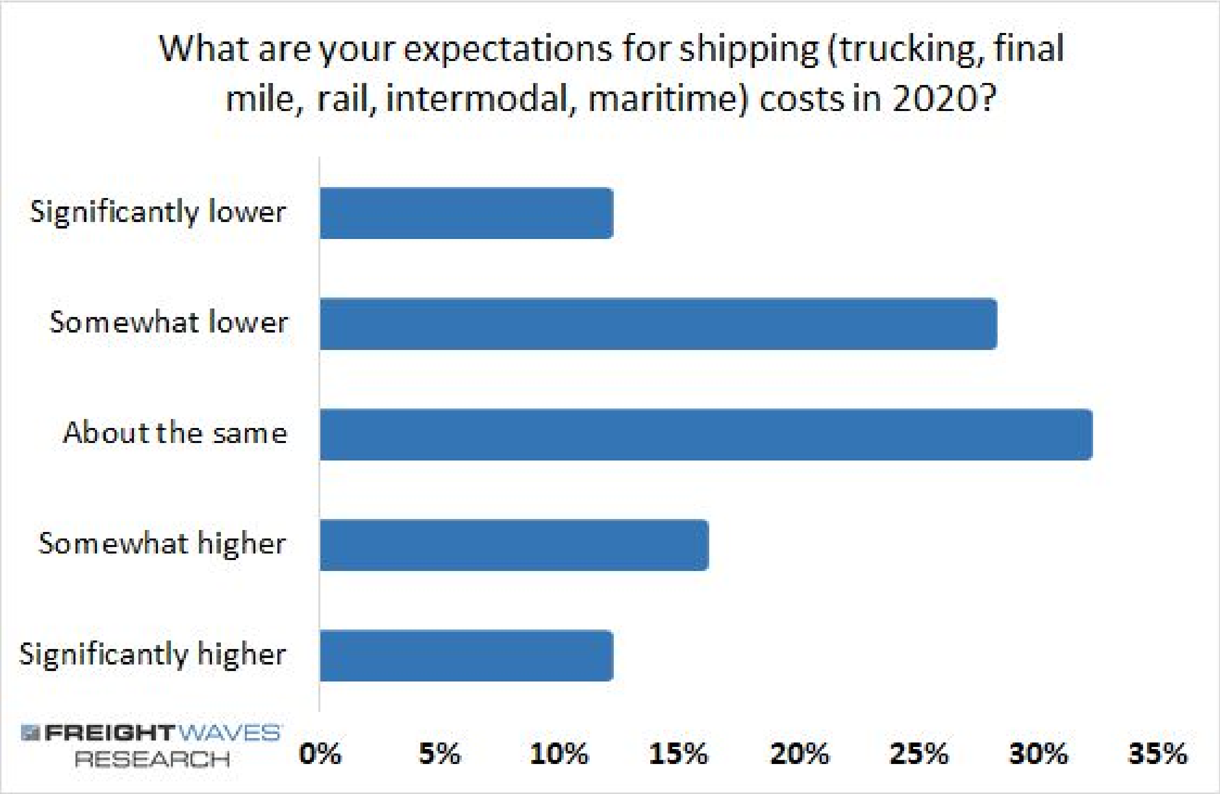
Our survey respondents are making lots of changes to their supply chains to respond to the new world of CPG in the U.S. Epidemics (unsurprisingly) top the list of concerns facing our survey respondents, followed closely by the ability to find qualified workers and the upcoming presidential election, among others.

Figure 7: Survey — What are the most significant risks for your supply chain in 2020?



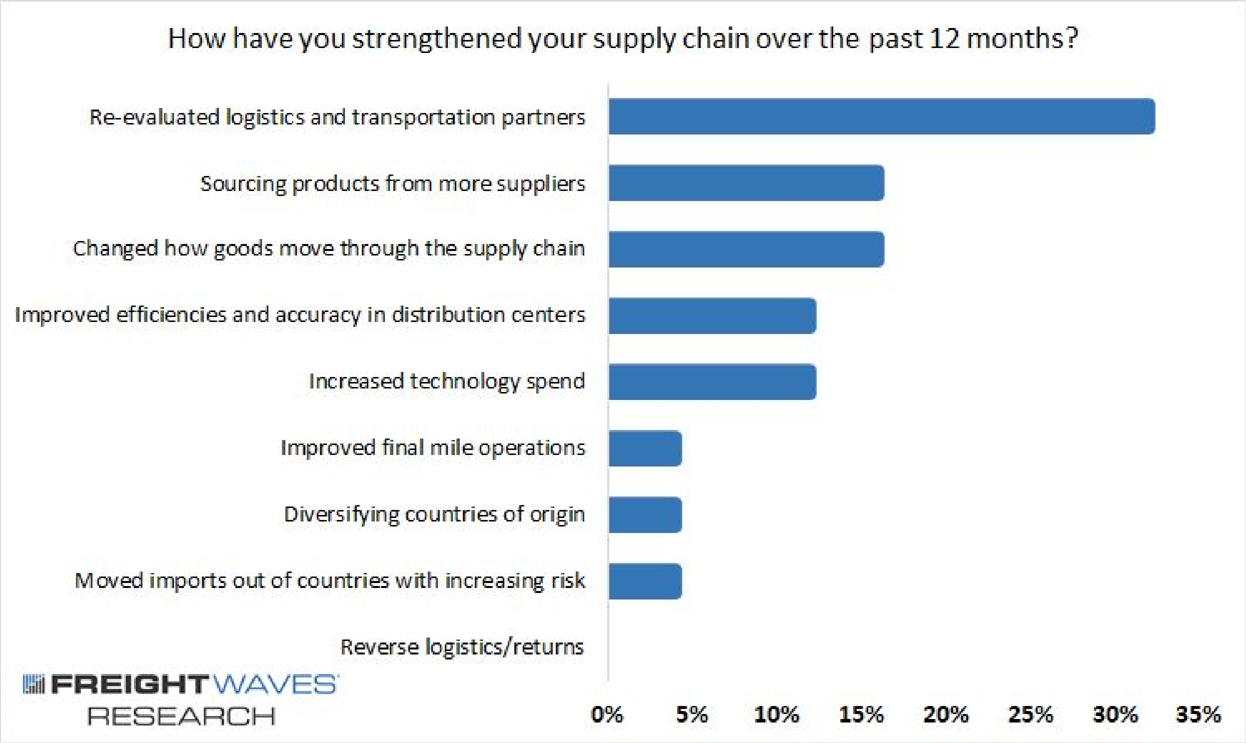
Our survey suggests that consumer product companies are expecting transportation costs to be down in 2020, with about 75% of respondents indicating they expect transportation costs to be flat to down compared to just 25% indicating that they expect them to be up. We would note though that only about 45% of respondents expect transportation costs to be distinctly down (either a little or a lot).

Figure 8: Survey — What are your expectations for shipping costs in 2020?



Our survey also looked at the changes CPG companies are making to streamline their supply chains and become more efficient. The primary ways they are doing so is by changing transportation and logistics partners, diversifying their business risks by sourcing products from more suppliers, changing how goods move through the supply chain, and improving speed, efficiency and accuracy in distribution centers.

Figure 9: Survey — How have you strengthened your supply chain over the past 12 months?



After years of struggle, COVID-19 creates a resurgence for CPG. But will it last?

The outbreak of a global pandemic combined with most of the world's consumers in quarantine with stay-at-home orders (source: Statista) has resulted in a windfall for the CPG industry. National brands have made a stunning resurgence, with most growing about 70% year-over-year for the better part of late March and into early April. While we do not believe growth can sustain at anywhere near those levels, we do see above-normal growth persisting for as long as consumers are quarantined due to the massive shift to meals at home, away from eating out.

Interestingly, our survey respondents are not as sanguine on the outlook for 2020 sales growth as we would have expected, with only about 30% indicating they expect sales to be somewhat higher or significantly higher in 2020. This compares to about 45% who expect them to be down year-over-year (either somewhat or significantly). This is understandable in light of 20% unemployment and the unprecedented GDP contraction — even worse than the Great Depression — in the second and perhaps third quarters of this year. The fact that about two-thirds of our respondents expect their business to be flat to up in 2020 is a testament to the strength of CPG and implies far superior growth on a relative basis to most other industries of the U.S. economy. Our survey respondents also mirror the overall CPG industry fairly closely, with about 70% of their sales coming from food and household products.

Figure 10: Survey — What are your expectations for sales growth in 2020 as compared to 2019?

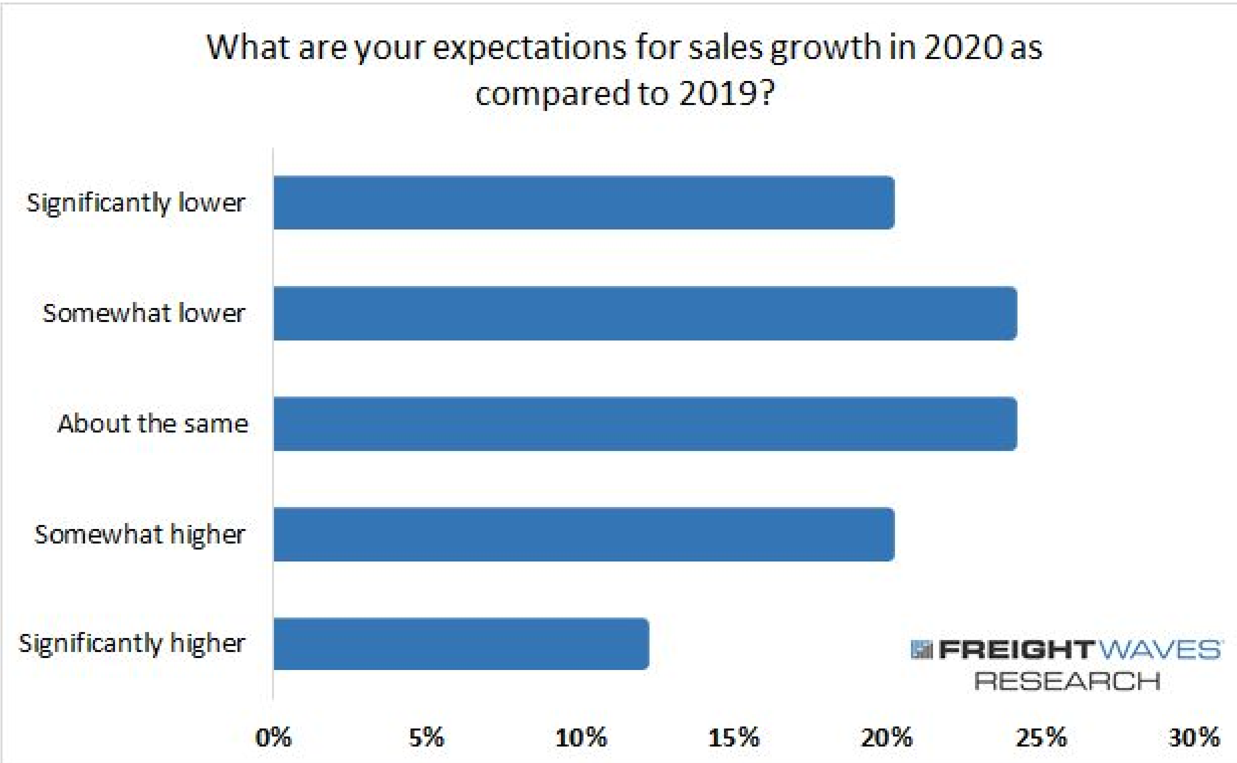
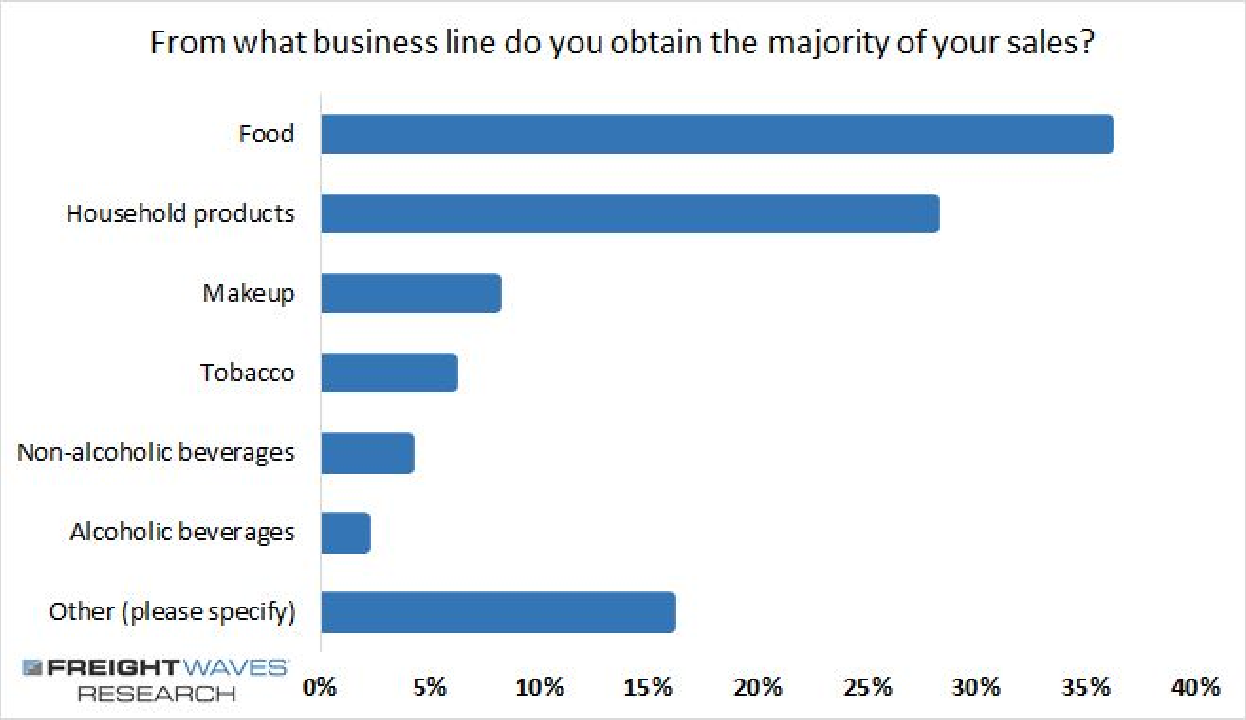
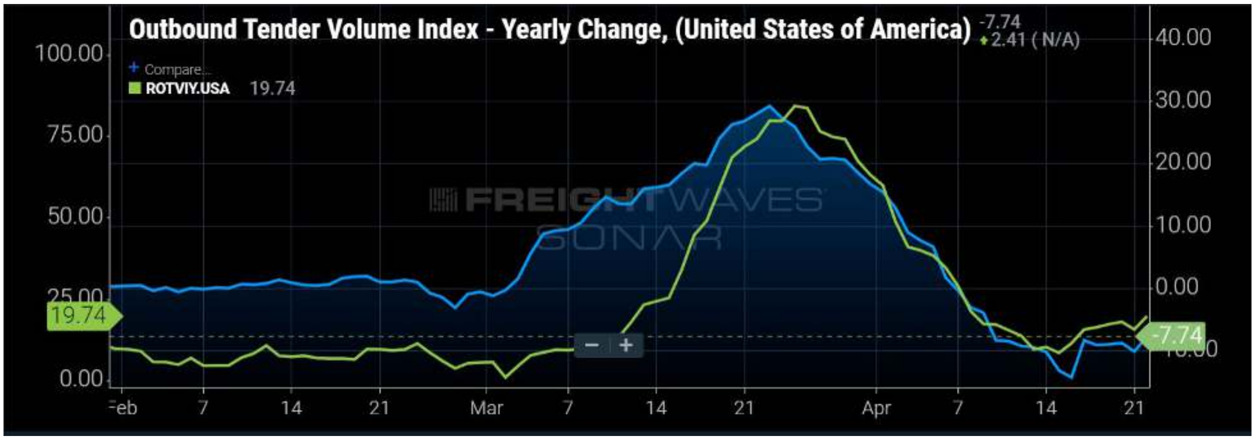


Figure 11: Survey — From what business line do you obtain the majority of your sales?



At FreightWaves, we saw the recent CPG buying surge in our outbound tender volume data as a wave of panic-buying of grocery, CPG and medical supplies was strong enough to lead to a peak year-over-year growth rate of 80% for reefer and 30% for overall contract truckload volumes in late March. We estimate these three recession-resistant categories comprise about 40% of overall trucking volumes, yet since the early panic-buying has subsided, they have not been enough to carry the day, with volumes now down meaningfully due to contraction in second-quarter GDP estimated to be 30% or greater.

Figure 12: Overall outbound tender volumes (blue; right hand scale) vs. reefer outbound tender volumes (green; left hand scale)



SONAR: OTVIY.USA, ROTVIY.USA

The key question for the CPG industry in the U.S. (and the transportation providers that serve them) is whether any of the COVID-19-induced changes in consumer behavior are permanent or at least long-lasting and sustainable. Time will tell on this front, but we believe that features like curbside pickup for groceries from the Walmart app ("click and collect"), ordering groceries online from Instacart and having them delivered, and consumers ordering more of their everyday essentials on a recurring subscription basis from Amazon will become increasingly popular and are here to stay.

Further, online CPG should continue to surge and national brands may reassert their dominance, which has all sorts of implications for sales and marketing dollars shifting to "pay for placement" (such as at the top of the search results on Amazon) instead of slotting fees at grocery stores. It also has dramatic implications for the CPG supply chain and potentially for the margins of the CPG companies themselves, as they increasingly invest in online and build out their distribution networks.

International sales in emerging markets (EM) are growing faster than domestic as EM middle-class consumers rise sharply

Much of the growth of the large, national brands and CPG companies is coming from expansion and penetration into emerging markets (China, India, Brazil), where the industry is less mature and has more growth opportunities as billions of new consumers slowly transition to the middle class. At present, the strong U.S. dollar is weighing down on much of this secular growth, but we expect the trend of higher run-rate growth in emerging markets for CPG companies to persist for many years.

Interestingly, our survey respondents do not match with this finding, perhaps because 2020 will be a down year for most economies, or because our survey was more skewed to domestically oriented companies, or because it is possible that the majority of our respondents' international sales come from developed international markets (e.g., Europe) as opposed to emerging markets.

As one can see from the charts below, our survey respondents skew domestic (though about a third of respondents obtain less than half of their sales domestically). Expectations for international sales growth in 2020 are muted, and there is no clear consensus that results will be superior to domestic growth.

Figure 13: Survey — How much of your sales are derived domestically?

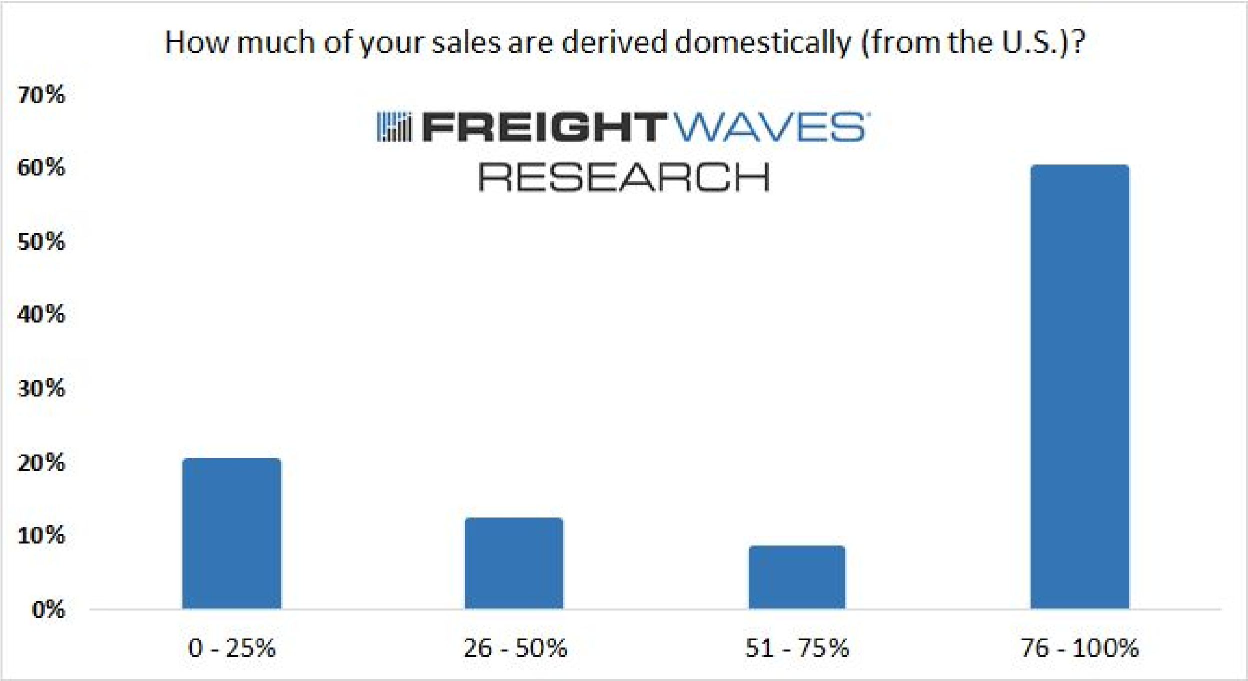
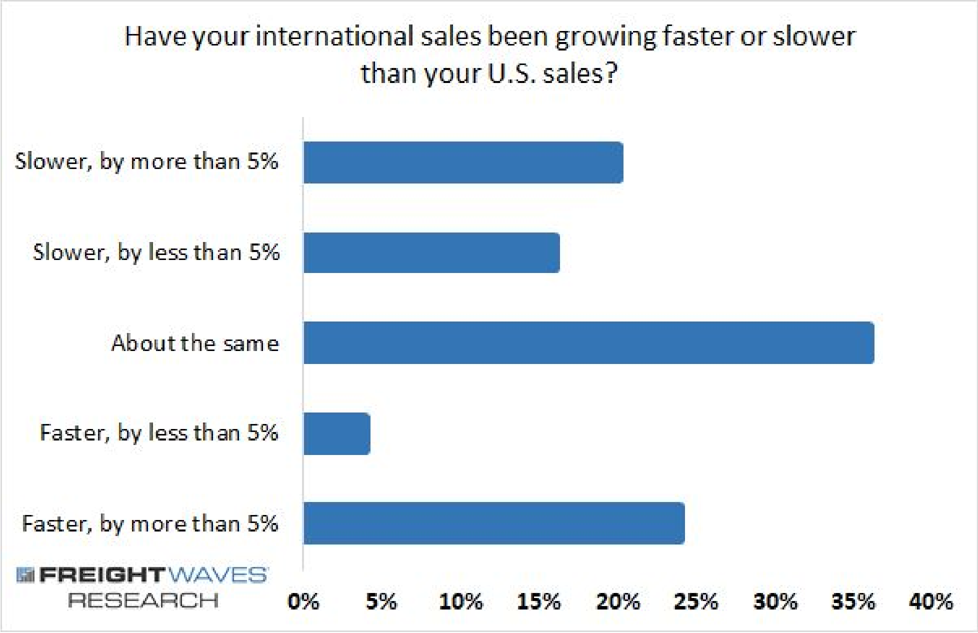


Figure 14: Survey — Have your international sales been growing faster or slower than your U.S. sales?



M&A as a supplement to organic growth opportunities; growing importance of environmental, social and governance (ESG) product attributes

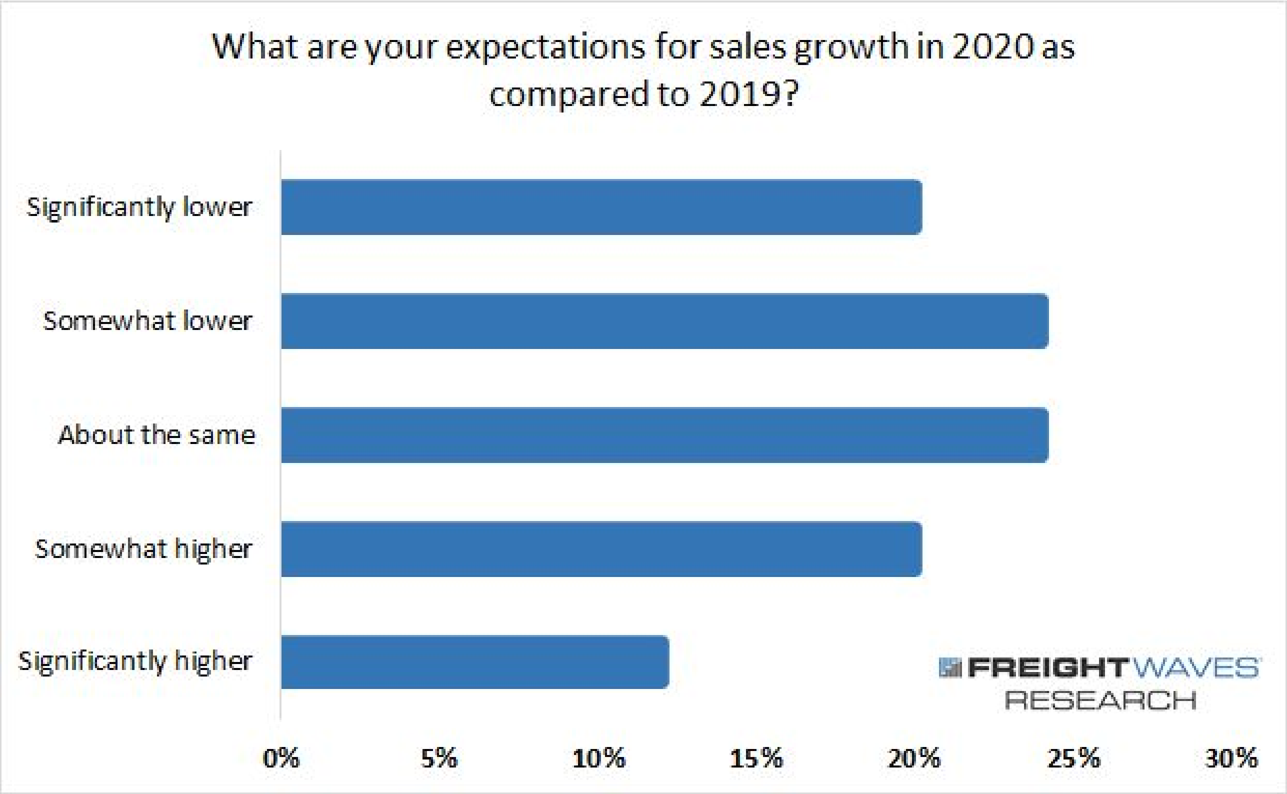
Over the past decade or so, organic CPG industry growth has been weak, with large companies growing at only about half the rate of U.S. GDP growth. However, with high margins for the industry leading to significant free cash flow generation, mergers and acquisitions (M&A) have been a primary source of capital allocation, along with return of capital through buybacks and dividends, given the maturity of the businesses.

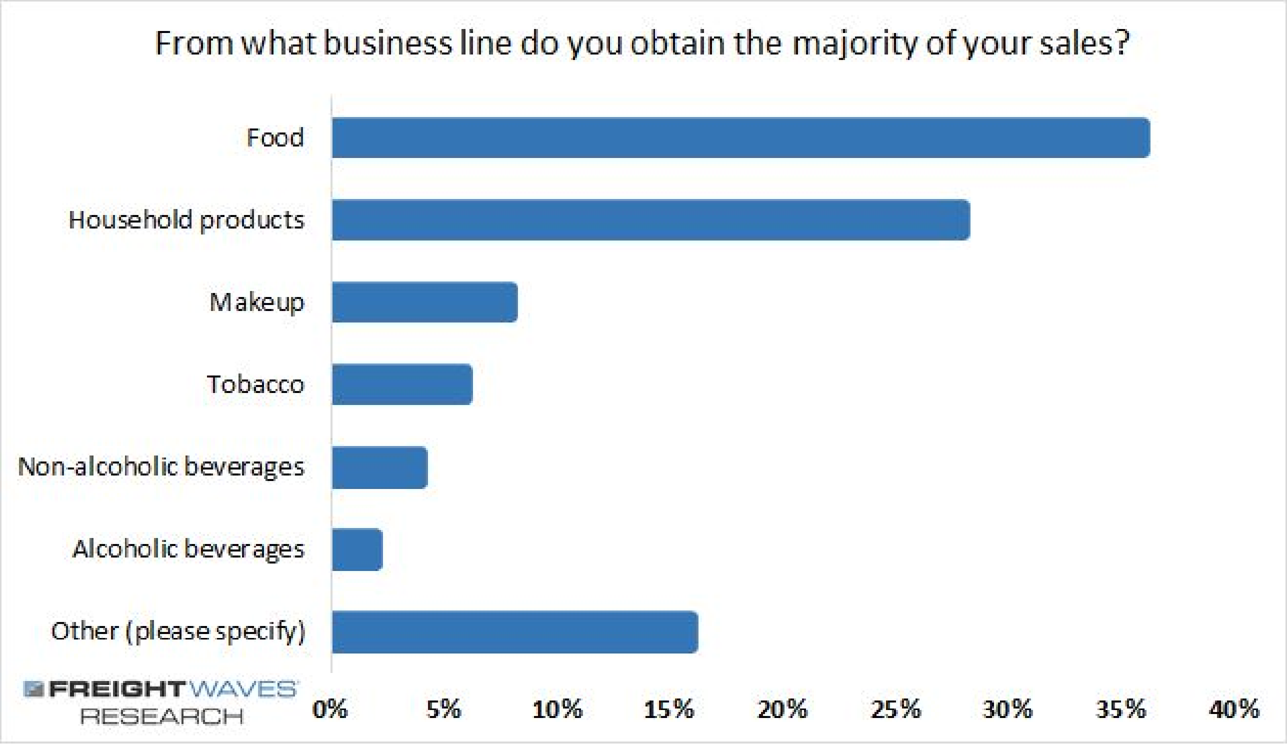
To mask much of the weakness resulting from the private label competition and changing consumer preferences and tastes , CPG companies often turn to M&A to consolidate markets, gain greater scale in customer negotiations, enable organic growth post-acquisition, and strengthen and fill in missing product lines in their product portfolios. Regarding transitioning consumer tastes, CPG is increasingly shifting to craft, local, natural and organic products with high environmental, social and governance [ESG] scores to meet modern consumer needs and beliefs.

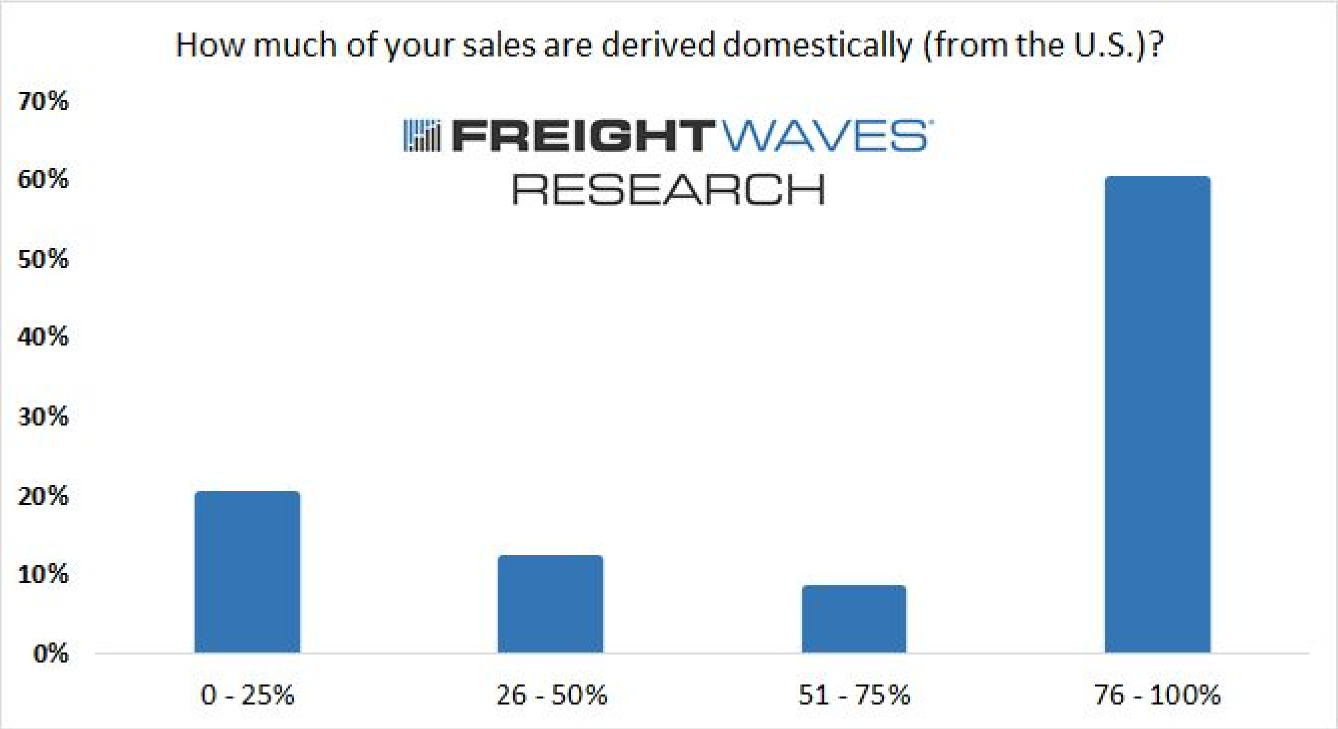
We believe that M&A and increasingly socially responsible products will continue to be major driving forces in the CPG industry for years to come.

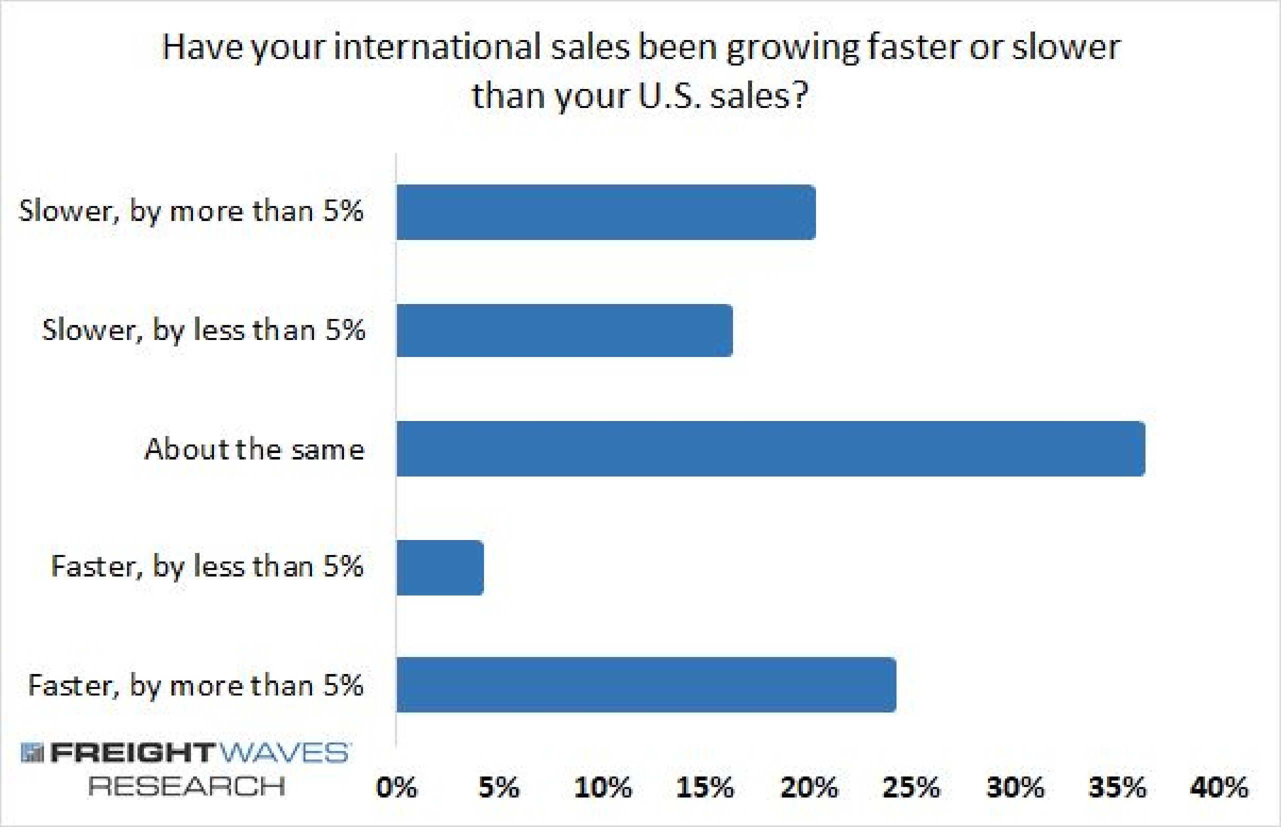
LIST OF FIGURES

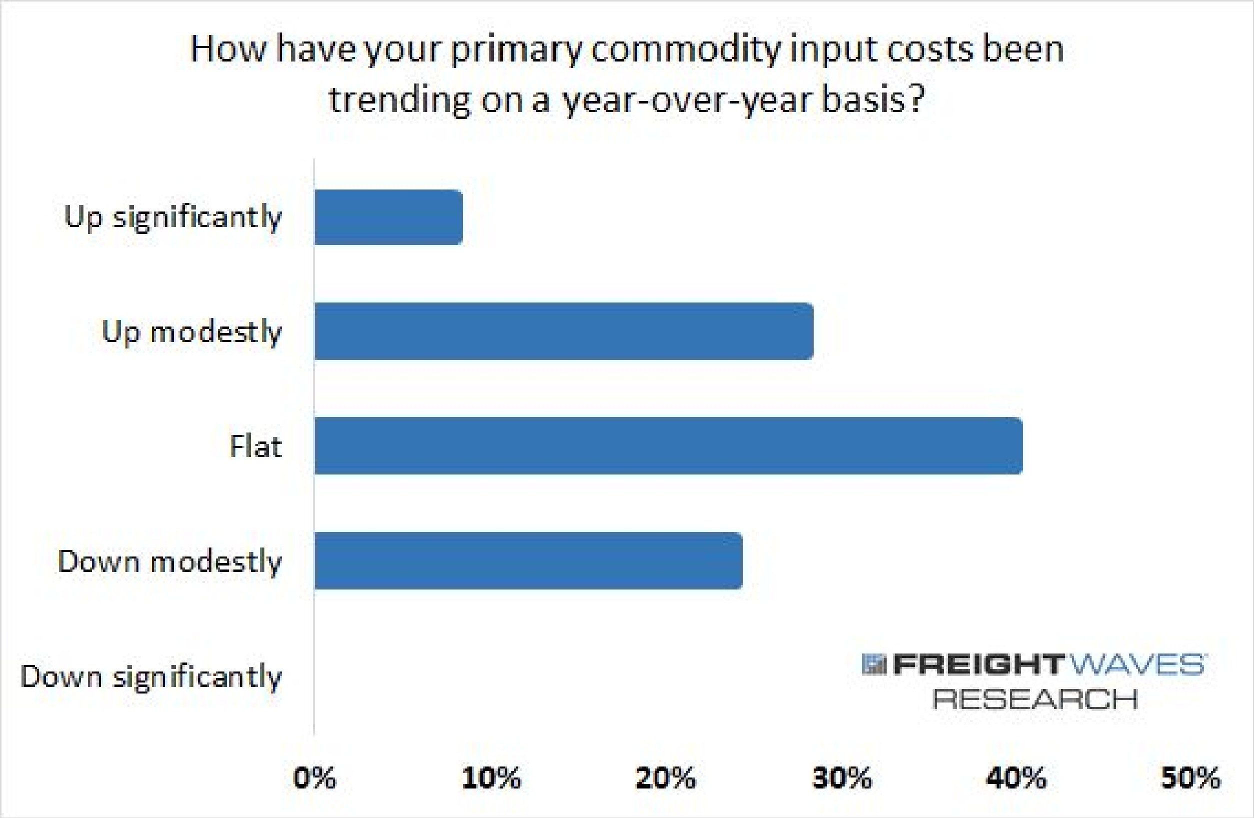
Appendix — Survey Results

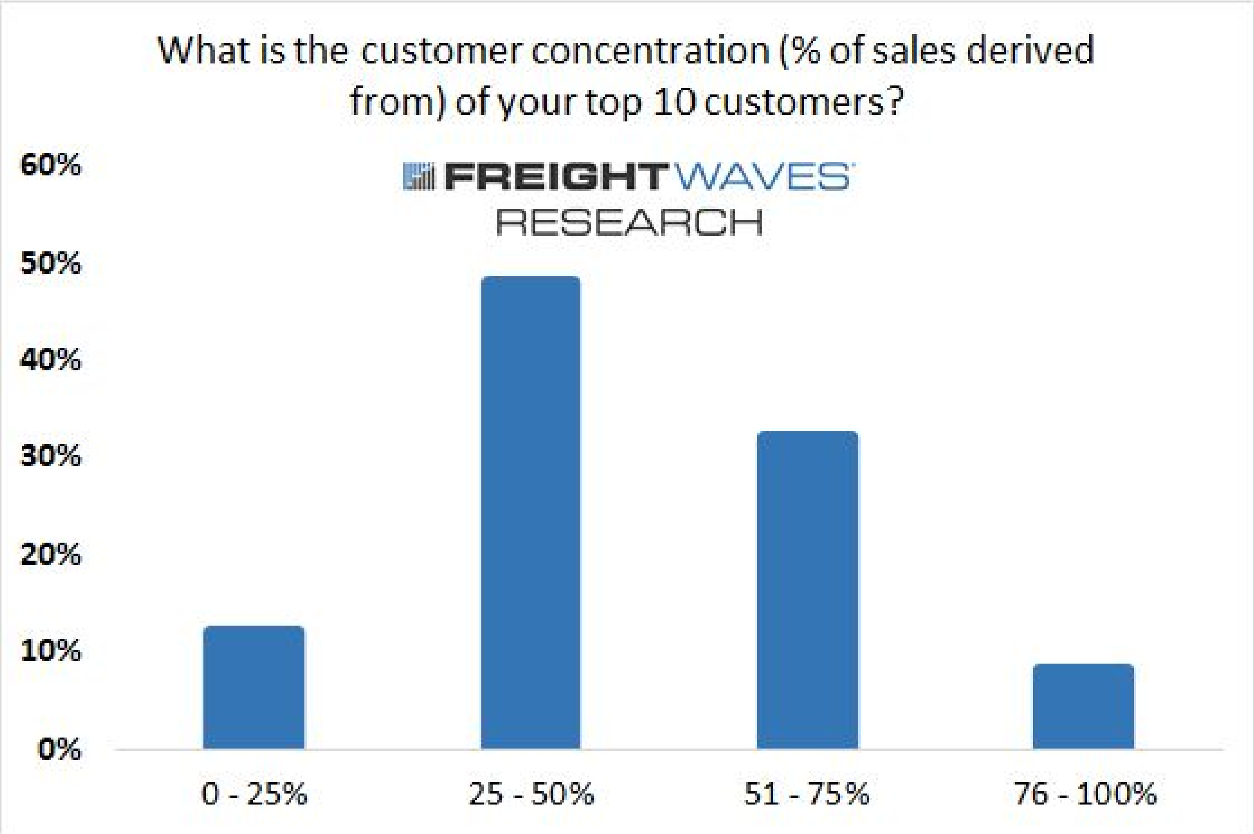


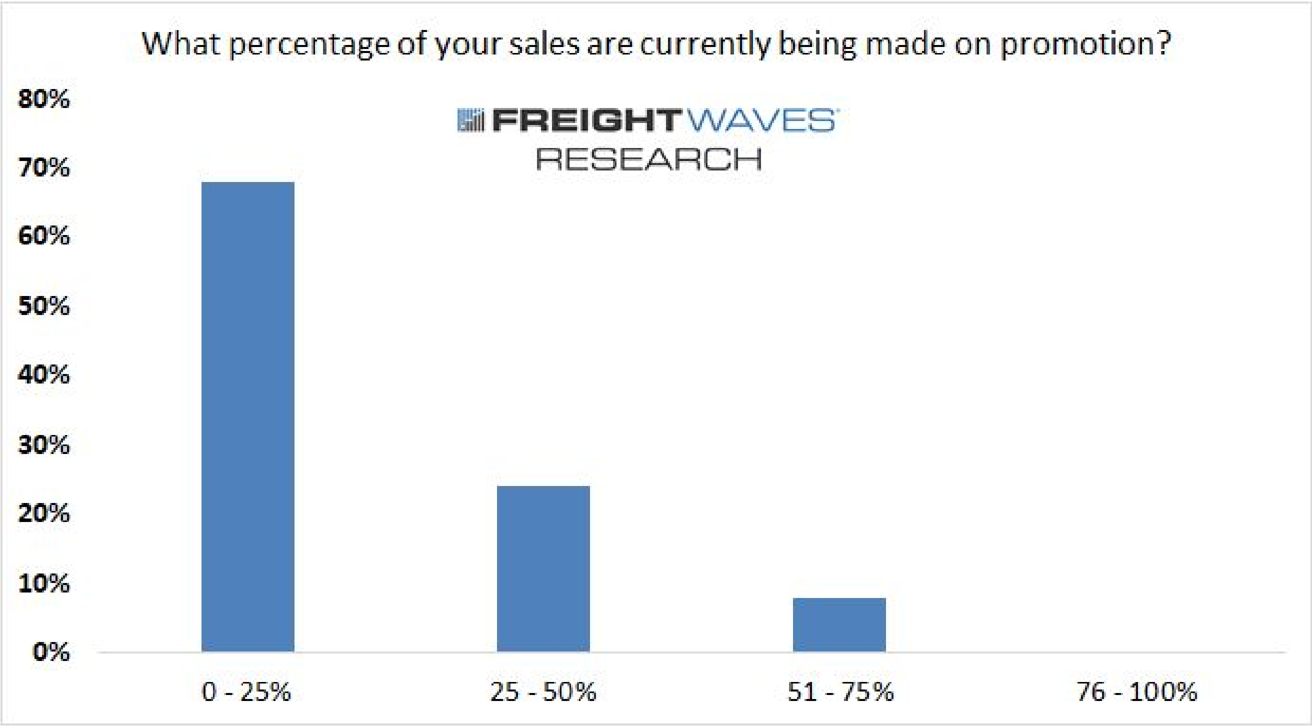


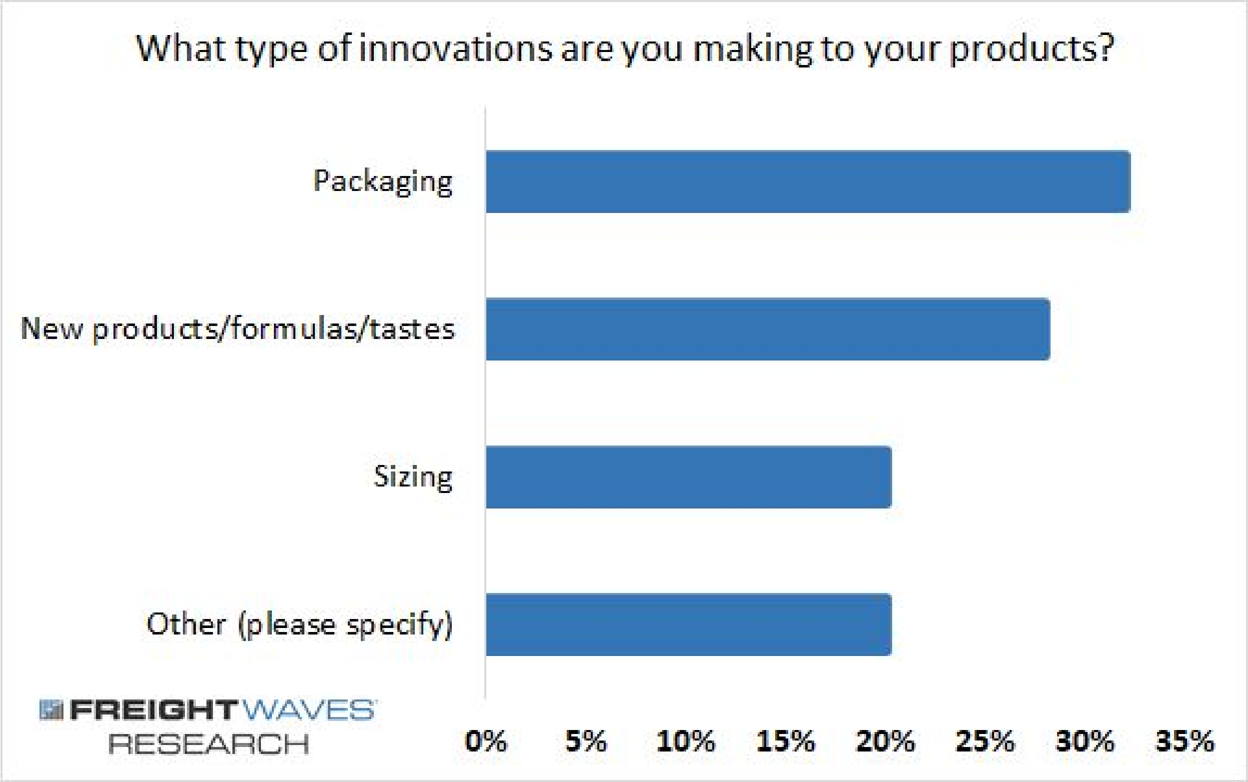

How much of your sales are derived domestically (from the U.S.)?
FREIGHTWAVES RESEARCH
70%
60%
50%
40%
30%
20%
10%
0%
0 - 25%
26 - 50%
51 - 75%
76 - 100%

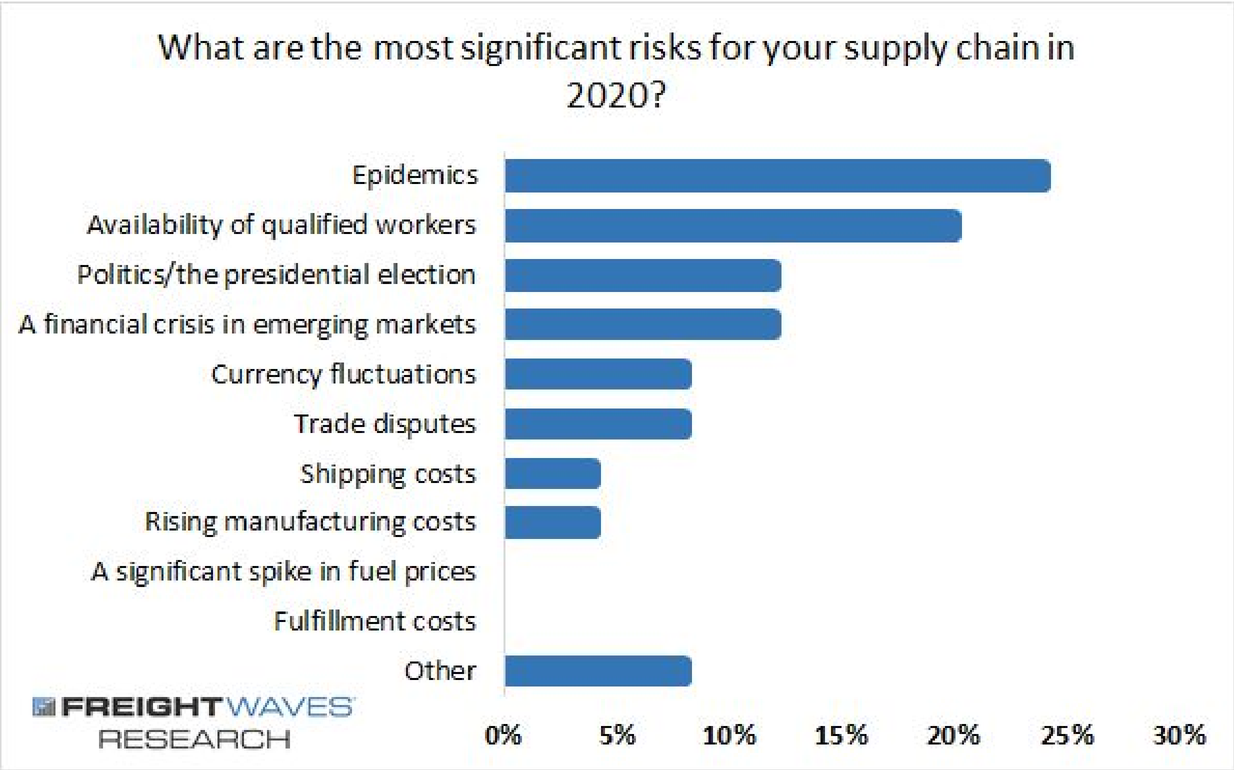

Have your international sales been growing faster or slower than your U.S. sales?
Slower, by more than 5%
Slower, by less than 5%
About the same
Faster, by less than 5%
Faster, by more than 5%
FREIGHTWAVES RESEARCH
0%
5%
10%
15%
20%
25%
30%
35%
40%

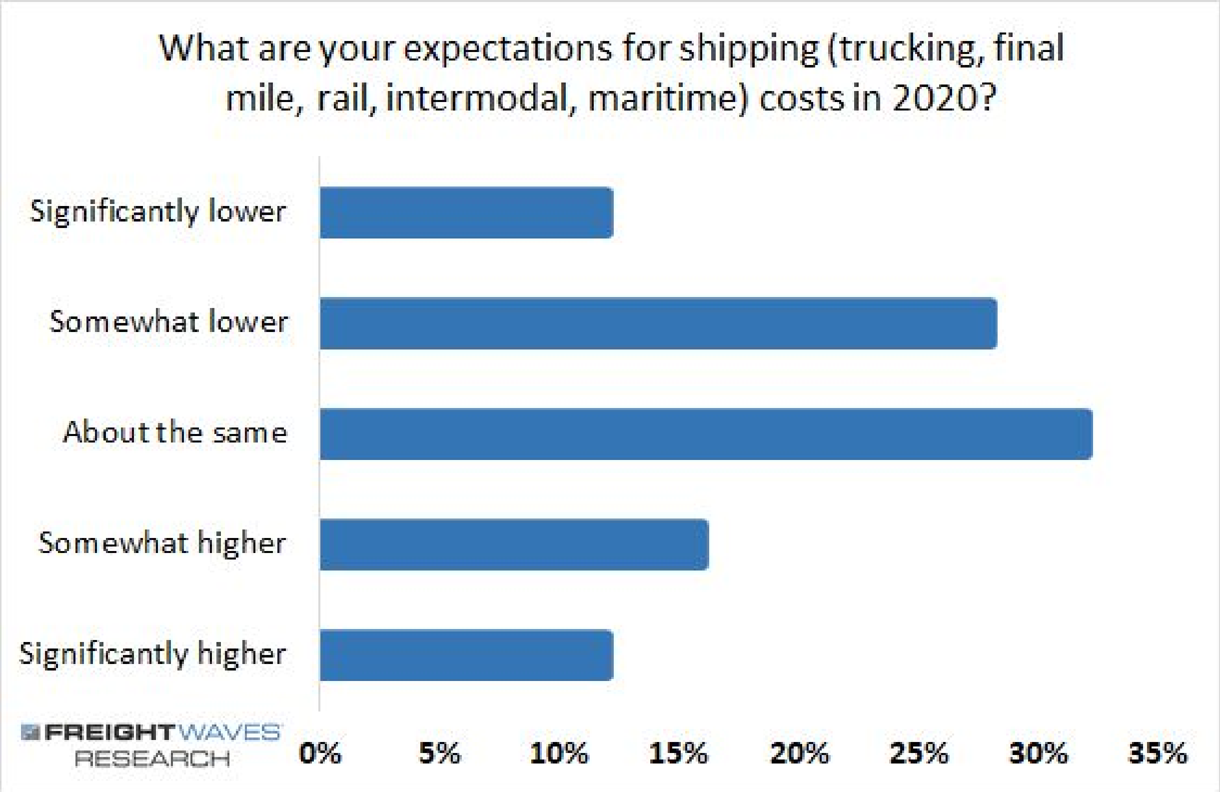

How have your primary commodity input costs been trending on a year-over-year basis?
Up significantly
Up modestly
Flat
Down modestly
Down significantly
FREIGHTWAVES RESEARCH
0%
10%
20%
30%
40%
50%

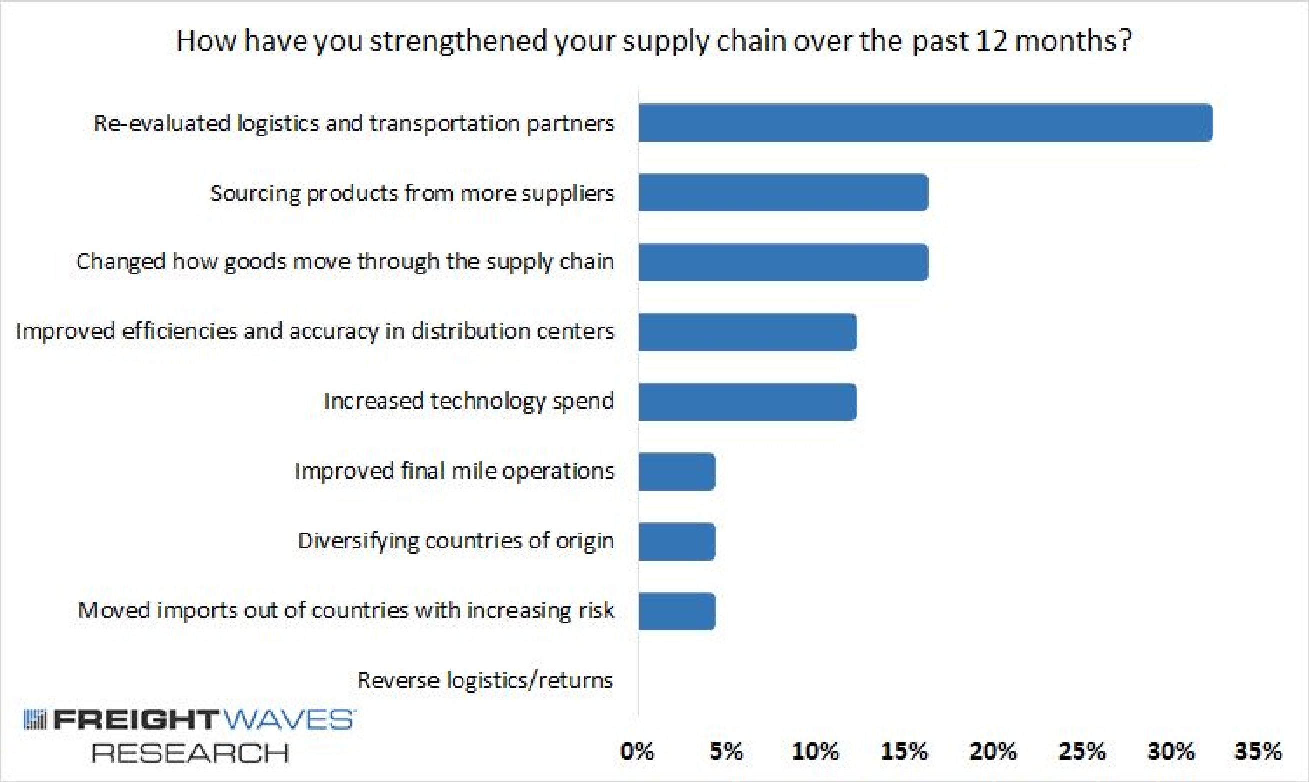

What is the customer concentration (% of sales derived from) of your top 10 customers?
FREIGHTWAVES RESEARCH
60%
50%
40%
30%
20%
10%
0%
0 - 25%
25 - 50%
51 - 75%
76 - 100%

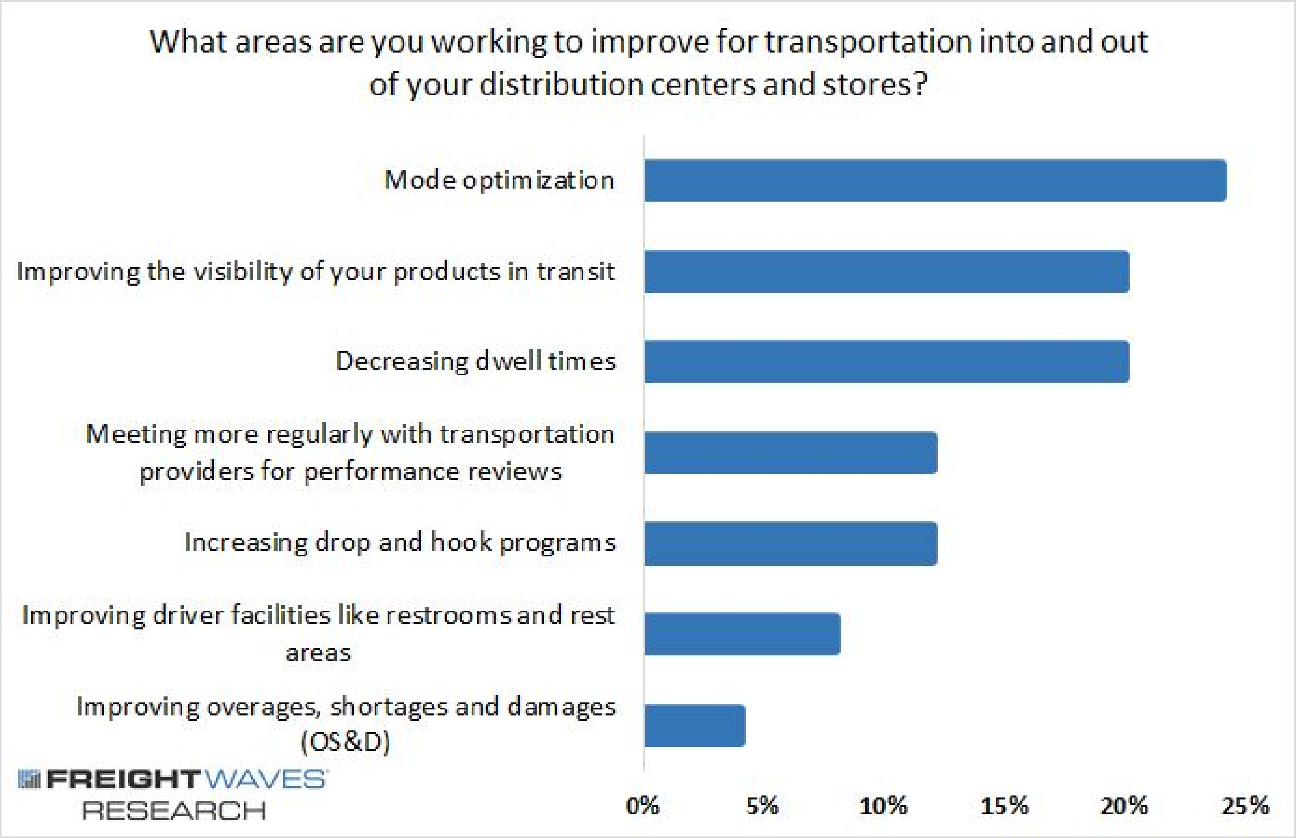

What percentage of your sales are currently being made on promotion?
80%
70%
60%
50%
40%
30%
20%
10%
0%
FREIGHTWAVES RESEARCH
0 - 25%
25 - 50%
51 - 75%
76 - 100%

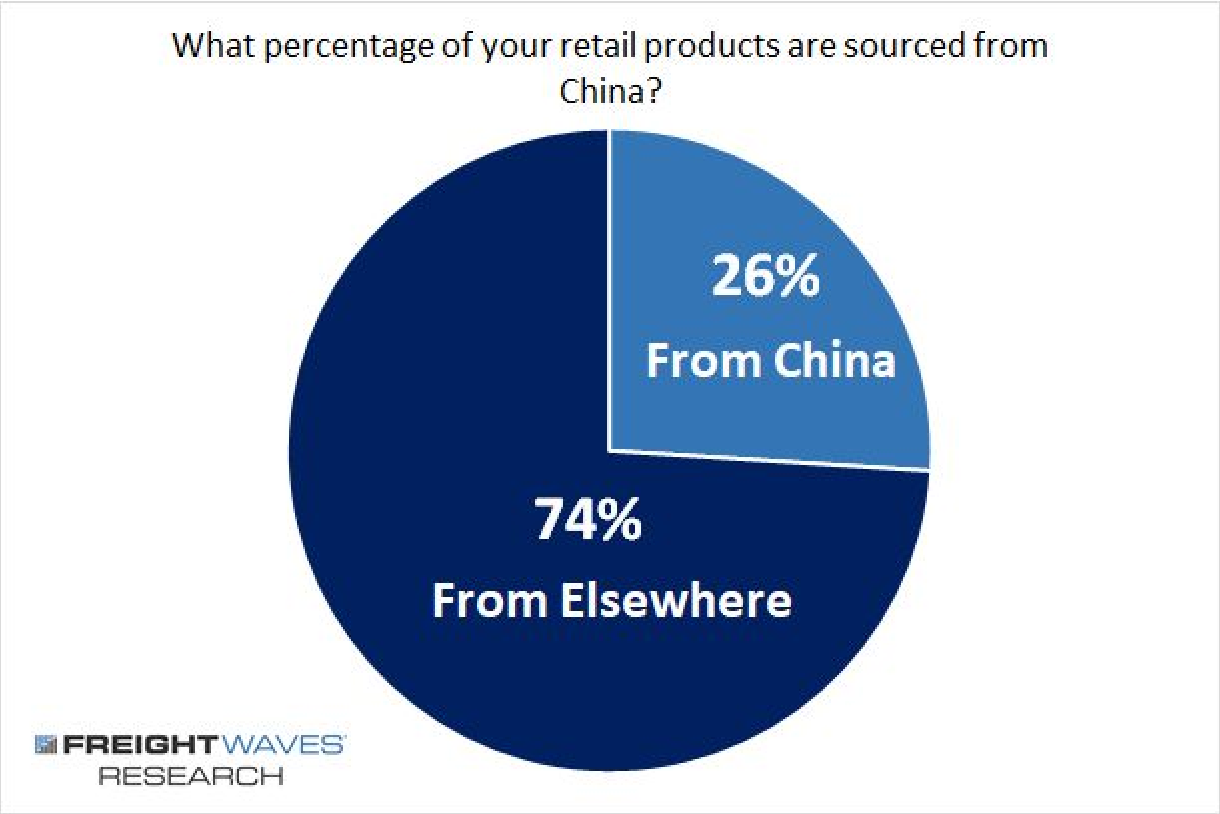

What type of innovations are you making to your products?
Packaging
New products/formulas/tastes
Sizing
Other (please specify)
FREIGHTWAVES RESEARCH
0%
5%
10%
15%
20%
25%
30%
35%

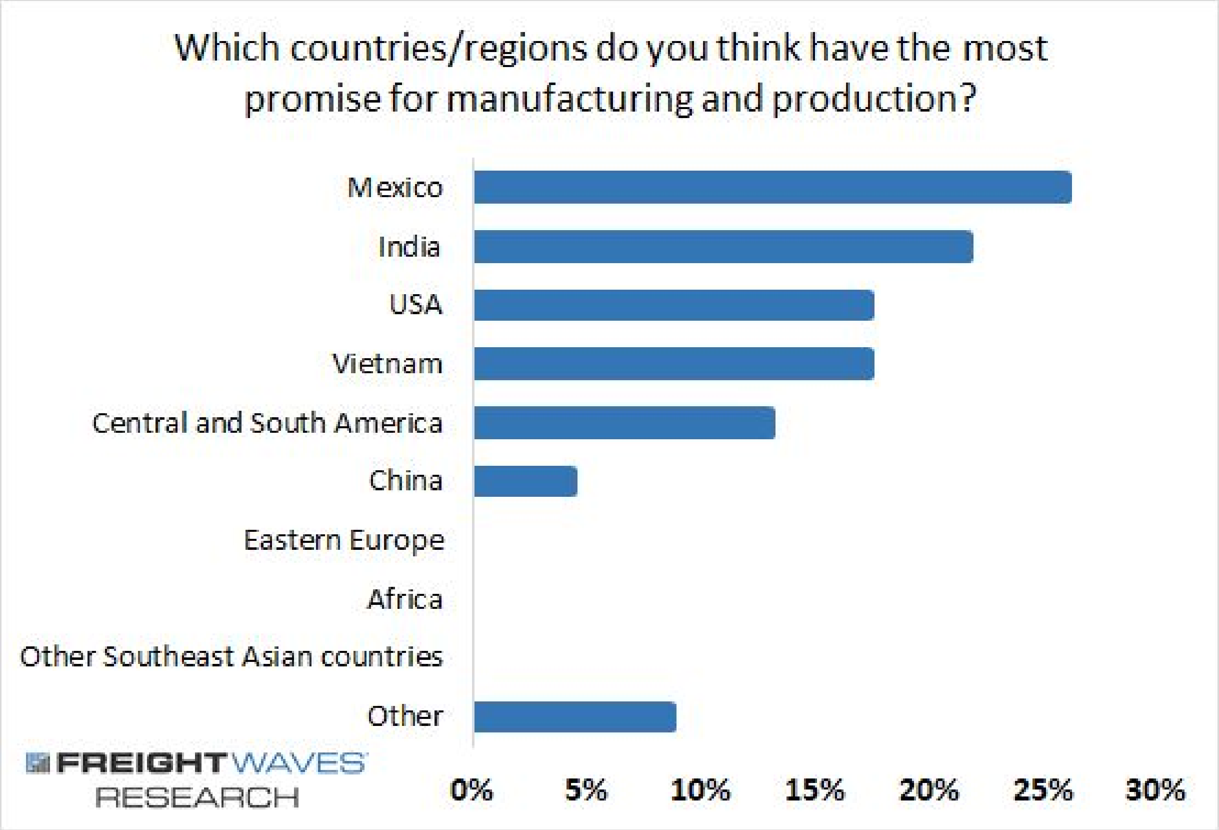

What are the most significant risks for your supply chain in 2020?
Epidemics
Availability of qualified workers
Politics/the presidential election
A financial crisis in emerging markets
Currency fluctuations
Trade disputes
Shipping costs
Rising manufacturing costs
A significant spike in fuel prices
Fulfillment costs
Other
FREIGHTWAVES RESEARCH
0%
5%
10%
15%
20%
25%
30%


What are your expectations for shipping (trucking, final mile, rail, intermodal, maritime) costs in 2020?
Significantly lower
Somewhat lower
About the same
Somewhat higher
Significantly higher
FREIGHTWAVES RESEARCH
0%
5%
10%
15%
20%
25%
30%
35%


How have you strengthened your supply chain over the past 12 months?
Re-evaluated logistics and transportation partners
Sourcing products from more suppliers
Changed how goods move through the supply chain
Improved efficiencies and accuracy in distribution centers
Increased technology spend
Improved final mile operations
Diversifying countries of origin
Moved imports out of countries with increasing risk
Reverse logistics/returns
FREIGHTWAVES RESEARCH
0%
5%
10%
15%
20%
25%
30%
35%


What areas are you working to improve for transportation into and out of your distribution centers and stores?
Mode optimization
Improving the visibility of your products in transit
Decreasing dwell times
Meeting more regularly with transportation providers for performance reviews
Increasing drop and hook programs
Improving driver facilities like restrooms and rest areas
Improving overages, shortages and damages (OS&D)
FREIGHTWAVES RESEARCH
0%
5%
10%
15%
20%
25%


What percentage of your retail products are sourced from China?
26%
From China
74%
From Elsewhere
FREIGHTWAVES RESEARCH


Which countries/regions do you think have the most promise for manufacturing and production?
Mexico
India
USA
Vietnam
Central and South America
China
Eastern Europe
Africa
Other Southeast Asian countries
Other
FREIGHTWAVES RESEARCH
0%
5%
10%
15%
20%
25%
30%

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