Quarterly Catch-Up: A Dive into Supply Chain Trends

January 2024

Welcome to the first quarterly update on worldwide supply chain insights called Quarterly Catch-Up: A Dive into Supply Chain Trends. The intent is to provide you with a quarterly snapshot of supply chain pressure and critical inflationary drivers that will aid senior leadership and supply chain professionals in navigating the ever-changing challenges of the global supply chain.

Each update will start with an Executive Summary of approximately one page, allowing the reader to understand the worldwide supply chain environment at 20,000 feet.

Following the Executive Summary is an in-depth analysis of six individual indices that allow the reader to dive deeper into the driving forces for each to understand better how they could impact your business.

Let me know if there are indices you think are relevant and should be included. I'm very interested in hearing suggestions.

Carpe Diem,

Art Koch

Executive Summary:

The document comprehensively analyzes various indexes and market data indicative of current supply chain conditions.

- **The Global Supply Chain Pressure Index (GSCPI)** from the Federal Reserve Bank of New York shows a notable decrease, ***suggesting easing global supply chain pressures***.
- **The S&P GSCI** reflects a volatile commodity market with ***potential short-term downward price pressures***, which could affect supply chain costs and stability.
- **Federal Reserve Economic Data (FRED)** highlights a trend of ***rising prices for Carbon Steel Scrap and Aluminum Base Scrap***, indicating increased costs that may affect supply chain lead times and overall costs.

- **The London Metal Exchange (LME)** is introducing new contracts for aluminum scrap, ***which could offer more stable pricing and sourcing options*** that align with sustainability goals.
- **Drewry's World Container Index** reports a ***significant increase in ocean container spot freight rates***, implying higher costs and the need for strategic supply chain planning.
- **Brent crude oil** ***prices have decreased***, suggesting a potentially stable cost environment for energy and transportation in supply chains.

The document concludes with the importance of leadership's continued vigilance and strategic planning to effectively navigate the evolving supply chain landscape. Please note this summary is crafted to provide a concise briefing on the key points from each section relevant to executive roles and is not a verbatim excerpt from the document.

If you want to discuss how these indices impact your business, schedule a 15-minute call with Art here. info@arthurkochmgt.com

Global Supply Chain Pressure Index (GSCPI)

Federal Reserve Bank of New York

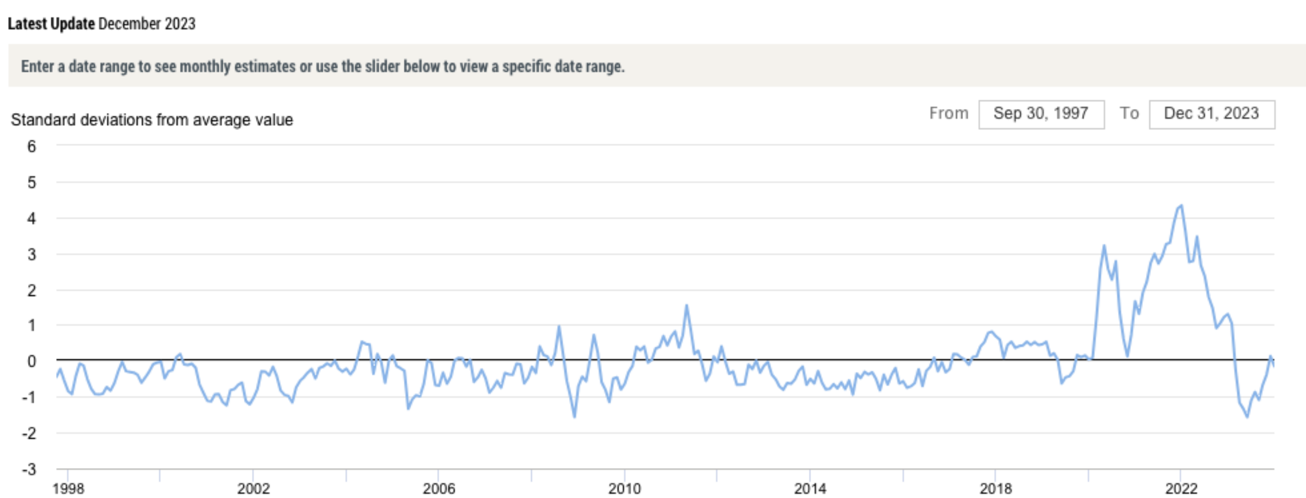
The Global Supply Chain Pressure Index (GSCPI) is a measure developed by the Federal Reserve Bank of New York to assess the strain level on global supply chains. As of the latest available data, the GSCPI for December 2023 stood at -0.1522, which marks a decrease from 0.1274 the previous month. This downward trend indicates a significant alleviation in global supply chain pressures compared with last year, with the index at 1.295.

Additionally, a report from Modern Distribution Management suggests that global supply chains have "returned to normal," with pressures dropping to their lowest levels since before the COVID-19 pandemic. Based on data from the New York Federal Reserve Bank, its monthly GSCPI fell to a reading of -0.26 in February, further declining from a revised 0.94 in January.

For CEOs, CFOs, and heads of supply chain management, this information:

- It can be interpreted as a positive signal, suggesting that supply chains are stabilizing after a prolonged period of disruption.
- The implications for lead-time stability, geopolitical stability, inflation and deflation, and logistic challenges are thus likely to be more favorable in the upcoming three to twelve months.
- It is advisable for leadership to anticipate a more predictable environment for planning and operations but remain vigilant for any potential disruptions that could cause fluctuations in the index.

Source: https://www.newyorkfed.org/research/policy/gscpi#/interactive



Standard and Poor's / Goldman Sachs Commodity Index (GSCI)

The S&P GSCI is recognized as a broad-based and production-weighted index that represents the global commodity market beta. It is designed to be investable, including the most liquid commodity futures, and provides diversification with low correlations to other asset classes.

The index has shown increases and decreases over the recent period, indicating volatility in commodity prices. As of the latest data, the index slightly declined at 0.83%, with a day's range showing fluctuation within a 10-point bracket.

Technical analysis from various market observers suggests a bearish outlook with the potential for a decline to lower support levels, hinting at possible short-term downward pressure on commodity prices.

The index plays a significant role in portfolio diversification due to its low to negative correlation with traditional asset classes like stocks and bonds. It also serves as an inflation hedge, as commodity values typically rise during inflationary periods.

Impact on Supply Chains and Actions for CEOs, CFOs, and Heads of Supply Chain Management:

- **Lead-Time Stability:** Commodity price volatility, as indicated by fluctuations in the GSCI, can affect the lead times for raw materials. Businesses should expect variability and may need to adjust their inventory management strategies accordingly.
- **Geopolitical Stability:** The GSCI's sensitivity to geopolitical events can lead to supply disruptions. Leaders should monitor international events in Ukraine and Russia, the Red Sea, and Israel and Gaza closely and develop contingency plans for supply chain disruptions.
- **Inflation and Deflation:** As an inflation hedge, the GSCI's movements can indicate inflationary trends, which may affect purchasing power and cost structures. Companies should prepare for potential cost increases and explore fixed-price contracts where possible.
- **Logistic Challenges:** Commodity price changes can impact transportation and warehousing costs. Logistics strategies may need to be revisited to ensure cost efficiency.

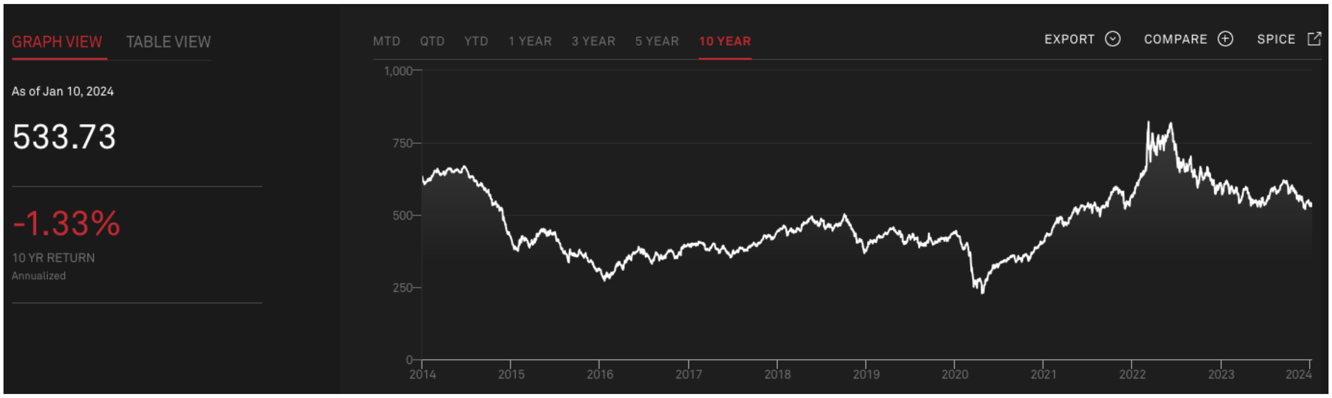
Expectations and Actions Over the Next 3-12 Months:

- Businesses should prepare for continued volatility in commodity prices and potential inflationary pressures.
- Diversification of suppliers and sourcing strategies can mitigate risks associated with commodity price fluctuations and geopolitical instability.
- Investment in lead-time compression methodologies forecasting tools for commodities and technologies may be prudent to anticipate market movements better and respond quickly to changes.
- Regular review of financial hedging strategies can buffer against significant price changes in commodities.

Overall Conclusion:

The current analysis of the S&P GSCI indicates a volatile commodity market with potential downward pressure on prices in the near term. CEOs, CFOs, and supply chain leaders should expect these conditions to impact lead times, costs, and overall supply chain stability. Strategic planning, including supply chain diversification, investment in predictive analytics, and financial hedging, will be crucial to navigate the upcoming months effectively.

Source: https://www.spglobal.com/spdji/en/indices/commodities/sp-gsci/#overview

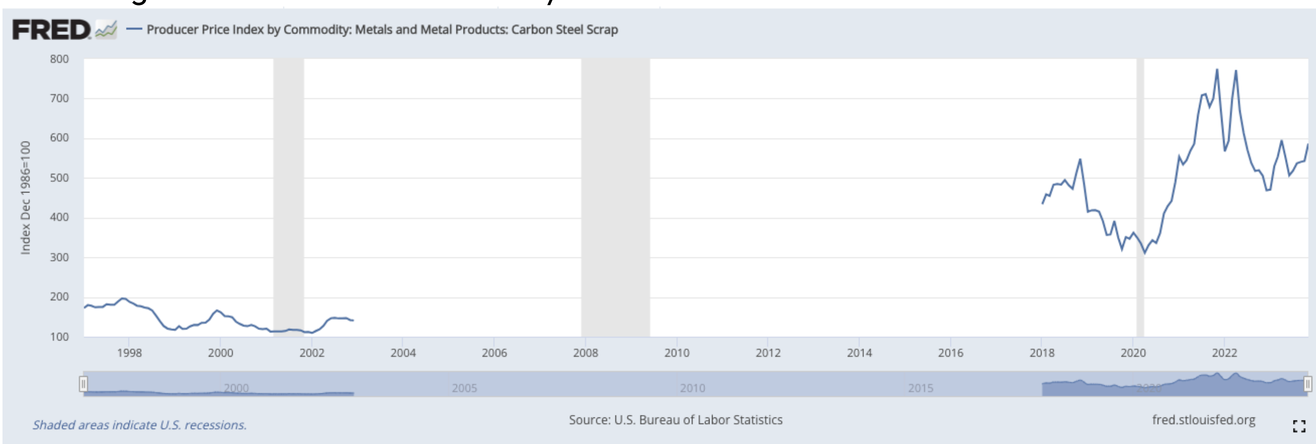


FRED - Federal Reserve Economic Data - Saint Louis.

Based on the latest data from the Federal Reserve Economic Data (FRED), here is the analysis and implications for supply chains regarding Carbon Steel Scrap and Aluminum Base Scrap:

Carbon Steel Scrap (WPU101211):

- The Producer Price Index for Carbon Steel Scrap stood at 523.115 as of November 2023. This represents a significant increase from the previous month's index of 490.709.
- The index shows a trend of rising prices for carbon steel scrap, which suggests increasing costs for industries that rely on this material.



Aluminum Base Scrap (WPU102302):

- The Producer Price Index for Aluminum Base Scrap was 253.868 in November 2023, indicating a slight increase from the October 2023 index of 247.713.
- Like Carbon Steel Scrap, the index for Aluminum Base Scrap is also on an upward trend, reflecting heightened prices for aluminum materials.

Impact on Supply Chains and Actions for Business Leaders:

- **Lead-Time Stability:** The increasing indices for both Carbon Steel and Aluminum Base Scrap may lead to longer lead times as suppliers pass on the higher costs and demand increases.
- **Geopolitical Stability:** Supply chains may be affected by geopolitical events that disrupt the production or distribution of these metals. Diversification of sources and strategic base material inventories may be necessary to mitigate risks.

- **Inflation and Deflation:** The rise in scrap metal prices contributes to inflationary pressure, which can affect the overall costs within the supply chain. Companies may need to adjust their pricing strategies accordingly.
- **Logistic Challenges:** Increased costs for raw materials like steel and aluminum could lead to higher transportation and logistics costs, impacting margins.

Expectations and Actions Over the Next 3-12 Months:

- Business leaders, including CEOs, CFOs, and heads of supply chain, should anticipate continued volatility in the prices of scrap metals.
- Considering current inflationary trends and potential lead-time disruptions, reviewing and possibly adjusting supply chain strategies is advisable.
- Engaging in fixed-price contracts or financial hedging may be beneficial to lock in prices for the near future.
- Monitoring market conditions and geopolitical events is crucial to respond promptly to disruptions or price fluctuations.

Overall Conclusion:
As reported by FRED, the increasing Producer Price Indices for Carbon Steel Scrap and Aluminum Base Scrap suggest rising costs in these commodities, likely impacting the stability and costs within global supply chains. Business leaders should take proactive steps to manage risks associated with price volatility and supply chain disruptions. Implementing diversified sourcing strategies, financial hedging, and dynamic pricing mechanisms can help navigate the challenges ahead.

Source (Carbon Steel Scrap): https://fred.stlouisfed.org/series/WPS101211
Source (Aluminum Base Scrap): https://fred.stlouisfed.org/series/WPS102302

London Metals Exchange

The London Metal Exchange (LME) is set to offer a new aluminum scrap contract aimed at the North American used beverage containers (UBC) sector. This initiative is part of a broader strategy by the LME to transition towards a sustainable economy and to assist industries in managing their price risk. It aims to support the development of the recycled value chain, enabling it to reach ambitious sustainability goals while maintaining robust planning and fair pricing. Additionally, the LME is considering introducing contracts for low-carbon emissions aluminum to aid users in sourcing low-carbon aluminum and fulfilling sustainability goals by reducing reliance on primary aluminum from specific regions.

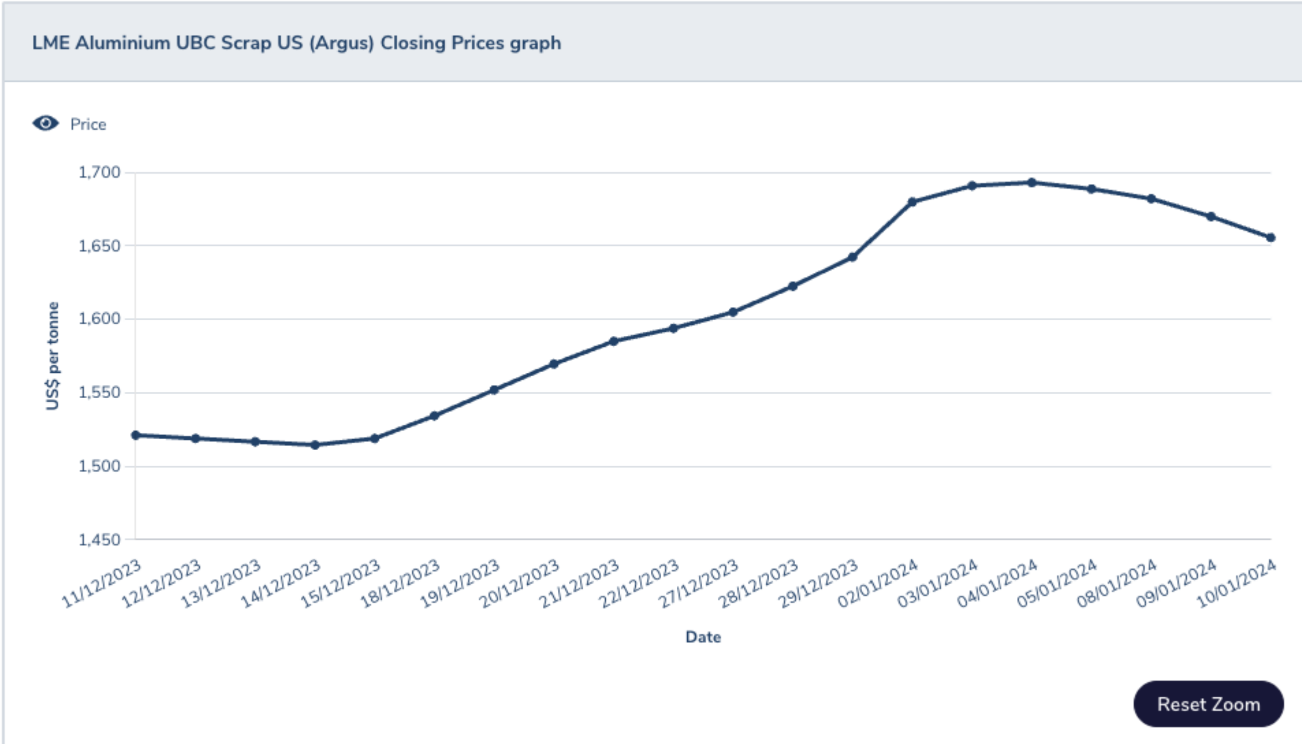
This development for CEOs, CFOs, and supply chain management heads means they will soon have new tools for price risk management in the aluminum scrap market. The move by the LME may also signal a broader industry trend towards sustainability and carbon-conscious production and trading.

In the coming months, business leaders should monitor these new contract offerings from the LME as they could provide opportunities for more stable pricing and sourcing in the aluminum scrap market. This could have significant implications for supply chain strategies, especially for industries that use aluminum UBC scrap in their production processes.

In terms of actions, it would be prudent for supply chain managers to:

- Stay informed about the launch of the new contracts and understand how they can be leveraged for price risk management.
- Assess the sustainability profiles of their supply chains and consider how low-carbon aluminum could be integrated into their procurement strategies.
- Explore the potential of these new contracts to contribute to their sustainability goals, possibly using them as a hedge against price volatility in the aluminum scrap market.

Overall, these developments at the LME could provide businesses with more options to manage price risks associated with metal commodities, which is a significant factor in supply chain management and cost control. Moreover, the focus on sustainability aligns with the growing global emphasis on environmentally responsible business practices.



Source (Aluminum UBC Scrap): https://www.lme.com/Metals/Non-ferrous/LME-Aluminium-UBC-Scrap-US-Argus#Price+graph

Source (HRC N. America): https://www.lme.com/Metals/Ferrous/LME-Steel-HRC-N-America-Platts#Price+graph

Source (Steel Scrap CFR Turkey): https://www.lme.com/Metals/Ferrous/LME-Steel-Scrap-CFR-Turkey-Platts#Price+graph

Drewry – Supply Chain Advisors – World Container Index

The Drewry World Container Index, which provides insights into the spot freight rates for ocean container shipping, saw an increase of 15% to $3,072 per 40ft container in the week of January 11, 2024. This significant rise in the index points to a robust increase compared to the same week in the previous year, with rates climbing by 44%. When looking at the figures from before the pandemic in 2019, the current rates are 116% higher, indicating a substantial shift in the cost landscape for ocean freight. Additionally, there has been a notable increase in freight rates across various major shipping lanes, such as Shanghai to Genoa and Shanghai to Rotterdam, with rates increasing by 25% and 23%, respectively.

For CEOs, CFOs, and supply chain heads, these dynamics suggest several actions:

- **Cost Management:** With the Drewry Index comprising eight major shipping routes, it's critical to account for these rising costs in financial planning and cost management strategies.
- **Contract Negotiations:** The correlations in the index suggest that route-specific contracts might have a similar risk profile, which can be leveraged during negotiations with carriers.
- **Supply Chain Diversification:** The variability in rates and potential route cancellations, which are currently at a 12% cancellation rate, emphasize the need for diversifying supply chain routes to mitigate risks associated with specific lanes.
- **Market Monitoring:** Staying updated with the Drewry Index is essential for anticipating and responding to price fluctuations in the ocean freight market.
- **Long-term Contracts:** Considering linking long-term contract prices to a verified and objective index to maintain competitive pricing, even when spot market prices fluctuate.

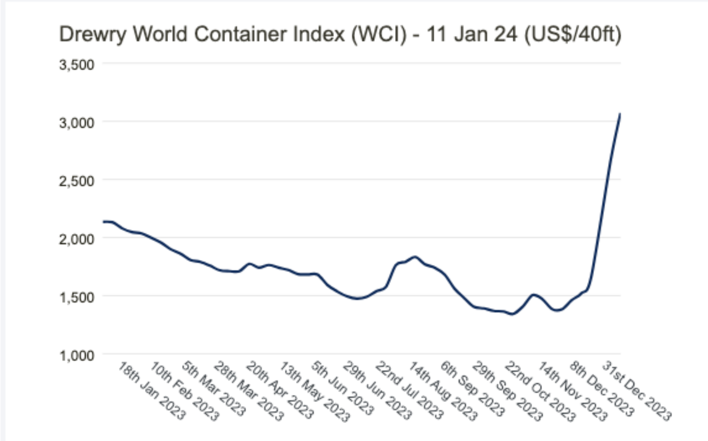
Overall, it's clear that the logistics industry is experiencing higher container shipping costs, which will likely affect supply chain strategies. Businesses should continue to monitor these indices to inform their supply chain decisions and prepare for potential increases in freight costs. The Drewry Global Container Port Throughput Index also offers insights into trade volume fluctuations, which could further impact supply chain strategies.

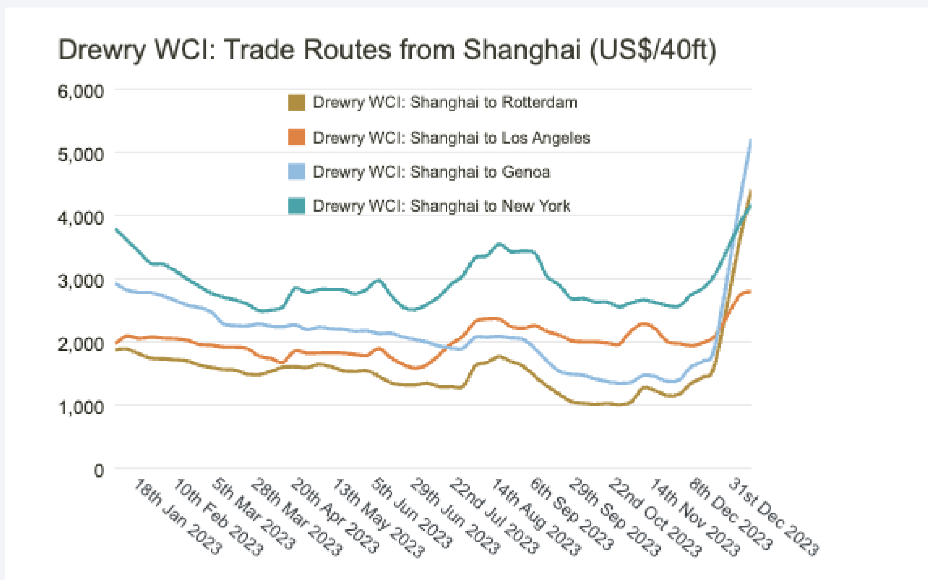
Businesses should regularly review the Drewry World Container Index for a more detailed understanding and the latest updates.

Source: https://www.drewry.co.uk/supply-chain-advisors/supply-chain-expertise/world-container-index-assessed-by-drewry

World Container Index - 11 Jan

Drewry's World Container Index increased by 15% to $3,072 per 40ft container this week.





Our detailed assessment for Thursday, 11 January 2024

- The composite index increased by 15% to $3,072 per 40ft container this week and has increased by 44% when compared with the same week last year.
- The latest Drewry WCI composite index of $3,072 per 40ft container is the highest since October 2022 and is 116% more than average 2019 (pre-pandemic) rates of $1,420.
- The average composite index for the year-to-date is $2,871 per 40ft container, which is $196 lower than the 10-year average rate of $2,675 (which was inflated by the exceptional 2020-22 Covid period).
- Freight rates on Shanghai to Genoa increased by 25% to $5,213 per feu. Followed by rates on Shanghai to Rotterdam which rose by 23% to $4,406 per 40ft box. Likewise, rates on Rotterdam to Shanghai elevated by 19% to $652 per 40ft container. Similarly, rates on Shanghai to New York increased by 8% to $4,170 per feu. Also, rates on Shanghai to Los Angeles increased by 2% to $2,790 per 40ft box. In the same way, rates on New York to Rotterdam and Rotterdam to New York surged by 1% to $599 and $1,513 per 40ft box respectively. Conversely rates on Los Angeles to Shanghai dropped by 1% to $766 per 40ft box. Drewry anticipates East-West spot rates to increase in the coming weeks, due to the Red Sea/Suez situation.

Route	Route code	21-Dec-23	04-Jan-24	11-Jan-24	Weekly change (%)	Annual change (%)
Composite Index	WCI-COMPOSITE	$1,661	$2,670	$3,072	15% ▲	44% ▲
Shanghai - Rotterdam	WCI-SHA-RTM	$1,667	$3,577	$4,406	23% ▲	133% ▲
Rotterdam - Shanghai	WCI-RTM-SHA	$466	$546	$652	19% ▲	-17% ▼
Shanghai - Genoa	WCI-SHA-GOA	$1,956	$4,178	$5,213	25% ▲	85% ▲
Shanghai - Los Angeles	WCI-SHA-LAX	$2,100	$2,726	$2,790	2% ▲	33% ▲
Los Angeles - Shanghai	WCI-LAX-SHA	$774	$776	$766	-1% ▼	-33% ▼
Shanghai - New York	WCI-SHA-NYC	$3,074	$3,858	$4,170	8% ▲	15% ▲
New York - Rotterdam	WCI-NYC-RTM	$592	$593	$599	1% ▲	-52% ▼
Rotterdam - New York	WCI-RTM-NYC	$1,480	$1,503	$1,513	1% ▲	-76% ▼

Markets Business Insider – Brent Oil

The current price of Brent crude oil is approximately $78.64 per barrel, having experienced a slight increase. The oil market has fluctuated due to various geopolitical and supply-demand factors. In recent developments, concerns over potential supply disruptions have led to a rise in oil prices, influenced by events such as strikes on Houthi targets in Yemen by the US and UK, which heightened tensions and raised concerns over oil supply stability from the region.

For supply chain managers, the current state of oil prices implies several considerations:

1. **Cost Management and Forecasting:** With Brent crude oil prices exhibiting volatility, businesses should incorporate flexible cost structures to accommodate the fluctuating fuel costs, which can impact transport and manufacturing expenses.

2. **Geopolitical Risk Planning:** Given the sensitivity of oil prices to geopolitical events, CEOs and CFOs should have contingency plans to address sudden spikes in energy prices that can affect overall operational costs.

3. **Logistic Strategies:** For logistics managers, it's vital to stay abreast of current oil price trends, as transport costs may vary significantly with changes in fuel prices, affecting shipping rates and lead times.

4. **Long-term Strategy Adjustments:** The trend of the oil market necessitates a review of long-term strategies, including the diversification of energy sources, investment in energy-efficient processes, and possibly renegotiating terms with logistics service providers.

5. **Inflationary Pressure Considerations:** As oil prices are a significant driver of inflation, financial leaders must prepare for potential impacts on purchasing power and the cost of goods sold, which can affect pricing strategies and profit margins.

The recent data from the U.S. Energy Information Administration noted that Brent crude oil averaged $83 per barrel in 2023, which was lower than the previous year. These dynamics can offset impacts from supply curbs, like those from OPEC+, and reflect adjustments to global trade dynamics, including shifts in oil trade routes due to geopolitical factors.

In summary, businesses should monitor oil price movements closely, as they have far-reaching implications for supply chain costs and operational stability. Strategic planning and risk management are crucial in navigating the uncertainties presented by volatile energy markets. It's advisable to consult various sources like Commodity.com, Investing.com, and the Financial Times for real-time updates and in-depth analysis of the oil market trends.

Source: https://markets.businessinsider.com/commodities/oil-price?op=1

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Self-Ranking - Pick one of the four questions below and fill in your comments relating to the current month's newsletter in the space provided.

1. Don't you think this applies to your business or enterprise? (Write three to four reasons why it might not.)
2. A new idea and strategy; we need to work toward it. (Brainstorm the first steps.)
3. We can do better. We just need to modify our strategy, and now we are moving in the right direction. (What are the next steps to ensure success?)
4. Our team gets the time to keep their minds fresh, and we plan to live our dreams. (Comment on how you're ready.)

- ____.
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