Supply Chain Outlook 2025

MAY - ISSUE 42



Sector Philipping to

ECONOMY

FED HOLDS RATES; JOB MARKET STEADY
JAPAN STABILIZES AFTER DEFLATION PERIOD

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Pricing Trends Key



Economic Outlook

United States - The United States economy remains fragile as tariffs challenge potential growth. Recent data shows decreasing business activity at the start of the second quarter. The short-term economic effects of the tariffs, specifically, supply chain disruptions, export cuts, and weakening demand, are reasoned by the Federal Reserve as **transitory costs in making the US** economy more self-sufficient.

Uncertainty continues to drive inflation during a period of stagnating growth. Prices rose sharply in April, while slowing consumer spending increases the risk of margin compression without rising demand. Government spending also declined with reduced federal outlays. Energy and material imports remain strained by the China trade war and falling oil prices. The latest PMI data shows a slowdown in business activity but a slight uptick in manufacturing and services. The Federal Reserve is holding rates steady, with only two cuts expected in 2025, dependent on economic stability. The job market remains steady but may face pressure from new immigration policies.

China

Collective data from the first quarter shows growth rates above the projected range for China's economy. Most of the growth can be attributed to mass export efforts from China before the tariff implementation. **Global demand for Chinese imports has** dramatically declined due to the tariffs, causing China to redirect economic efforts inward. Prior to the tariffs, China was experiencing weak demand and overstocking from mass manufacturing. Prices have lowered to encourage spending, but economic uncertainty will impede consumer confidence. Deflation prolongs possible economic growth, leaving the Bank of China responsible for necessary policy changes. The BOC has introduced recovery strategies but struggles with implementation, despite the crucial need for support. The job market

is facing setbacks as wage growth increases, employment plans narrow, and salaries are cut. Industrial productivity is increasing further with spikes in technology and automobiles.

Market movement YTD as of 5/21/25: • DJIA: -1.61%

• S&P 500:: - 0.63%

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• NASDAQ: - 2.27%

Eurozone

Economic growth in the Eurozone is

stagnating and projected to shift only slightly as tariffs are expected to rise to at least 15% this year. In April, headline and core inflation fell, bringing the rate below the European Central Bank's 2% target. The drop is likely due to weakening exports, low-cost Chinese imports, and a stronger euro. Current data suggests the ECB may cut rates at least twice this year, depending on inflation trends. Energy prices have dropped, while food prices are rising and may climb further due to extreme weather. Service inflation is at a record low as goods inflation stabilizes. In the short term, the Eurozone is prioritizing infrastructure and defense spending to stimulate growth amid weak consumer and business confidence. Long-term goals focus on building resilience and competitiveness within the EU's common market.

Japan

Economic growth in Japan depends on the Bank of Japan's ability to balance domestic pressures and global trade war effects. Early in the year, Japan boosted imports to gain trade momentum ahead of proposed tariffs. Strong late-2024 growth and rising inflation suggest the economy is stabilizing after a prolonged deflationary period. Inflation is driven by surging food and energy prices and increased tourism, though rising costs are limiting spending in other sectors. Japan's trade union has secured wage increases and faster raises for minimum wage jobs to support financial security. The rising yen is easing inflation by pressuring commodity prices. The BOJ is expected to raise interest rates cautiously to support growth while avoiding a return to deflation.

CURRENT EVENTS

- STEEL, CHEMICALS HIT HARD BY TARIFFS
- VITAMIN IMPORTS EXEMPT FROM TARIFFS (FOR NOW)

May 2025 Tariff Update:

• During the recent US-China meeting, a temporary trade agreement was reached to ease tariff war damages. The US agreed to lower tariffs from 145% to 30%, and China from 125% to 10% - a 115% reduction from each side for 90 days. Both parties emphasized the importance of a fair, mutually beneficial trade relationship. Retaliatory tariffs are suspended, and the US does not plan to reinstate the 145% rate after the pause. However, the 20% tariff on fentanyl will stay to pressure Beijing over the opioid crisis, as will the 25% tariff on steel, aluminum, and cars. The compromise was necessary as US businesses struggled and China's exports declined. Neither country seeks further conflict, making this tariff reduction vital for growth ahead of the holiday season.

Resources Affected by the Tariffs:

 After months of newly imposed tariffs, several industries are struggling with the impact. Products most at risk include aluminum, steel, graphite, various chemicals, minerals, natural resources, technology, and machinery. Monoethylene glycol and ethanol - key chemicals for multiple industries - are facing major setbacks. Some goods will be exempt or see lowered tariffs to support American industries and ensure critical supplies, including automobiles, essential machinery, and pharmaceuticals. Countries with major exports to the US, like China, India, and the EU, have enacted reciprocal tariffs on electronics, technology, machinery, and energy products.

Japan's Rice Crisis:

- Japan is experiencing a growing problem in generating rice, the primary driver of its export market. The agricultural land for rice was greatly affected by excessive heat in 2023 and is still struggling to meet growing demand for the crop. Japan's tourism rates are also rising, which furthers rice consumption as a primary element of the culture.
- Japan is turning to large volume imports to avoid putting pressure on struggling producers and further raising consumer prices. In February of this year, the import rate surpassed the total import volume of 2023 for rice. The government has not made official plans to help navigate the agriculture industry through the shortage.

Russia's Slowing Economy:

- After years of militarizing Russia's economy, data shows significantly slower growth for 2025. Mass investments in the war on Ukraine, supply chain disruptions, and inflation have all contributed to Russia's gradual economic deceleration.
- As inflation is still rising, Putin is being urged to invest in more productive outlets for Russia's economy. America's trade war has also contributed to new setbacks for Russia, especially in its oil and petroleum industries. Labor shortages, wage growth, and price spikes all add to Russia's standstill economy.

Vitamins:

- The information on the U.S. trade and tariff policies for 2025 are ever evolving. The impact of these are **starting to be seen in the cost of raw materials.**
- At the beginning of this year, a 20% tariff was placed on all goods imported from China. On April 9, 2025, the Trump administration announced a reciprocal tariff to be added. Luckily, most vitamins and minerals are currently exempt from the reciprocal tariffs being implemented on Chinese imports.
- Because of the unknowns regarding these new tariff changes, what is being seen is that the quantity of inbound containers to the U.S. has declined thereby creating a decline in the freight costs. This is good news for transportation costs!
- What we see is a stabilizing of costs of the raw materials, but the added tariffs associated with the imports.

Tariffs, tensions, and **trade realignments**



FAT SOLUBLE VITAMIN K • VITAMIN K • VITAMIN B • VITAMIN C

Vitamin A: Vitamin A pricing has stabilized. Market demands have been weak.

Vitamin D: Vitamin D has stabilized, but prices remain high. There have been indications that prices may strengthen even more in the coming months.

Vitamin E: Pricing for Vitamin E has stabilized but remains high.

Vitamin K: Current pricing for vitamin K1 has stabilized.



Pricing Trends Key
Price Increase 껜
Price Increase Due to Current Events
Price Stable 🕖
Price Decrease 🕖
Price Stable 🕖

Tariffs imposed in early 2025 **pushed up prices on raw materials,** with further increases likely as trade tensions continue.



WATER SOLUBLE VITAMINS: • VITAMINK • VITAMINB • VITAMINC

Vitamin C: With the

coming extended summer maintenance shutdowns, more to be seen as to how this will affect the pricing in the market.

Vitamin B1 (Thiamine):

Pricing has been stable lately.

Vitamin B2 (Riboflavin):

Riboflavin USP and food grade pricing have stabilized. Supplies are adequate. Several new entrants have begun manufacturing and potential capacity increases can be expected by the majors.

Vitamin B3 (Niacin/

Niacinamide): Niacin/ Niacinamide pricing is currently stable.

Vitamin B5 (Calcium

Pantothenate): B5 pricing has stabilized but remains low. There have been new producers entering the market, creating an oversupply of material.

Vitamin B6 (Pyridoxine):

B6 pricing has stabilized but remains on the high end.

Vitamin B7 (Biotin):

Production of B7 has stabilized and pricing has followed. Because pricing is on the lower level, there may be some increase in pricing coming.

Vitamin B9 (Folic Acid):

Pricing of B9 has stabilized from the recent increase that it just had.

Vitamin B12 (Cyanocobalamin)

The B12 market price has stabilized. There is an ample supply of inventory which should keep pricing stable. Pricing Trends KeyPrice Increase Image: Image



MINERALS

CERTAIN MINERALS SHOW RISING COSTS
 STABLE PRICING, BUT SLOWER AVAILABILITY

Trending Minerals

- Chelates
- Zinc Gluconate
- Magnesium Citrate
- Zinc Citrate

Calcium Carbonate: Visit the Granulations section on page 10 for more information about our directly compressible version of SuperTab® oyster shell calcium carbonate.

- SuperTab[®] Oyster Shell Granulation (OSG) 2000 AM
- SuperTab[®] Oyster Shell Granulation 2100 Malto
- SuperTab[®] Oyster Shell Granulation 2300 Acacia

Copper: Prices have stabilized but demand remains high.

Iron: Iron prices have stabilized, and supply is available.

Electrolytes

Calcium: Calcium prices have stabilized.

Magnesium:	Magnesium market price and supply
are stable.	

Potassium: Potassium prices and availability are stable.

Phosphorus: Pricing has become relatively stable.

Sodium: Sodium prices have stabilized.

Zinc

Zinc prices and availability have stabilized. There have been new manufacturers that have entered the market which will keep the pricing stable.

Zinc Gluconate: The price of Zinc Gluconate is stable however, lead times are increasing.

Zinc Oxide: Prices for Zinc Oxide had started to see some strengthening but have now stabilized.

Zinc Sulfate: Zinc Sulfate prices remain stable however, lead times are increasing.

Zinc Ascorbate: The price of Zinc Ascorbate is stable; however, lead times are longer than average.

Zinc Citrate: Prices are showing an increase with longer lead times continuing.





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MINERALS

MOST MINERAL PRICES REMAIN STABLE
 HIGH DEMAND AND LEAD TIMES AFFECTING AVAILABILITY

Chelates

Zinc Amino Acid Chelate: Prices and lead times for zinc amino acid are increasing.

Zinc Bisglycinate Chelate: Prices have stabilized. There have been additional manufacturers that have entered the market which should keep pricing from increasing as well.

Zinc Glycinate Chelate: Zinc Glycinate is experiencing longer than average lead times, but prices remain stable.

Copper Glycinate Chelate: Prices are stable and expected to remain so. There have been additional manufacturers that have entered the market which should keep pricing from increasing as well.

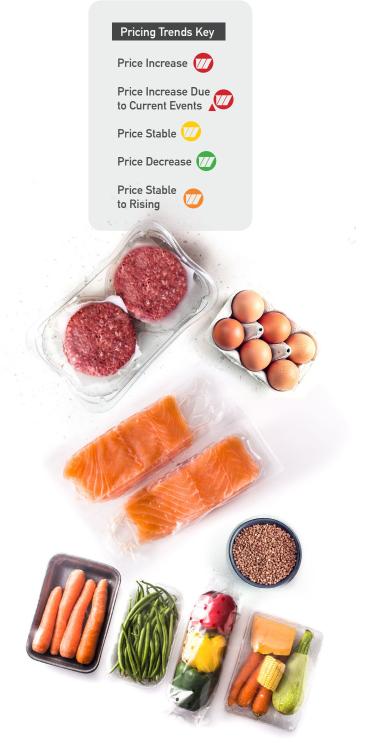
Manganese Amino Acid Chelate: Manganese Amino Acid has stabilized.

Trace Minerals

Chromium: Chromium prices remain stable but can be difficult to source due to long lead times.

Molybdenum: The Molybdenum market is experiencing longer than normal lead times, but prices are remaining stable.

Selenium: The selenium lead times have increased; however, prices are stable.



PREMIXES

MANUFACTURERS ARE SWITCHING TO PREMIXES
 CUSTOM PREMIXES SIMPLIFY NUTRIENT PROCUREMENT

Custom Nutrient Premixes

More and more manufacturers are switching to vitamin and mineral premixes. Premixes consolidate multiple nutrients into a quality-assured, single-step ingredient and deliver economies of scale by simplifying ingredient procurement from a single source.



MUNDER

DRINK MIX Net wt o da dz dz

TWG SuperBlend®

Our value-added SuperBlend® custom nutrient premixes deliver performance and stability in high temperature and shear processes in a variety of food and beverage products, including:

- Extruded bars
- Gummy supplements
- Breakfast cereals
- Ready to drink beverages
- Beverage mixes

MICROENCAPSULATION

- AN EFFECTIVE METHOD OF MASKING UNWANTED FEATURES
- DELIVER A WIDE-RANGE OF FUNCTIONAL INGREDIENTS

Microencapsulation Technology

Vitamins, minerals, and other nutrients possess unique characteristics that can affect the appearance, color, and odor of the final product. Microencapsulation is an effective method of masking unwanted sensory characteristics while maximizing nutrient function.

SuperCoat®, our most recent innovation using our proprietary SMART[™] process, envelops particles at the microscopic level in a protective shell. This value-added coating technology delivers superior performance and stability of essential nutrients for a wide range of multifunctional ingredients.

Trending Microencapsulated Nutrients:

- Vitamin C
- Vitamin B5 (Calcium Pantothenate)
- Vitamin B9 (Folic Acid)

With a diverse portfolio of products, **TWG Health + Nutrition** is one of only a select group of manufacturers with the technology and resources to deliver independent manufacturing of custom premixes, microencapsulated nutrients, and granulations.

Our comprehensive supply chain and extensive list of prequalified ingredients allows us to react quickly to changing market trends and help you keep up with consumer demand. We also understand that superior service is just as important as technology and expertise. That's why we provide you with prompt quotations, technical assistance, and support documentation to help you efficiently deliver your products on time. Contact us today to talk to one of our experts about your project needs or ask about any ingredients not listed here.



GRANULATIONS

- DELIVER ESSENTIAL NUTRIENTS IN GRANULAR POWDERS IDEAL FOR HIGH SPEED TABLETING
- CAN BE INCORPORATED INTO DRUM-TO-HOPPER TABLET BLENDS

Granulations

Rather than outsource granulations from a third-party manufacturer, TWG Health + Nutrition has committed to developing technologies and processes in-house to effectively and efficiently manufacture **SuperTab® direct compressible granulations**.

SuperTab® granulations deliver essential nutrients in uniform, free-flowing, granular powders ideal for high speed tableting processes. As usual TWG Health + Nutrition combines quality, innovation and superior knowledge to make sure your product is the best it can be. Ask about our granulation capabilities today!

Trending Granulations:

- Glucosamine
- Chondroitin
- Vitamin C

Oyster Shell Granulation

SuperTab® Oyster Shell calcium carbonate is sourced from an above sea level deposit, characterized as fossilized oyster shell beds. These oyster shell beds have been thoroughly vetted over the past ten years with testing of the material both analytically and physically to insure consistency and purity. TWG Health + Nutrition sources the high purity genuine shells exclusively from a domestic supplier.

Contact us today to get started on your next dietary supplement product containing calcium carbonate granulations. Insist on SuperTab® Oyster Shell authenticity in your formulation.



Direct Compressible Granulations

POWERED BY PROTEIN, PROVEN BY SCIENCETM

Custom protein formulations

to address your specific functional needs.



WRIGHTPRO® Custom Protein Blends





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