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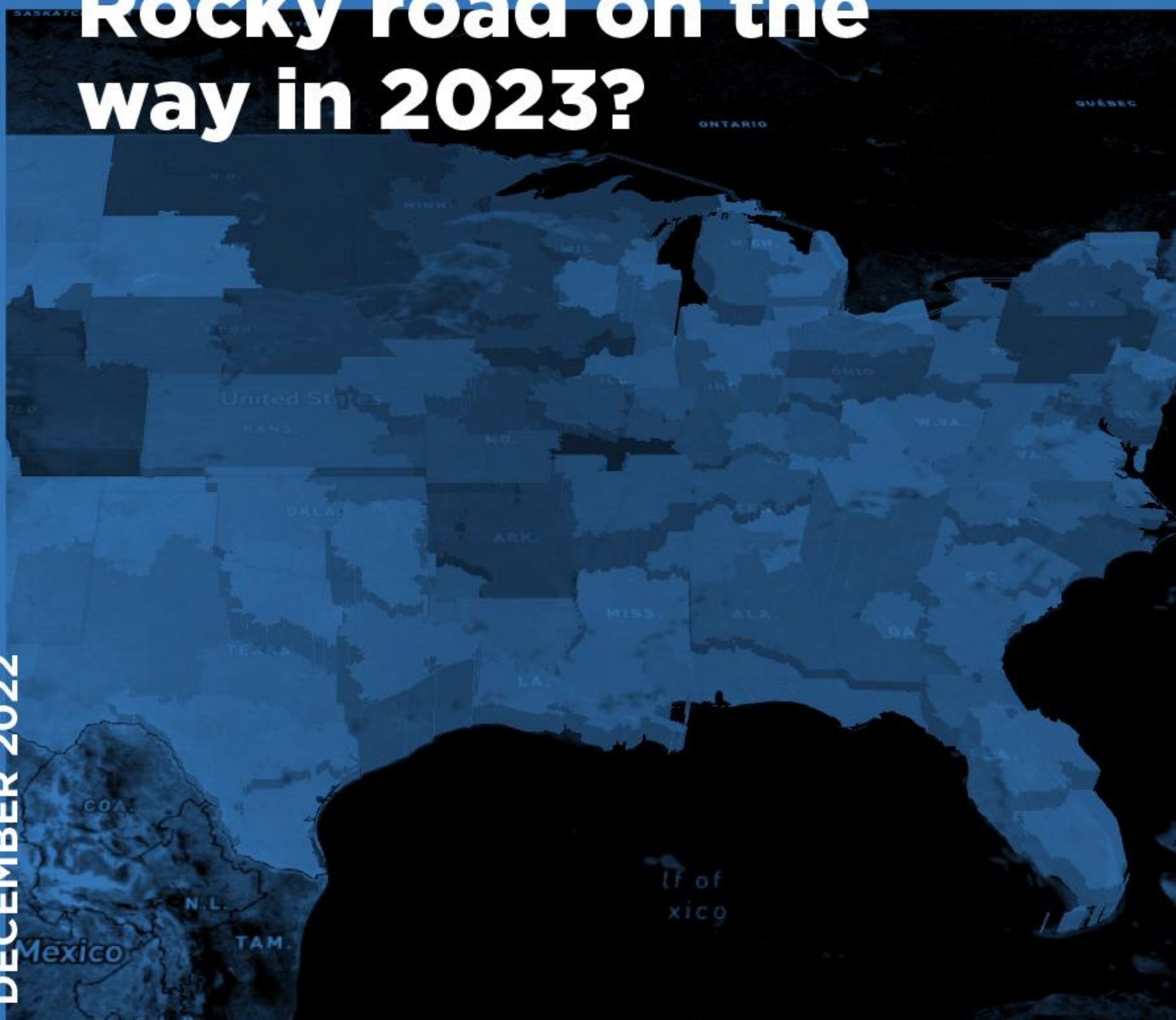
Rocky road on the way in 2023?



DECEMBER 2022

WHITE PAPER

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Executive Summary and Forecast

In 2020, consumers found themselves with an excess of time and funds, thanks to both stay-at-home and stimulus measures introduced after the pandemic began. This simple combination led to astounding growth in freight demand, driven mainly by the flow of consumer goods. At the same time, previously established supply chains were thrown into disarray — for instance, farmers were tasked with redirecting a large portion of their produce from restaurants (which had been closed or otherwise bridled) to grocery stores. 2020 thus became a year in which logistics received its due attention.

In 2021, truckload markets saw continued growth as freight demand outstripped capacity, catapulting spot rates into the stratosphere. Carriers were spoiled for choice in rejecting contracted freight, which had been priced at rates that lagged far behind volatile market conditions, in favor of higher-paying loads in the spot market. As a result, tender rejections climbed to unheard-of levels.

In one sense, it should not be too disappointing that 2022 failed to match the historic growth of years prior, given the unusual convergence of circumstances that enabled such growth in the first place. Despite an impressive start to the year, freight volume quickly receded in March and continued to fall throughout the remaining months. This lack of overall volume, coupled with contract rates that finally met (and then surpassed) market expectations, led carriers to cling to their contracted freight. As tender rejections lowered, fewer loads fell to the spot market, driving down spot rates. Contract rates, the pricing of which had been limited to yearly bid cycles, became more nimble and reactive as shippers shortened bid cycles to quarterly or even monthly bases.

On the other hand, the trucking industry is suffering from a recession during a time in which the global economy faces its own downturn. While 2019 was the year of the trucking industry's last recession — the business cycle for truckload markets usually lasts three or four years — it did not face additional pressure from a weakened economy. Rather, tender volumes rose in 2017 and 2018, spurring a host of new drivers to enter the marketplace. 2019's recession was therefore less caused by a drastic reduction in freight demand and more about carriers' oversupply of capacity.

2022 is a different story: The aforementioned growth in consumer spending on goods worsened inflationary pressures that had been developing since mid-2021. The war between Russia and Ukraine entered full-scale operations in late February, which rocked commodity markets at home and abroad. China proved to be a mercurial business partner, as its government's "zero-COVID" policies halted its manufacturing and export activity on a frequent but erratic basis.

To make matters worse, 2022 was marked by rising fuel costs, continued congestion at the ports and the bullwhip effect. This latter influence occurs when temporary surges in retail demand — especially for durable goods such as furniture and home appliances, which are bulky and thus devour warehouses' capacity if not moved quickly — are grossly magnified by upstream manufacturers. When consumer demand slows, as it did in 2022, retailers are burdened by a glut of costly inventory. This inventory is costly because warehousing space remains at a premium, but also because the velocity of containers moving out of their ports slowed dramatically, increasing dwell times and worsening congestion.

Congestion at the heavyweight West Coast ports, such as those of Los Angeles and Long Beach, has been mostly resolved by the time of writing. While some of this clearance was made possible by declining shipper activity, a more substantial factor was the widespread relocation to smaller ports on the East Coast, like Savannah, Georgia. Since the infrastructure at such ports is not scaled to accommodate such activity, congestion was simply transported elsewhere. Even so, the overall volume of ocean imports did decline in the third and fourth quarters of 2022.

Consumers have continued their spending patterns throughout 2022, despite the lack of stimulus measures that expired at the end of 2021. The result has been consumers taking on more debt at higher interest rates. There has been a shift in spending in recent months, shifting from goods spending that spurred freight demand in the past two years back to services spending. The higher costs of debt, increased outstanding revolving credit and slowing job openings are setting up for a rocky road for the consumer in 2023.

In light of these market conditions, we believe that spot rates will continue to decline throughout 2023 by high-single-digit to low-double-digit percentages. One source of potential upward pressure on fuel-inclusive spot rates is the price of diesel, the inventory of which is threatened by tight refinery capacities and stockpiles depleted by the cold season. Yet diesel prices are also linked to the price of crude oil, which (at the time of writing) has plummeted in response to a fear of weakened Chinese demand. But many financial institutions anticipate 2023 to bring either new highs or at least a return to the elevation seen during most of 2022.

Contract rates, meanwhile, should see more considerable declines clustered around the start-of-quarter seasons in 2023. In 2019, dry van contract rates (which exclude fuel costs) averaged $2.01 per mile. At the end of 2020, when contract rates were concluding a six-month surge, rates averaged $2.48 per mile. As of late November, contract rates are now averaging $2.62 per mile, setting themselves back to levels last seen in early September 2021. Needless to say, contract rates have quite a bit of room to fall. We predict that contract rates will decline by 13% to 17% during 2023. Q1

2023 will likely give rise to the largest of these declines as monthly, quarterly and yearly bid cycles align with one another.

2023 Consumer Outlook and Implications for Truckload

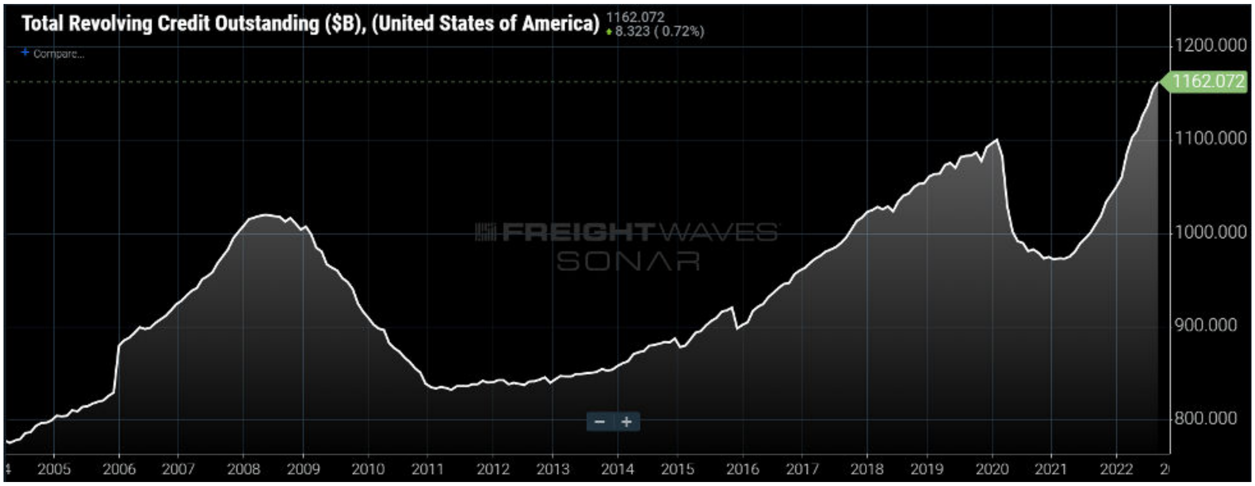
Is the consumer in for a rocky road in 2023?

2023 is setting up to be one of the toughest economic environments that consumers have faced in numerous years. Executives at some of the largest financial institutions across the country are warning that consumers are facing more and more difficult challenges and that spending patterns are changing.

Before turning the calendar to 2023, it is important to understand how the consumer is placed into this predicament.

In 2020 and 2021, the COVID-19 pandemic caused a shutdown in the economy that the federal government stepped in and provided stimulus payments to individuals to continue economic activity. With many services (the vast majority of spending in the U.S. economy), the consumer turned to spending money on goods, as well as paying down outstanding revolving credit (i.e., credit cards).

Figure 1: Consumers are turning to credit to continue their spending habits



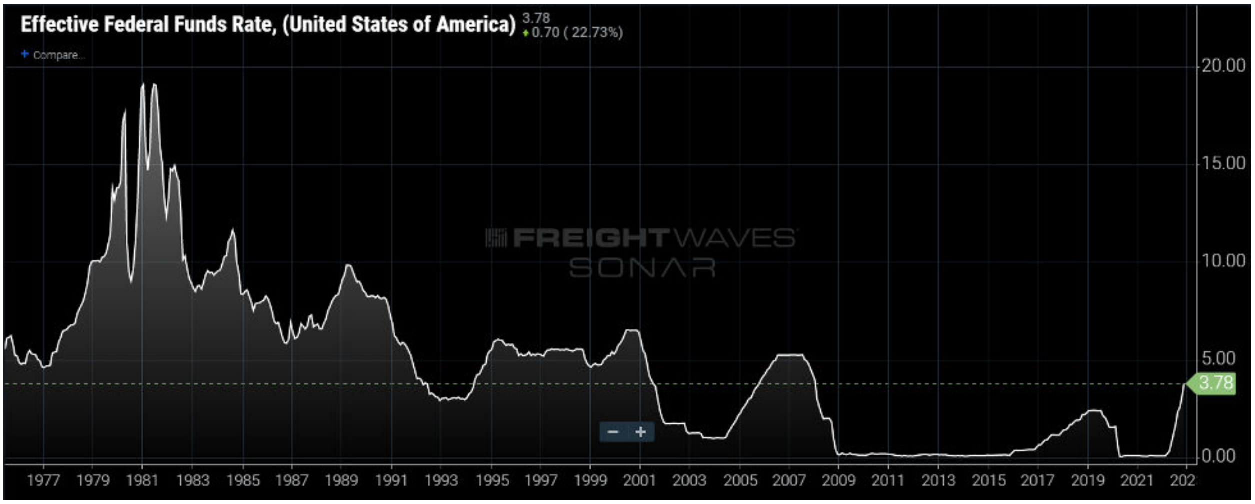
SONAR - Total Revolving Credit Outstanding (CCOR.USA)

From February 2020 through February 2021, consumers were able to pay down $126.8 billion in outstanding revolving debt. This was one of the fastest drawdowns in outstanding revolving credit in the history of the data set, which dates back to 1968. Only the Financial Crisis of 2008 rivals the decline as outstanding revolving credit fell by $126.9 billion from May 2008 through May 2009.

After bottoming out in March 2021, the spending has been on. Over the past 21 months, the total revolving credit outstanding has increased by $189.1 billion, an increase of 19.4%, surpassing pre-pandemic levels, currently $1.162 trillion in outstanding revolving debt. In comparison, when total outstanding revolving credit started to increase in February 2011, it took until September 2017 to experience the same 19.4% increase.

The concern isn't just that outstanding revolving credit is rising at one of the fastest rates in history, it's happening at the same time that the cost of debt is rising as the Federal Reserve is battling rampant inflation. The Federal Reserve has been raising interest rates throughout 2022 in an effort to curb inflationary pressures, raising rates by 75 basis points (bps) at a time.

Figure 2: The Federal Reserve takes a hawkish stance to curb inflation



SONAR - Effective Federal Funds Rate

Since March, the effective Federal Funds Rate has increased by 350 bps. Jerome Powell, chairman of the Federal Reserve, has made it clear in recent statements that interest rates will continue to rise until signs of inflation as well as the employment market cool off, though the increases will likely be smaller in nature than the 75 bps increases.

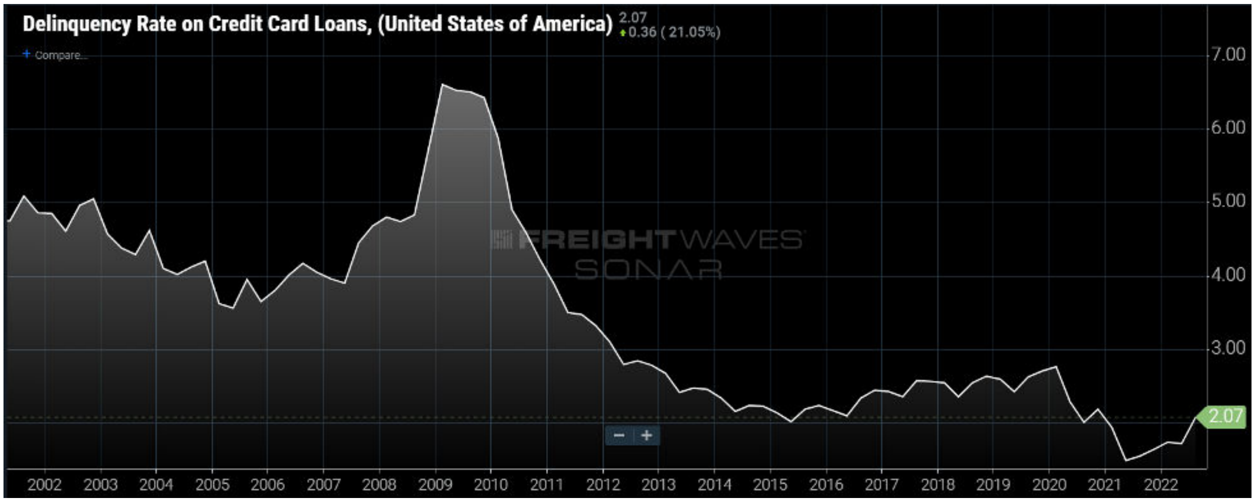
Why is the Fed Funds Rate so important, especially to outstanding revolving credit?

The Fed Funds Rate represents the interest rate that commercial banks lend reserves to other commercial banks overnight. In other words, this is the rate at which it costs banks to borrow from other banks in order to lend out. With outstanding credit, banks are lending money to consumers (and other entities like businesses) but charging interest on balances and the rate that is being charged is increasing.

In the third quarter, the average interest rate for a credit card was 16.27%, more than 100 bps higher than the second quarter's average of 15.13% and 167 bps higher than 2021's average.

An individual with an outstanding balance of $1,000 was paying $11.40 more in interest in Q3 than in Q2. That amount doesn't seem too alarming, but the average outstanding credit card balance is more than $5,000, meaning that just the rising interest rates have added over $55 in interest expense on average.

Figure 3: Delinquency rates for credit cards remain historically low but are starting to creep higher



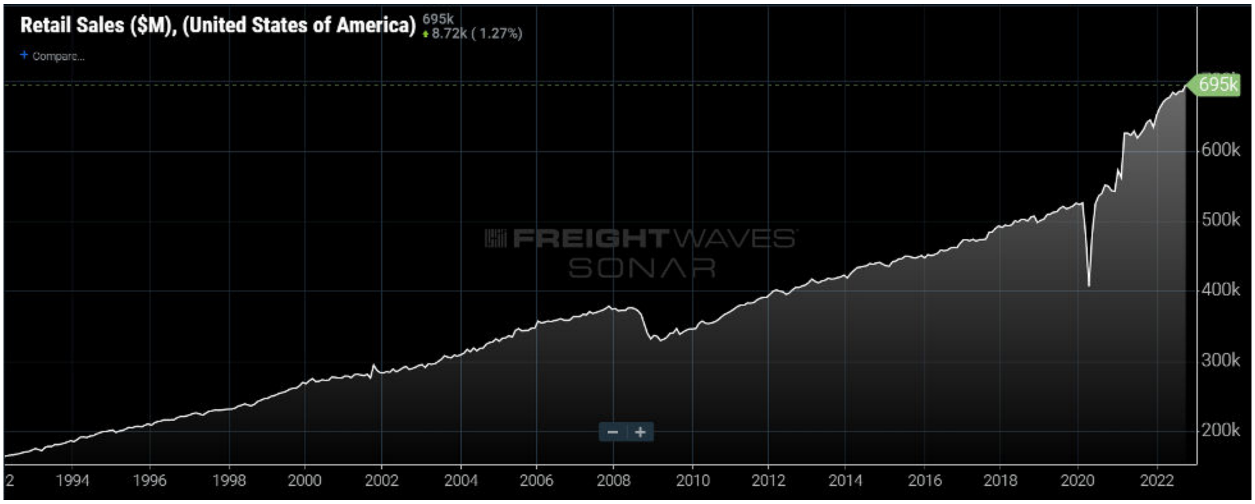
SONAR – Delinquency Rate on Credit Card Loans

Despite the rising interest rates and outstanding revolving credit, delinquency rates on credit card loans remain low compared to historical levels but are starting to rise.

In the last prolonged recession in 2008-09, delinquency rates were on the rise leading into the recessionary period but exploded, climbing by over 2 percentage points from Q3 2008 through Q1 2009 before slowly coming down.

Through Q3 2022, delinquency rates have increased by half of a percentage point since Q2 2021, but this is an area to pay attention to, especially as the calendar turns to 2023. A continued rise in delinquency rates, surpassing pre-pandemic levels, is a cause for concern, especially with the rapid increases in interest rates as well as outstanding revolving credit levels.

Figure 4: Consumers continue to spend at a rapid pace



SONAR – Total Retail Sales in millions

Consumers, despite increasing their spending via credit, have continued their propensity to spend overall. As the old adage goes, never doubt the American consumer's ability to spend. Over the past year, total retail sales have increased by 8.27% year over year (y/y).

Retail sales aren't adjusted for inflation, but the Consumer Price Index (CPI), one of the most cited measures of inflation, is up 7.7% y/y, so there has been growth in retail sales even when factoring in inflation.

Recent credit card spending reports from Bank of America show slowdowns in spending happening starting in November after stimulus in California and Amazon's second Prime Day in October were responsible for strength in card spending. In the most recent week (ending Dec. 3), total card spending was down 0.7% y/y, according to Bank of America.

Additionally, while spending as a whole is down slightly, spending on categories that involve physical goods is all down significantly as services spending is ramping up. Bank of America's card spending report, through Dec. 3, shows spending on clothing, furniture, department store, home improvement and online electronics all down double digits y/y.

This slowdown in goods spending, should it persist into the first part of 2023, presents a further risk of demand deterioration in the freight market.

Figure 5: Job openings are on the decline after a rush to hire in the past 2 years

SONAR - Total Nonfarm Job Openings

With the "Great Resignation" seemingly behind us, the labor market is still holding up, but early indicators are starting to show through. Since the beginning of the year, the number of job openings has declined by nearly 2 million, but there are still ample openings for those unemployed. Initial and continuing jobless claims have been steadily increasing despite the relatively strong jobs reports numbers in recent months.

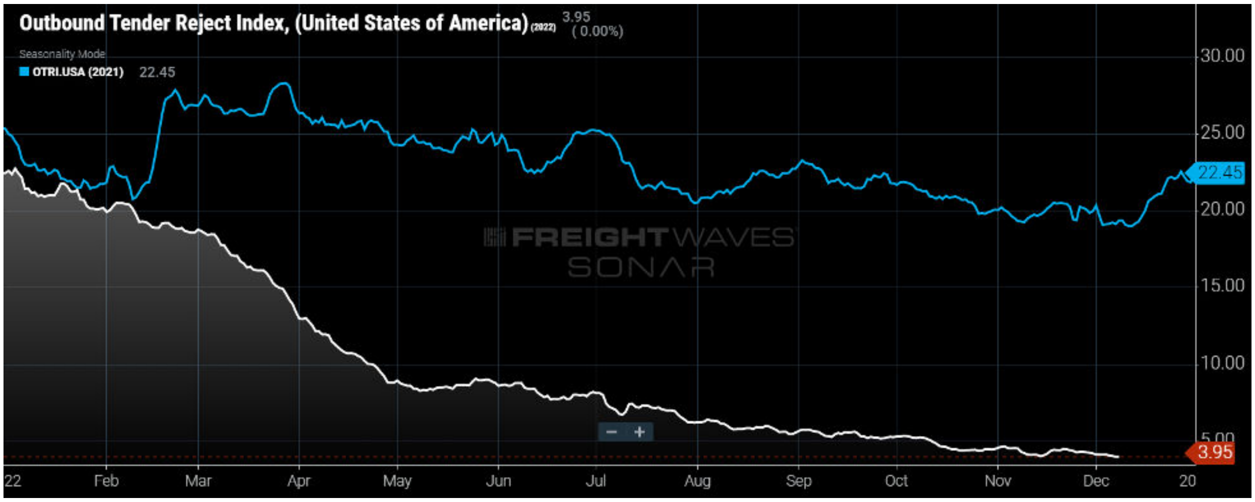
2023 is setting up to be a tougher time frame for consumers as a whole as interest rates are set to continue to rise and inflation has persisted in everyday goods, though there are signs of improvements, especially in the energy sector. This is all happening while the personal savings rate continues to decline to the lowest level it has been since July 2005. Consumers now are saving just 2.3% of their disposable income.

A rapid recovery in freight demand would likely have to be led by the consumer and if the current trends continue, it doesn't look likely in the first half of 2023. Add in student loan repayments will likely begin in the summer of 2023, which is another risk to slowing consumer spending habits after more than a two-year pause.

2022 Review of Truck Capacity (Supply)

With few interruptions, capacity became consistently easier to secure throughout 2022. The first quarter of the year saw a rocky start to capacity since, after 2021's year of record profits, more drivers could comfortably afford to extend their holidays and spend more time off the road. Worsening this capacity crunch, shippers were unusually active early in Q1. As a result, the Outbound Tender Reject Index (OTRI), which measures relative capacity in the market, was elevated during the first week of January, though it soon fell off from its yearly peak of 22.75%.

Figure 6: Tender rejection rates have fallen below 4%, an indication there is plenty of available capacity in the market



SONAR – Outbound Tender Reject Index: 2022 (white) and 2021 (blue)

Tender rejections are largely driven by two forces. The first, and most common, scenario occurs when carriers abandon previously contracted freight to pursue higher-paying opportunities in the spot market. OTRI's downward trend during the whole of 2022 can largely be attributed to the deterioration of spot market rates and volumes at a time when contract rates remained relatively stable near all-time highs.

The second factor behind an increase in tender rejections is a sheer lack of capacity witnessed in a volatile market. The ongoing semiconductor crisis prevented new truck orders from being fulfilled; accordingly, prices for used trucking equipment spiraled upward. Despite these limiting factors, new entrants continued to flood the trucking industry, seduced by 2021's lucrative spot rates. Sadly, these new arrivals purchased used equipment that was heavily overpriced. Now overleveraged with payments on such expensive equipment, these new entrants are desperate to tread water and remain solvent for as long as possible, and they are thus willing to move freight with thinner margins.

Until mid-February, tender rejections were in a state of flux. They rose one week and then fell the next, only to rise again in the week following. During this period, OTRI hovered just above 20%. In the second half of February, OTRI was stable around 19%. But when March came, the bottom fell out.

National tender rejections were in a state of freefall with many shippers and carriers alike wondering where the floor would be. In the two-month period from March to May, OTRI lost nearly 1,000 basis points (bps), meaning that shippers broadly found capacity easier to source in Q2. OTRI's rapid descent was occasioned by a host of related factors, one of which was a meteoric rise in contract rates. Even without any influences from the economy at large, these rising rates could have brought about lower tender rejections by themselves: Lower tender rejection rates mean that fewer loads fall to the spot market, which in turn causes spot rates to cool. A decline in spot rates diminishes any incentive for carriers to reject their contracted freight, further perpetuating the cycle.

After tender rejections began to flatline at the tail end of Q2, they found further room to fall from July to September. The spread between contract rates, which continued to remain high, and spot rates, which plummeted, proved to be a sufficient incentive for carriers to cling to their contracted loads.

OTRI's performance in Q4 suggested comparisons with 2019, the year of the trucking industry's previous recession. In 2019, carriers rejected an average of 6.08% of loads; in Q4 2022, OTRI never rose above 5.32%. In fact, OTRI fell beneath 5% in mid-October and then quickly broke below 4% in the following month. In 2019, OTRI hit a yearly low of 3.78%. For all intents and purposes, this figure should be considered OTRI's floor, even though it did fall to 2.6% in the early days of the pandemic.

At the time of writing, OTRI has yet to outdo 2019's yearly low. Nevertheless, it seems now to be a matter of when — not if — it will do so.

2022 Review of Load Volumes (Demand)

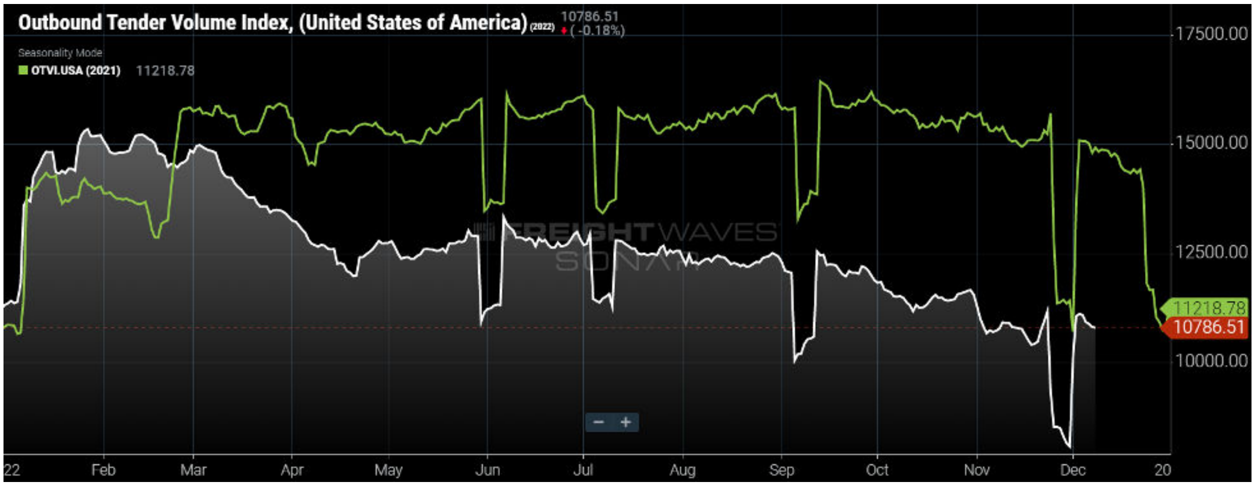
After a slow week to begin the year, truckload demand took off like a rocket throughout January and most of February, comfortably outpacing year-ago levels. This performance was incredible since shippers generally do not move much freight in these months, as consumer demand is usually exhausted after the holiday spending season. But this year, shippers were wisely proactive, preferring to frontload their freight in a traditionally quiet season instead of noisily competing for capacity in March and Q2. This strategy had its downsides, as any freight that does not need to move immediately will instead languish in a warehouse. With vacancies virtually nonexistent, warehousing space continued to command a premium; retailers eventually began to move their product into warehouses farther inland or into their stores' back rooms, both of which are cheaper alternatives.

Late in the quarter, however, economic headwinds began to form. First, there were the geopolitical factors that are beyond the control of shippers and carriers. The most devastating of these, which also gave rise to a truly tragic loss of human lives, was the Russia-Ukraine conflict. Though imports of Russian oil are not a significant portion of domestic consumption, the embargoes against Russia rocked the international market, sending oil prices skyward. As a result, even though domestic supply was not greatly threatened, prices of diesel, jet and marine fuel all spiked. Additionally, the ongoing microprocessor shortage worsened by this conflict: Ukraine was responsible for 90% of the United States' supply of semiconductor-grade neon (which is needed for lasers in chip manufacturing), while Russia accounts for nearly half of the global supply of palladium.

China was also hit by a wave of new COVID-19 cases in its manufacturing hubs of Shenzhen, Changchun and Shanghai. These outbreaks tested the Chinese government's "zero-tolerance" policy toward the pandemic, winding down production and limiting exports at the Port of Shanghai, the busiest container port in the world. While import volumes from China were affected by this string of lockdowns, continued congestion at the ports provided a buffer to truckload volumes for a few months.

Second, inflationary pressures began to have an appreciable effect on consumer spending. The annual rate of inflation reached (at the time) a four-decade high of 8.5% in March. After adjusting for inflation, the national average price of gasoline rose 36% y/y in March. Since businesses began to encourage workers to return to the office, demand for gasoline became relatively inelastic, leaving consumers with little income to divert to discretionary spending. This slowdown in retail weighed heavily on the following summer shopping season.

Figure 7: Tender volume declines have been in place since March 2022



SONAR – Outbound Tender Volume Index: 2022 (white) and 2021 (green)

Freight demand, inheriting the downward trend started in March, was unseasonably low in the second quarter. April was marred by a string of disappointing earnings reports from major retailers that saw serious misses in operating income and earnings per share. In short, cost-inflation issues ramped up at a much quicker pace than consumer-side prices received could be adjusted. High levels of inventory, which continue to plague retailers and manufacturers alike, were also first reported in this period.

Another demand-side factor behind Q2's freight slowdown was consumer satiation of goods. Prior to the pandemic, consumer demand was weighted heavily in favor of services, which are not significant drivers of freight volume. When stay-at-home measures were put in place to restrict the spread of COVID, these services — restaurants, movie theaters and airline travel, for example — became extremely inaccessible if they did not shut down altogether. With additional money from government stimulus checks and no means to spend them on services, consumers shifted their spending toward goods. But after almost two years of retail spending, consumers have effectively purchased whatever they wanted by now. With a sufficient amount of personal goods, consumers returned to spending on travel and dining.

For the most part, tender volumes continued to deteriorate throughout the third quarter, continuing a downward trend begun in March. While volatility has been the primary constant in truckload markets since 2020, there have been enduring trends that dictate when freight demand waxes or wanes. As mentioned at the beginning of this paper, tender volumes historically gain momentum in mid-July before rising significantly in August. This surge played out like clockwork in 2019, 2020 and 2021 — three years over which market conditions fluctuated wildly.

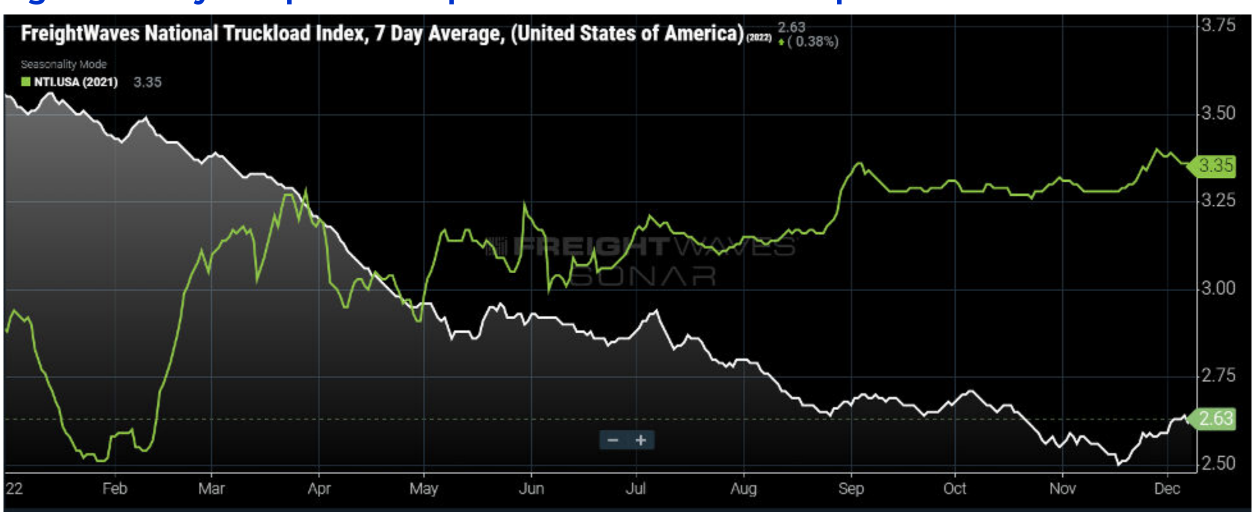
That such an upturn did not occur this year is a testament to the ailments that the industry is currently facing. Shippers' demand was hamstrung by a flood of inventory that remained dammed by declining consumer sentiment and activity. Demand from the construction sector similarly ebbed in Q3 and Q4, given that the average rate on a 30-year fixed mortgage skyrocketed to 7.08% — its highest level since 2002.

A series of monthly surveys is conducted by regional banks of the Federal Reserve, measuring manufacturers' sentiment about current business conditions as well as their expectations for improvement (or lack thereof) within six months' time. During the third and fourth quarters, optimism among manufacturing firms fell to historic lows in New York, Dallas and Philadelphia. While supply chain hiccups remained a sticking point for many of those surveyed, fears about the broader economy were a more pressing factor as order growth slowed in the back half of the year.

2022 Review of Trucking Rates

As was the case with the truckload market more broadly, spot rates began the quarter with upward momentum and greatly outpaced year-ago levels. Early in January, the National Truckload Index (NTI) — a fuel-inclusive, seven-day moving average of national dry van spot rates — reached its yearly peak of $3.56 per mile. Yet, like tender rejections, spot rates plummeted rapidly in the two-month period from March to May, falling 14%.

Figure 8: Very few periods of positive momentum for spot rates in 2022



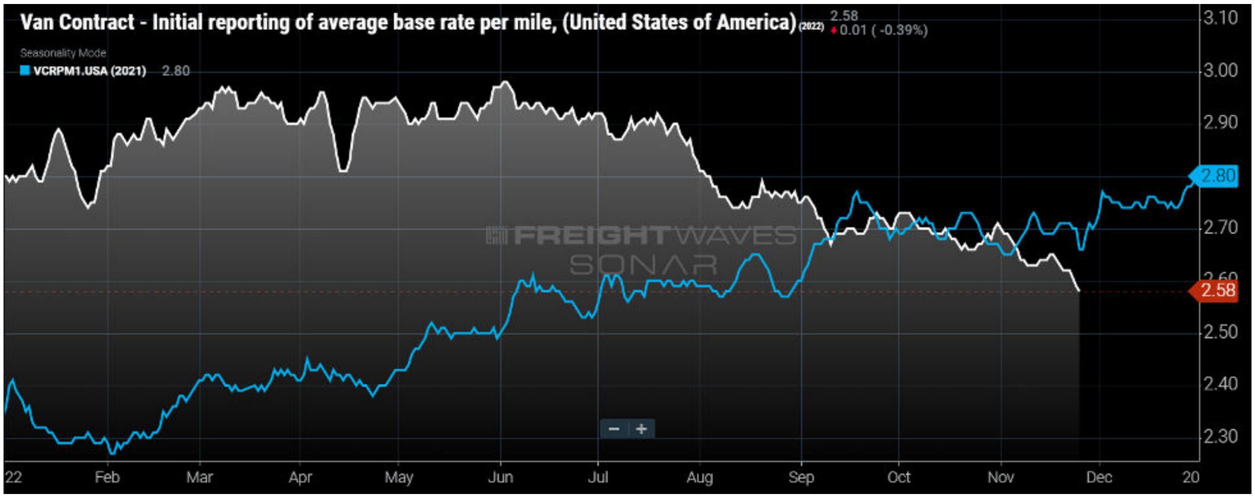
SONAR – FreightWaves National Truckload Index: 2022 (white) and 2021 (green)

Meanwhile, contract rates, which were fairly slow to catch up to the truckload market in 2021, saw continued growth during this same period. At the beginning of 2020, contract rates were typically negotiated on a yearly basis. Unfortunately for shippers, unforeseen market volatility caused by the pandemic led to contract rates becoming inappropriately priced, as many carriers began to reject contracted loads in favor of much higher rates in the spot market. Shippers took over a year before finally settling on contract rates sufficient to retain capacity, while the relevance of contract rates was helped by shortening bid cycles to a quarterly (or even monthly, in some cases) basis.

Spot rates' downward spiral was not interrupted until late May, when the Commercial Vehicle Safety Alliance's International Roadcheck, colloquially known as Blitz Week, took a good deal of capacity offline. Random vehicle inspections are not a common occurrence for most carriers, as many inspections are instead consolidated in a single week. To avoid demerits, roughly 5% of independent owner-operators voluntarily stay off the road during this inspection period. Of course, the more difficult it becomes to secure capacity, the higher spot rates rise in response.

After Blitz Week, however, spot rates continued along their gradual descent until the end of the quarter. Since the NTI is inclusive of fuel, this trend was alarming because diesel prices reached their yearly peak in June, averaging $5.81 per gallon. The diesel market tightened in response to several factors, not least of which was an increase of exports to Europe intended to offset the continent's losses from the Russo-Ukrainian war. Crude oil prices were also rising while refineries were pushed to their utmost limits of capacity. Even still, the fuel-inclusive NTI fell 7.3% throughout Q3.

Figure 9: Contract rates followed spot rates decline in H2 2022



SONAR – Initially reported dry van contract rate per mile: 2022 (white) and 2021 (blue)

While contract rates made it through the first half of 2022 unscathed, they suffered a tremendous drop at the tail end of July, falling 5.5% in two weeks. Given that the spot market had been decaying for nearly six months, it was unsurprising that contract rates finally caught up. Shippers had incredible leverage during their renegotiation of Q3 contract rates, as tender volumes and rejection rates had both dwindled. Yet, as has been mentioned, not all shippers negotiate contracts on a quarterly basis. This fact left contract rates with room to fall further in early September, dropping 3.6% over the first two weeks of the month.

Since that time, contract rates remained more or less stable until November, when they fell an additional 3.3% in the month's first three weeks. Spot rates, on the other hand, jump-started a muted recovery in the second half of November that is lasting into December. The upcoming winter holidays should provide some cover to spot rates until January, since carriers historically take advantage of holiday pricing for time-sensitive freight.

Trucking Forecast for 2023

After months of consecutive increases, the federal funds target rate has risen from 0% to 4.5% — reaching its highest level since 2007 at its quickest pace since the 1980s. According to the Federal Reserve, then, inflationary pressures will continue to weigh heavily on any economic outlook for 2023. While consumers have proven to be surprisingly resilient in the face of such inflation, the current rapidity with which they have racked up credit card debt is an alarming signal for long-term freight demand.

When the first few rounds of government stimulus arrived in the early stages of the pandemic, most consumers paid off their revolving credit — which includes credit card debt — and spent the remainder on household goods. Unfortunately, they largely forwent payments on nonrevolving accounts such as student loans and mortgages, given the forbearances that were readily obtainable for these loans.

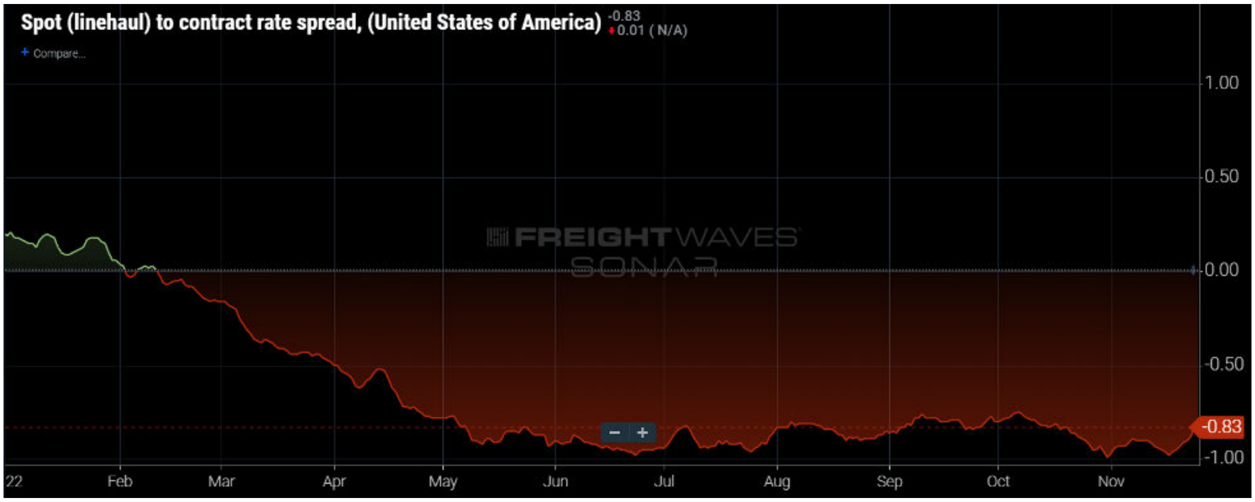
Yet the grace periods are fading for such nonrevolving accounts, which are likely to resume regular payment schedules in 2023 if they have not already. Payment on these accounts alone will eat into consumers' budgets, disregarding rampant inflationary pressures with relatively sluggish wage growth. Meanwhile, the total amount of credit card debt continues to set all-time highs at the fastest pace on record. Although a wave of credit card delinquencies has yet to surface, delinquency rates on automotive loans hit their highest level in more than a decade in December.

In short, there is unlikely to be a surge of consumer demand for freight-intensive goods during the first half of 2023, doubly so since consumers have (as mentioned earlier) returned to spending on services. To make matters worse, many analysts and economists anticipate a global recession in the first two quarters of 2023. Should this prediction pan out, freight demand will continue to subside. Rejection rates are also likely to bottom out early in 2023, since the spot market will not be abundant enough to tempt carriers away from contracted freight.

Consumers are not the only ones beset by inflationary woes, as carriers both large and small have wrestled against higher operating costs. One such operating cost that has thinned carrier margins considerably is maintenance. Since new truck orders were constrained by the semiconductor crisis, large carriers were unable to replace their aging fleets at their usual pace. The limited availability of new trucks led the prices of used trucking equipment to spiral out of control, prices which are only now beginning to soften.

Eventually, the combination of high operating costs and lower rates will force smaller and newer carriers out of the market in droves. This exodus will have a twofold effect on the trucking industry. First, capacity will ratchet tighter as the number of carriers dwindles, though it is possible that tender volumes will decline at a faster clip than carriers exit the marketplace. Second, the pool of remaining carriers will consolidate when larger carriers seek to acquire smaller, struggling carriers. This move should benefit the larger carriers, which will be able to increase their fleet sizes by such acquisitions. Even if this consolidation should occur, the trucking industry is highly cyclical and does not require heavy investments in infrastructure as do rail and maritime shipping — thus, independent owner-operators will likely return during the market's next stage of growth.

Figure 10: Spread between spot and contract rates provide room for contract rates to continue their decline into 2023



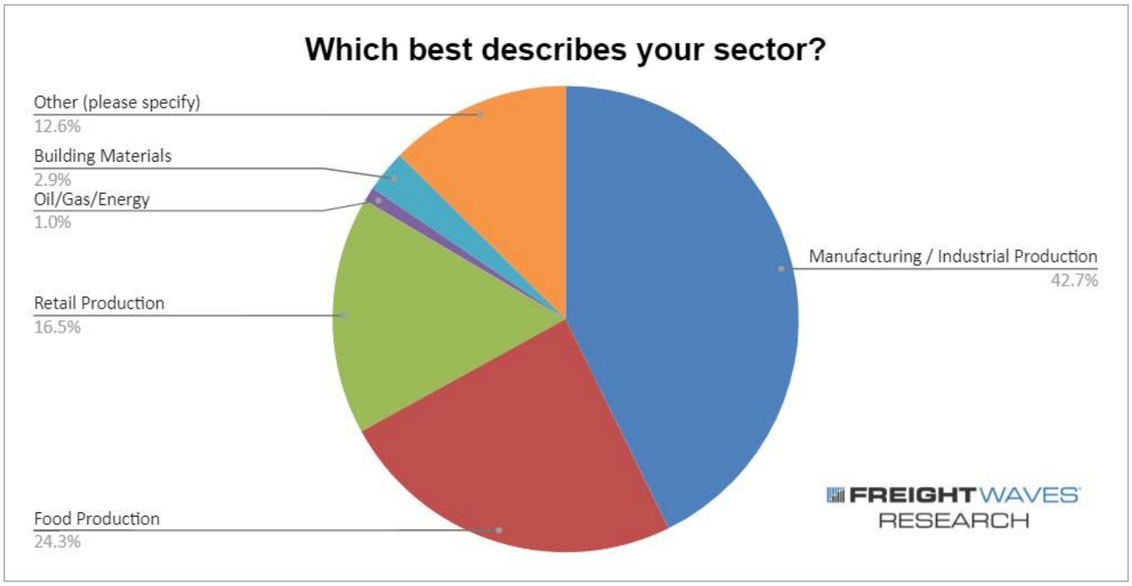
SONAR – Spread between van contract rate and National Truckload Index – linehaul only

If rejection rates do see a notable rise amid the coming wave of carrier bankruptcies, spot rates should see a similar boost. But spot rates are not expected to increase meaningfully until the second half of 2023, if then. Contract rates, on the other hand, have quite a bit of room to fall further.

Although they have already lost their gains made in 2022 (and some of those made in 2021), contract rates have yet to erase all the momentum gained since mid-2020. Since the worst pandemic-induced volatility is behind us, shippers will likely return to longer bid cycles. Contract rates, therefore, will probably see large, stepwise declines throughout most of 2023, with Q1 promising to bring the largest such decline. Even though shippers wield a significant amount of pricing power, there is still a chance that they prioritize reliable service over cost-cutting measures after having been burned with insecure capacity throughout 2020 and 2021. Should shippers prove to be twice shy, then, contract rates will instead moderate rather than nosedive in the coming year.

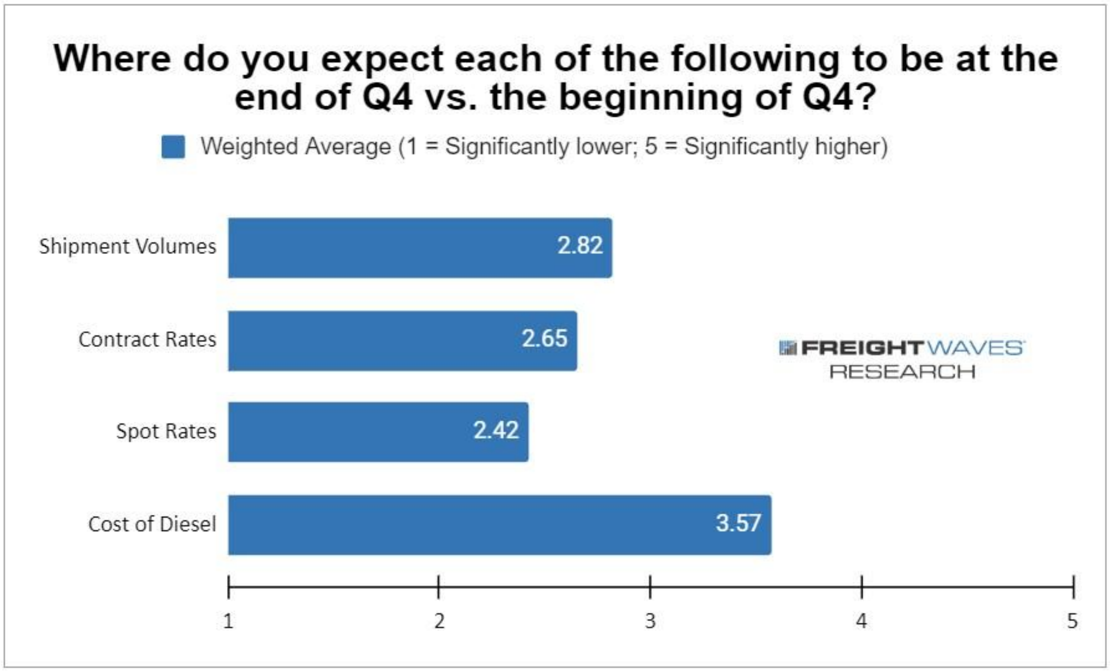
FreightWaves' Shipper Survey Takeaways

Figure 11: Shipper survey respondents by sector



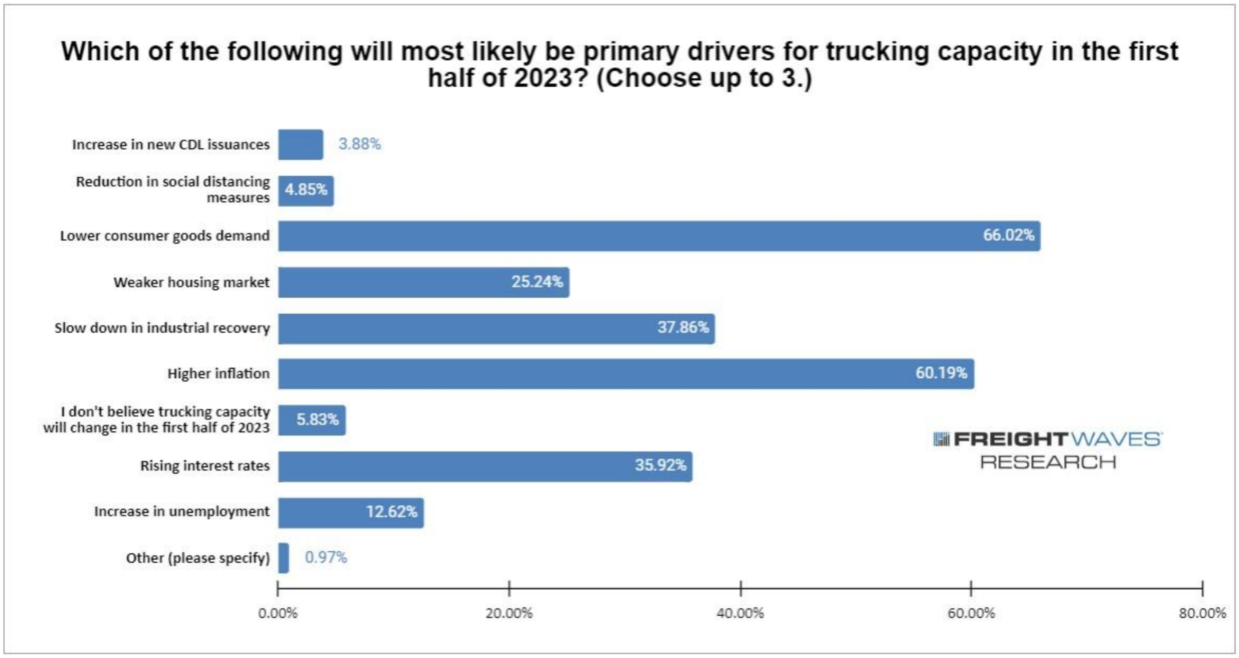
SOURCE: FreightWaves' Q4 2022 Shipper Rate Report, presented in partnership with U.S. Bank and Tive

Figure 12: Shipper survey respondents' expectations for volumes, rates at the start of Q1 2023



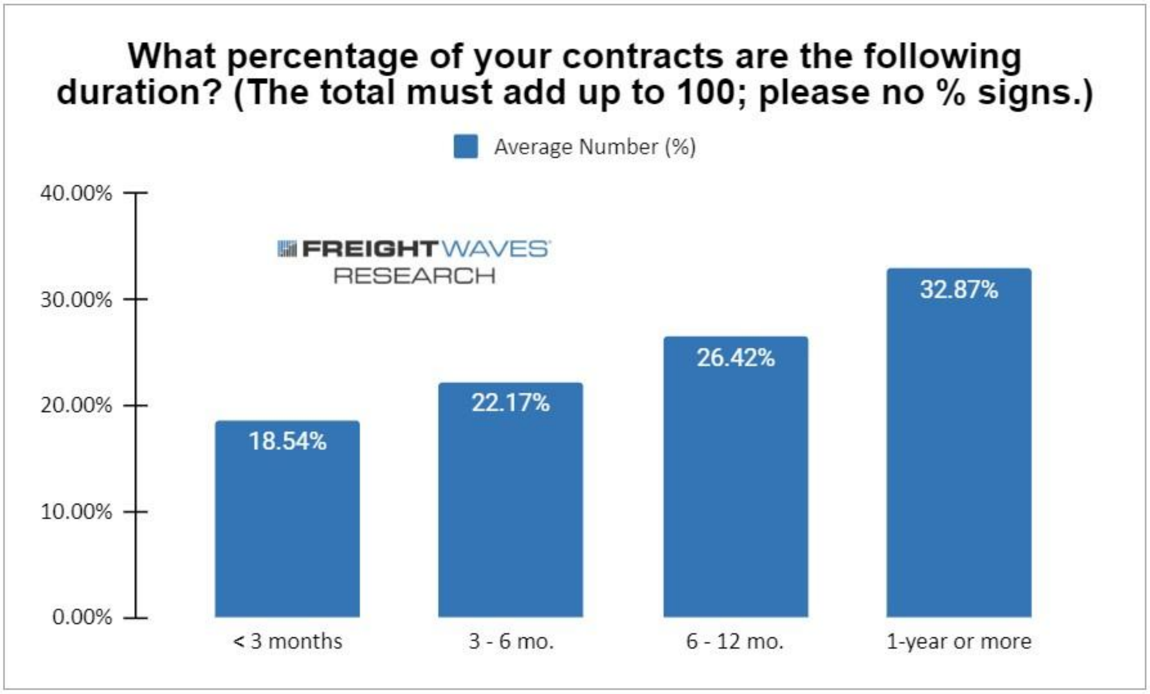
SOURCE: FreightWaves' [Q4 2022 Shipper Rate Report], presented in partnership with U.S. Bank and Tive

Figure 13: Shipper view of primary drivers for trucking capacity in H1 2023



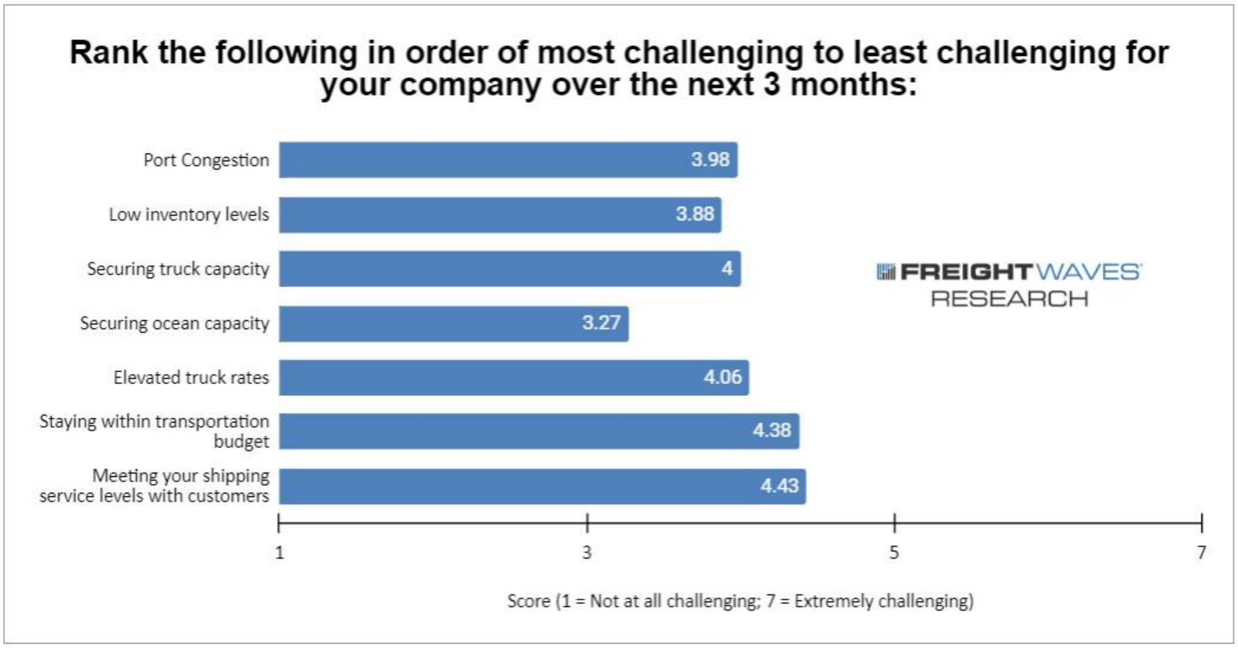
SOURCE: FreightWaves' [Q4 2022 Shipper Rate Report], presented in partnership with U.S. Bank and Tive

Figure 14: Most common contract durations for shippers



SOURCE: FreightWaves' [Q4 2022 Shipper Rate Report](), presented in partnership with U.S. Bank and Tive

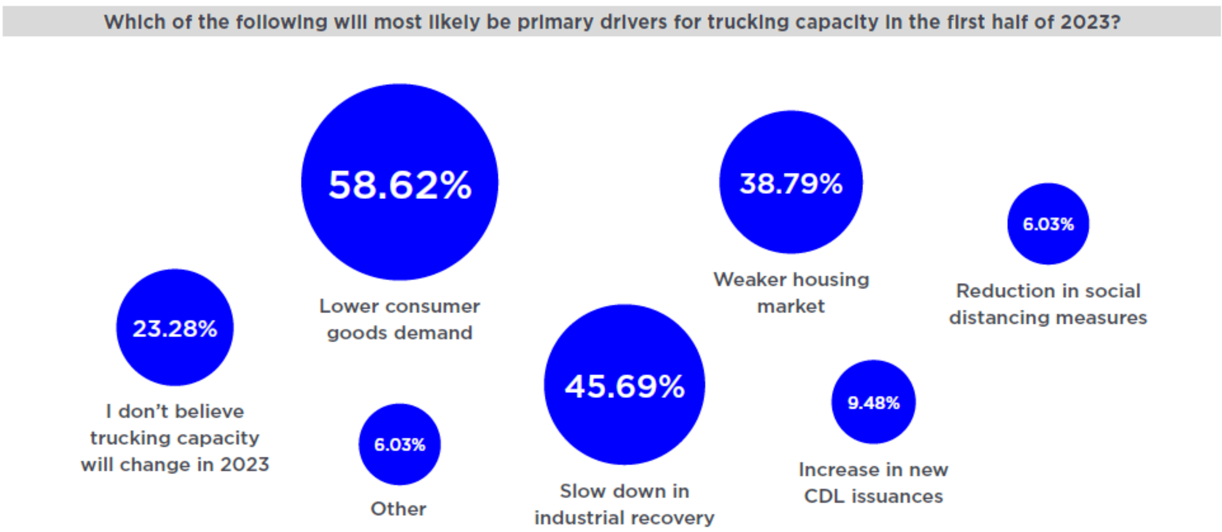
Figure 15: The biggest challenges for shippers as they move into Q1 2023



SOURCE: FreightWaves' [Q4 2022 Shipper Rate Report](), presented in partnership with U.S. Bank and Tive

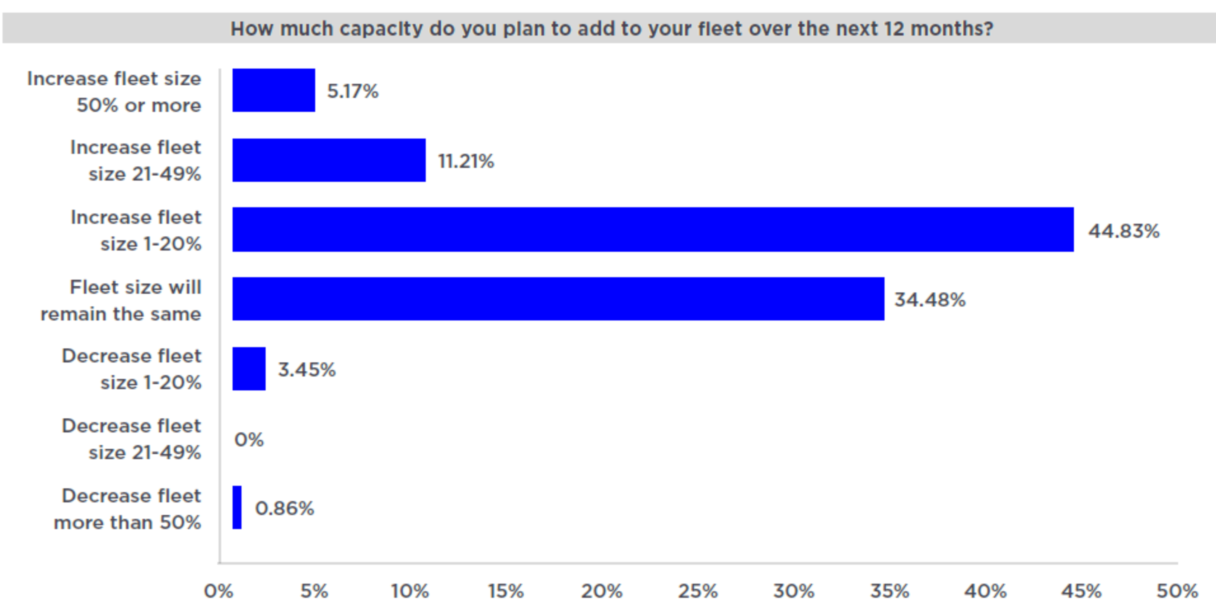
FreightWaves' Carrier Survey Takeaways

Figure 16: Carriers believe lower consumer goods demand will be the primary driver for trucking capacity in 2023.



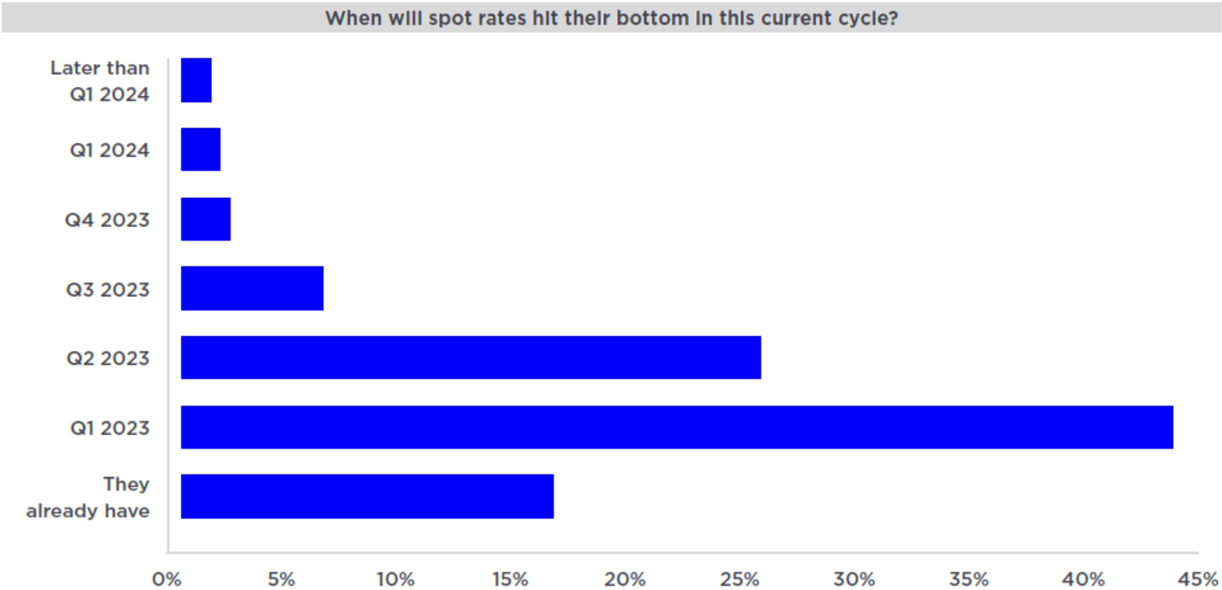
SOURCE: FreightWaves' [Q4 2022 Carrier Rate Report], presented in partnership with DDC FPO

Figure 17: Carriers are likely to continue adding capacity to their fleets in 2023



SOURCE: FreightWaves' [Q4 2022 Carrier Rate Report], presented in partnership with DDC FPO

Figure 18: Carriers expect spot rates to bottom in the first half of 2023.



SOURCE: FreightWaves' [Q4 2022 Carrier Rate Report], presented in partnership with DDC FPO