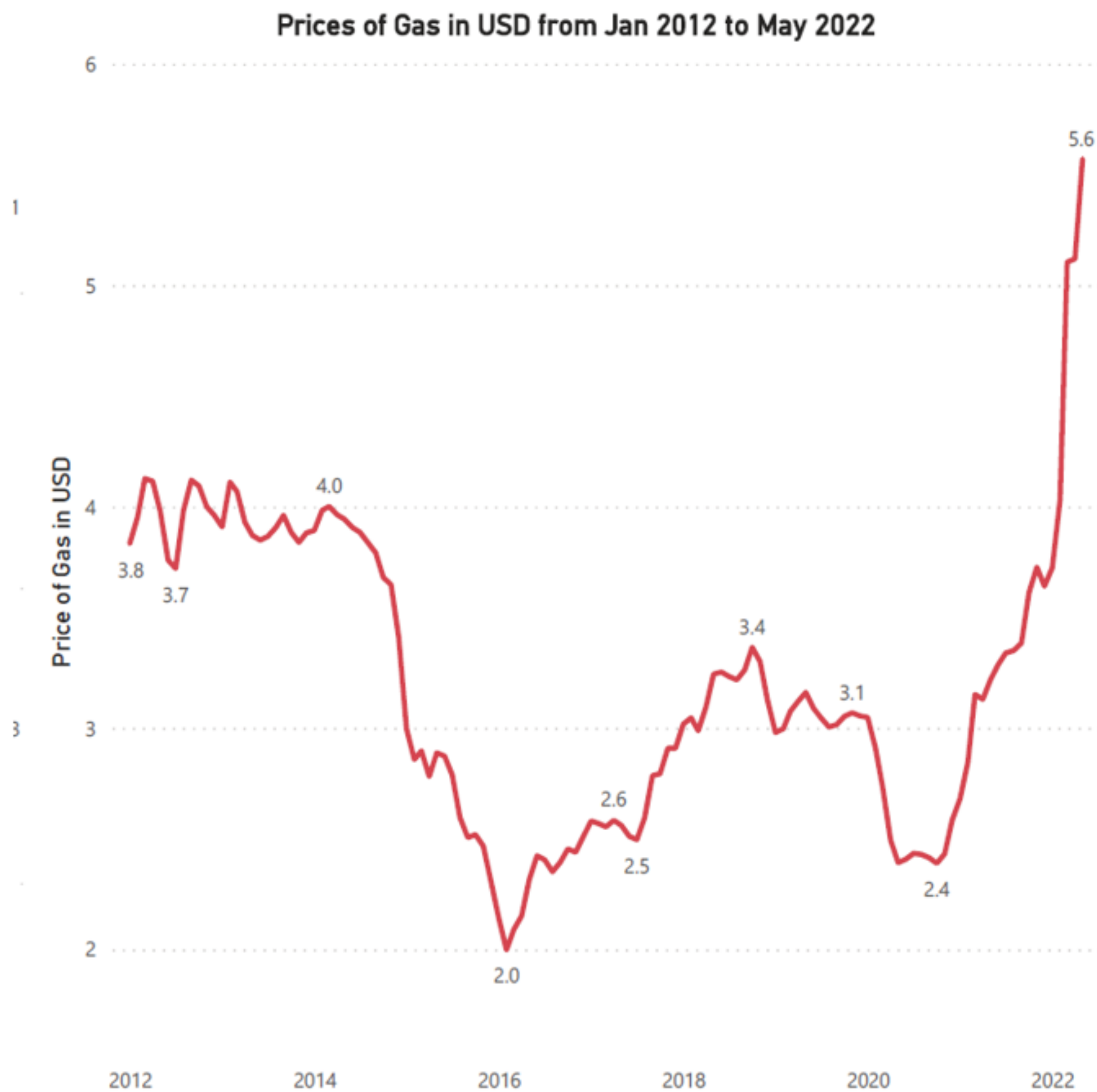
**CUSTOMER-FACING MARKET ANALYSIS**

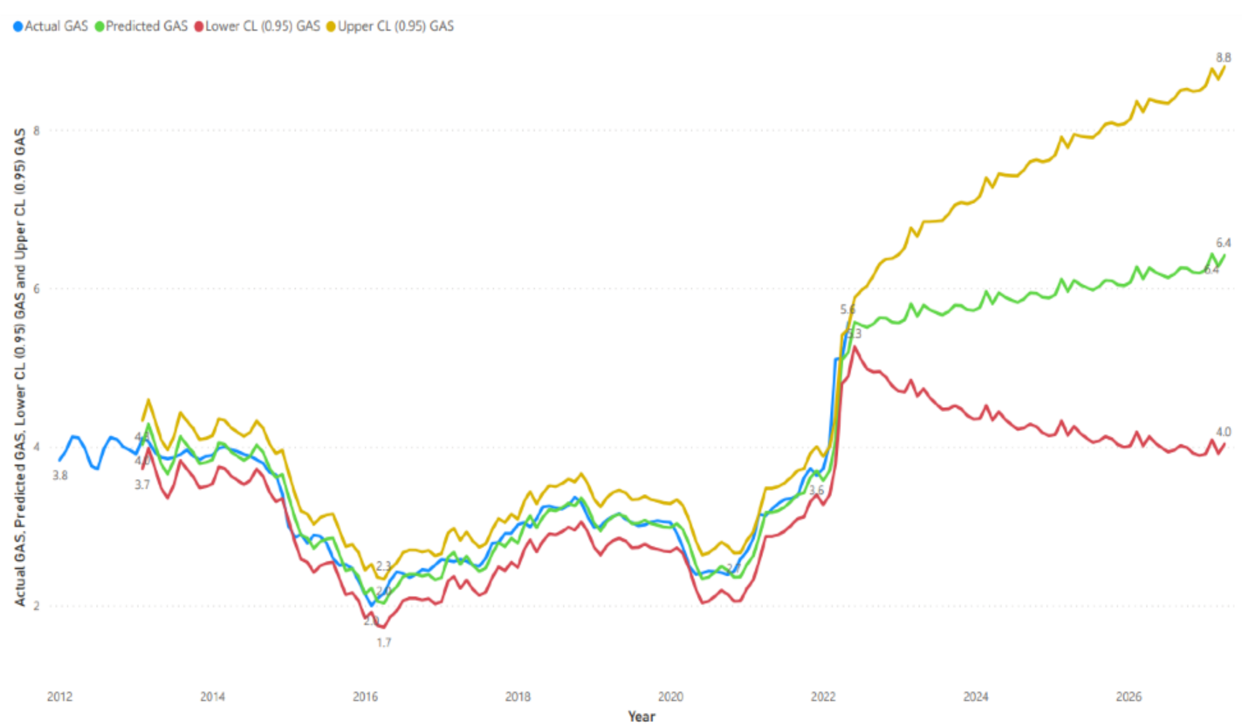
This study was conducted by graduate student Peace Saxone, who is earning her M.S degree in Quantitative Economics from Western Illinois University. It looks at the economic impact of inflation on the ag sector. In reviewing the input actual vs projected, the reader will be able to conceptualize the impact of box ownership verses rental in the current inflationary climate.




Since 2021 gasoline has been steadily rising. With Russia invading Ukraine in 2022 this trend has continued upward. This has contributed to the discussion of high input prices for all agricultural producers. Farmers and businesses must contend with increasing fuel prices, just like the rest of the country. While preparing to plant during one of the most significant crop years in recent memory, growers have been dealing with these price spikes all spring. Fuel prices have fluctuated erratically and abruptly during the previous few years. The various changes in the price happens from season to season and region to region. The cost of fuel is, however, affected by factors such as inflation. The term "inflation" describes the rise in the cost of goods and services. Inflation and rising gas prices are linked since they are directly proportionate. Despite a pause in April, inflation has increased, according to the most current Labor Department numbers. In June 2022, inflation rate was a stunning 9.1 percent, this is more significant than what had been previously predicted by financial analysts. Since December 1981, this represents an enormous 12-month growth. New data from the Bureau of Labor Statistics show that U.S. inflation increased far more than the prior estimate of 8.8 percent, according to @CNBC. The most recent numbers show the inflation rate since November 1981. Experts identify the essential elements for a breakdown of inflation rates. Fuel costs grew by 11.2 percent, electricity by 1.7 percent, and new and used car prices by 1.6 percent. These three variables caused the majority of the rise in inflation. All of this indicates that prices will continue to climb.

Before 2020, when COVID lockdowns severely reduced the demand for fuel, the cost was roughly twice as high as the five-year average. Compared to June 2021, when gas prices were $3.286 per gallon, they increased by $2.314 per gallon, or 74%, to reach $5.6 per gallon in May. Fuel currently costs twice as much as it did before 2020. In the two weeks that followed the Russian invasion of Ukraine, at the end of February 2022, the price of fuel increased. fuel prices were rising before Russia's measures, but they were barely $4 per gallon and had been hovering around $3.60 per gallon as 2021 ended. A gallon of gas currently costs $4.99 on average in the United States, according to AAA, to put those figures into perspective. Additionally, rising prices may intensify worries that a recession is imminent.

**THE OUTLOOK FOR GAS PRICES IN THE NEXT 5 YEARS**

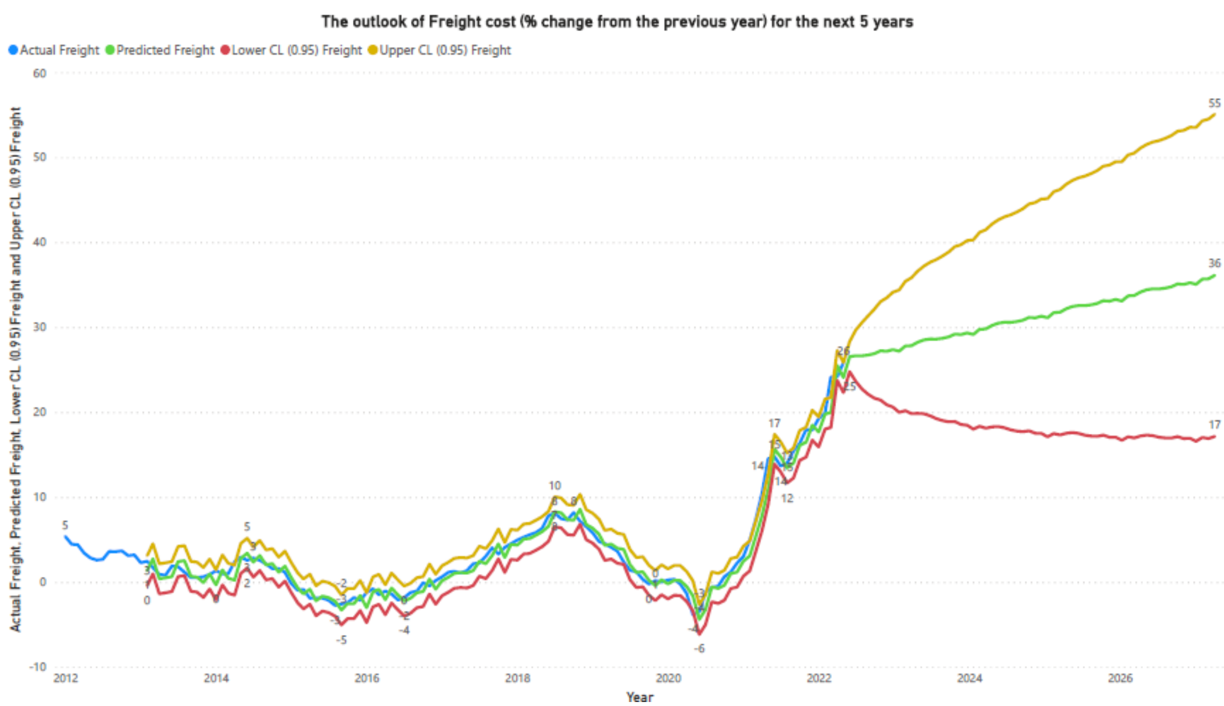



The most significant factor affecting this is fuel costs, making fuel the most important primary energy source globally. Fuel is expected to surpass all other primary energy sources by the year 2034, according to numerous experts. Its demand will reach its peak in 2035, making it the last fossil fuel to do so. However, since it can coexist with the growing use of renewable energy, its demand will undoubtedly continue to rise during the following five years.

For long-term projections on an asset like this, it's essential to consider the market's reaction to these changing models as well as how the world might balance rising demand and supply. There is little doubt that fuel demand will increase, but for the price of fuel to keep growing alongside demand, production and supply of gas must keep pace rather than surpass it.

The market's recent influx of supply from US Shale gas deposits, which has increased supply, can only have a short-term impact on fuel prices by temporarily reducing demand. The outlook for the next five years predicts an increase in fuel prices, however with a 95% lower confidence level that if fuel prices fall, it won't fall below $4.

TRUCKING FREIGHT COST




Operating costs for trucking companies are substantially higher now,

than they were in 2019. The cost per mile for trucks is comparable to July 2021.

The range of average truck prices is $2.30 to $2.86 per mile. These are the most prevalent types of freight trucks' current rates: The fuel cost has been rising rapidly over the past year, and it is a significant factor when determining how to compute transportation costs. Prices have continued to increase in 2022, with significant supply and demand fluctuations. Supply, demand, and the price of the commodities or services sold all impact market price changes. A greater demand will increase price pressure. The increased competition among General Freight Trucking companies will put pressure on prices. The graph shows the

Percentage change of freight cost from previous years and the outlook for the next five years as represented by FRED data.

**DRIVERS SHORTAGE**

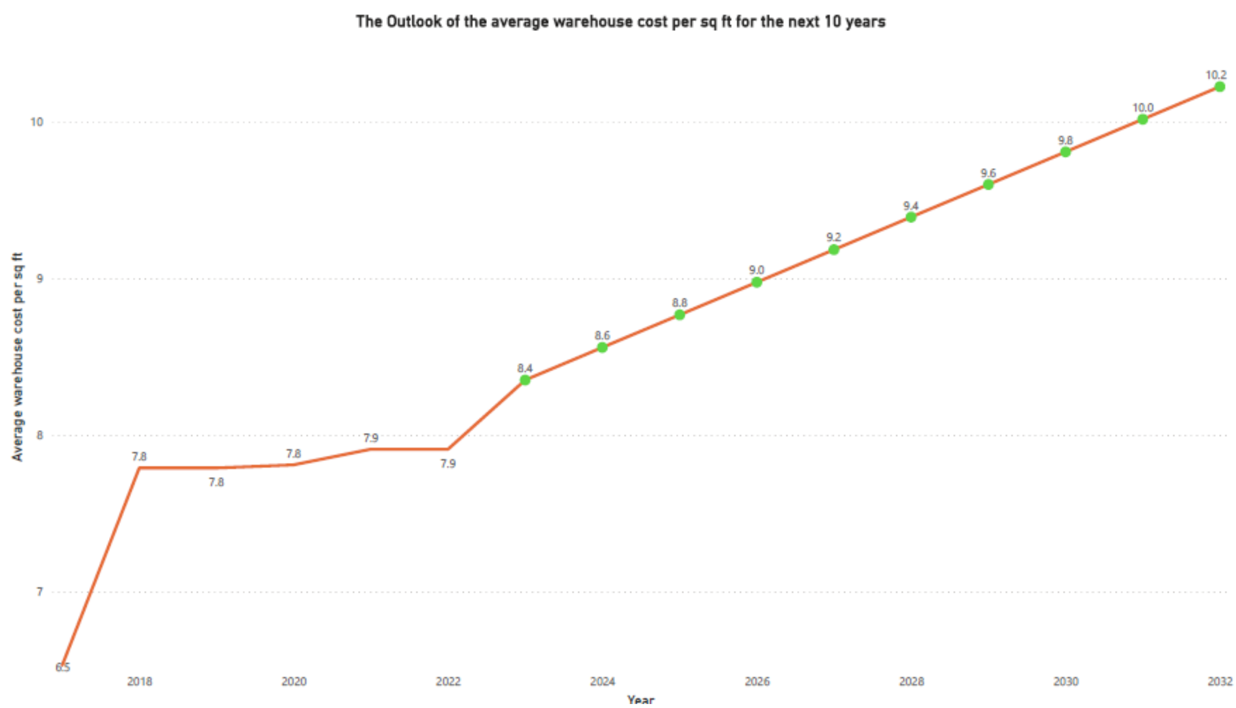
The trucking industry is experiencing a nationwide driver shortage due to some primary factors such as difficulty hiring new drivers. Since individuals under 21 are not allowed to operate interstate trucks, this excludes them from becoming truck drivers. Similarly, finding women willing to work as drivers can often be challenging for trucking companies, barring a separate category of potential employees.

The American Trucking Association predicted that in 2021, there would be a historic shortage of approximately 80,000 truck drivers. This statistic reflects the mismatch between the actual supply of drivers and the ideal supply, given the freight demand level.

The COVID-19 pandemic has harmed various industries, including the trucking sector. After all non-essential freight shipments were halted during the initial lockdown in the spring of 2020, most truckers lost their jobs and began receiving government unemployment checks. However, as restrictions were gradually loosened nationally and businesses began to reopen, the backlog of consumer orders placed during the lockdown led to a considerable rise in the number of shipments needed. Demand for truck drivers rose dramatically, but there wasn't enough supply. Mission Financial Services reported that many drivers were receiving unemployment benefits practically to the same extent as they would have in the early months of the pandemic. This discouraged a lot of drivers from returning to work, which is another reason for the current driver shortage and the sharp rise in freight prices. The lack of truck drivers is a serious problem in the trucking business and has been made worse by several factors.

According to the ATA, over the next ten years, the industry will need to hire nearly 1,000,000 new drivers to replace those retiring, leaving the field voluntarily or involuntarily (due to lifestyle changes, for example), as well as additional drivers required for industry expansion. If things continue, the shortage may reach 160,000 by 2030. This prediction was made based on demographic trends for drivers' gender and age as well as projected freight increases.

## WAREHOUSE COST




Every business owner needs warehouses and storage facilities for an effective and seamless inventory setup. A warehouse is a location used to gather or store finished items, raw materials, semi-finished products, etc. The products must be kept in storage to make them available to end-users as needed. Every step in the value chain of any product requires the storage of a specific quantity of products. Storage guarantees that a business will continue to produce in anticipation of future demand.

In the United States, running a warehouse is getting more expensive; in 2021, the cost per square foot was 7.91 US dollars. This marked an increase of 5.6% over the typical cost from the previous year.

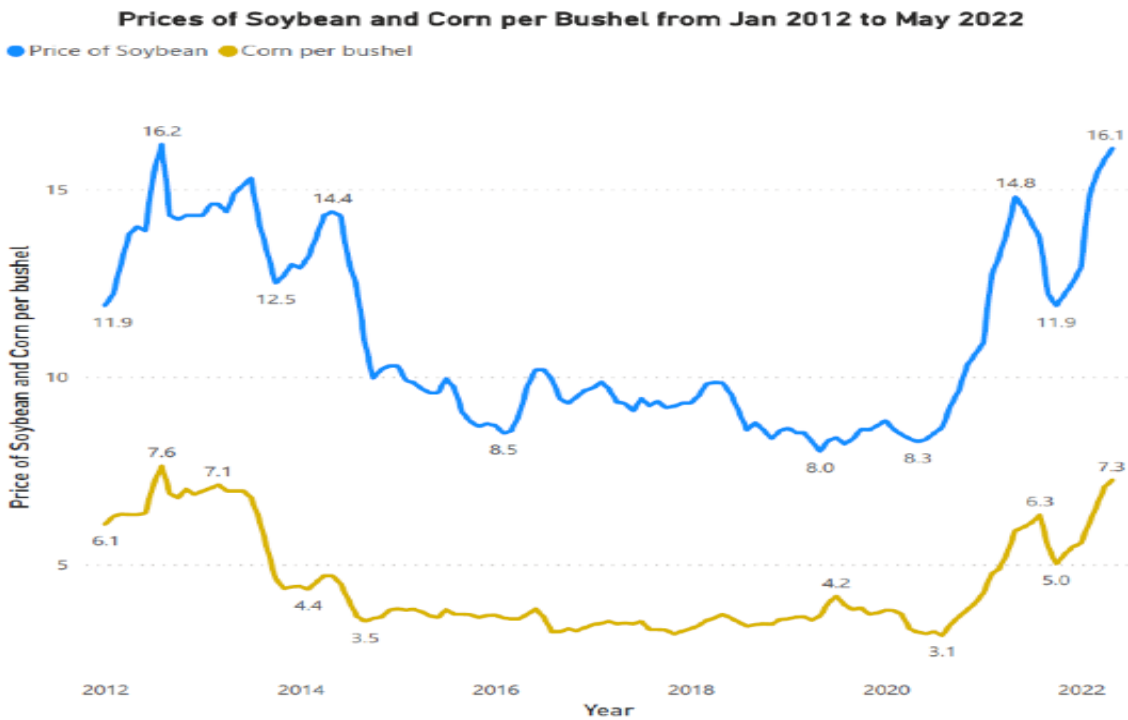
## COST OF CAPITAL TO PURCHASE BOXES, Rising Interest Rates

To be a successful business owner or investor, you must pay attention to interest rates. The current situation of the economy and how it may impact future returns must be considered by business owners.

Unfortunately, because of the market's unpredictable character, which includes supply chain issues, growing inflation that may not be temporary, and labor shortages, among other challenges, it can be difficult for businesses to identify what steps to take to control what might happen next.

The Federal Reserve predicts that short-term interest rates will increase all through 2022. These rate increases are consistent with sustained economic growth, which is also brought on by inventory shortages caused by supply shortages. Another goal is to reduce inflation, which is still one of the Fed's primary objectives in light of the recent price surge. Due to increasing interest rates, consumers will be less likely to take out loans, eventually slowing the economy and lowering inflation. Business owners must plan for an increase in interest rates when making investment decisions for purchasing seed boxes to be ready for these ongoing adjustments until the economy stabilizes.

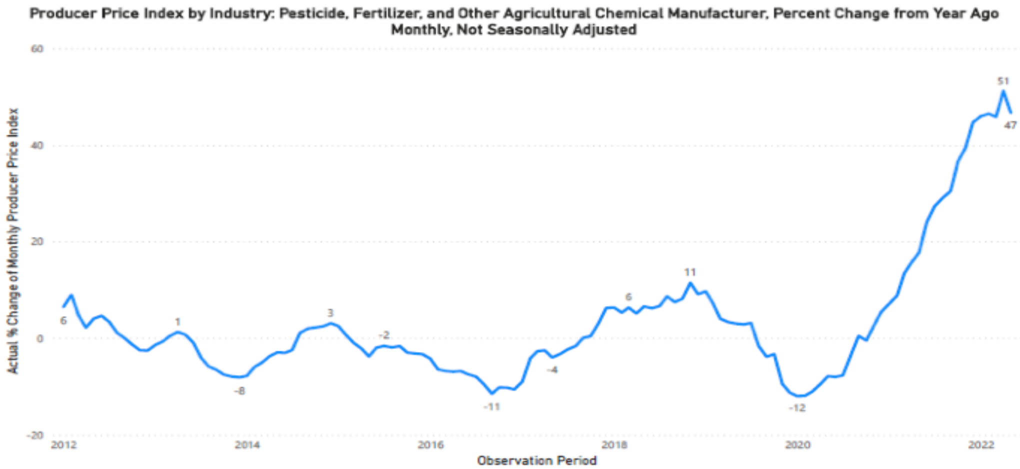
**COMMODITY PRICING (CORN, SOYBEAN)**




Concerns regarding inflation's impact on corn and soybean prices have been raised recently, as prices have risen and are projected to keep rising over the years. Due to COVID, consumer spending fell, but savings increased. When economic activity resumed, pent-up demand led to rising spending, The pandemic hampered the flow of supplies, and the government's adoption of stimulus packages which had a significant economic impact and directly benefited consumers, raised consumers' spending power and demand, leading to price increases. Also, prices have increased due to the enormous global demand for food. Changes are to blame for increased prices, shortages, and a general failure to meet customer demand. These commodities prices are influenced by the ethanol market, crude oil prices, the US dollar, and weather.

Cost increases are mostly brought on by high commodity prices, inflationary pressures, and supply disruptions. By far the biggest increase in spending will be on fertilizer

**EFFECTS AND CONSEQUENCES OF PRICE INCREASES ON THE FERTILIZER MARKET**




Fertilizer prices worldwide are almost at record highs and are projected to remain high through 2022. Nearly one-fifth of farm cash costs in the United States is accounted for by fertilizer costs, with corn farmers bearing the brunt of this burden. To produce corn, a farmer must spend 36% of his operational budget on fertilizer. These elevated prices may impact agricultural production in 2022 and 2023. The already limited fertilizer supply has been made worse by the Russian invasion of Ukraine, resulting in import-export restrictions that will increase shortage fears.

Although the United States produces a lot of nitrogen and phosphorus, it imports a lot of fertilizers with potassium as the main component. Although the price of fertilizer started to rise in 2021, many American farmers could avoid the subsequent spike in fertilizer prices brought on by Russia's invasion of Ukraine since fertilizers for 2022 plantings were purchased in 2021. The influence of fertilizer prices, however, might significantly impact 2023 agricultural production decisions locally and internationally if the Russia-Ukraine conflict continues.

**Supply Outlook for Fertilizers**

The primary industrial method for creating ammonia, the Haber-Bosch process, combines hydrogen and nitrogen from the air at incredibly high pressures and temperatures to produce ammonia. The Haber-Bosch method, which uses nitrogen from the air as its main ingredient, is used to create nitrogen fertilizers. Natural gas is essential to the process. Many countries lack the resources necessary to engage in such substantial production due to the cost and availability of natural gas.

Potassium and phosphorus are mined minerals; many nations lack such reserves. More than one-third of the world's phosphorus is produced by China, followed by the United States, India, Morocco, and Russia. Together, these five nations make more than three-quarters of the world's phosphorus supply.

The highest concentration of output is potassium. Only three nations provide two-thirds of the world's potassium reserves: Canada, Russia, and Belarus. A third of the world's potassium supply is generated by Canada, with the other third coming from a combination of Russia and Belarus. Because these three macro-fertilizers are used in crop production in some combination, practically every nation depends on importing fertilizer from the few countries that have access to it.

Fertilizer use is determined by the kind of soil and the crop being grown, even though fertilizer manufacturing is highly concentrated. The usage of fertilizer is therefore widespread throughout the world. Most of the fertilizer used in the United States is used to produce grains and oilseeds, making up around 10% of the world's total usage.

## To RENT or To BUY?

**Freight and Material Cost**

The cost of freight and raw materials has increased significantly over the past few years, and statistical analysis indicates that this trend will likely continue. Inflation and global economic pressures are keeping commodity prices high.

**Advantages of buying**

Suppose you have a small fleet, and those boxes stay local to your operation. In that case, ownership can be beneficial i.e., If you have a situation where your Seed boxes are returned to the exact location where they will be filled with seeds and do not need to ship them often, then ownership is more advantageous.

**Advantages of Renting**

Suppose you are shipping your boxes to conditioners or treatment facilities, trying to stage them throughout your market, and needing to buy more to satisfy customer demand. In that case, renting may be advantageous. Seedbox Solution has a large pool of rental boxes throughout the Midwest so that you can ship from closer proximity to that customer or representative, and for full truckloads of rental boxes Seedbox Solution covers the freight cost. As freight and resin prices rose dramatically this past year, the cost of the rental remained the same. The rental program insulates our customers from the negative effects of rising material costs and inflation.

- **Capital Preservation**

The main objective of the conservative investment approach known as "preservation of capital" is to protect investment capital and avoid portfolio losses during periods of inflation. Investment in the most secure short-term is required by this method. Thus, instead of keeping money locked up in seed boxes that may or may not be used, it can be utilized in times of inflation for activities that generate greater income. Suppose customer A purchased a million dollar in seed boxes and 2000 boxes cost a million dollars in capital.

Let's say that customer A.) purchased 2000 boxes with a capital cost of $1,000,000 on seed boxes. Customer A would have saved $751,000 dollars if they had rented the seed boxes, which could have been invested in equipment or grain/seed storage to generate returns for the business.

**Advantages of the Gen250**

Whether purchasing and owning your own fleet or utilizing the rental program, the Gen250 is the best option for your packaging needs. Sixty -six Gen250s can be shipped in a standard swing door trailer, 50% more than the competition. This creates direct and measurable savings to the bottom line by reducing freight spend. The Gen250 is capable of holding the same number of seed as the old style of box and has made improvements to the slide gate and corner hit plates along with many other updates. All while reducing the nested height of the box and not changing the footprint.

**Warehouse Cost**

In the United States, the cost of running a warehouse is increasing as a result, this is a crucial consideration when selecting whether to buy or rent.

Business owners need to consider the following when determining which choice is best for their company:

- Do you possess the resources necessary to invest in warehousing?
- Will the location meet your company's long-term needs?
- Are you considering growth?
- Will your company have more money to reinvest in the business due to lower upfront cost?

**Advantages of Buying**

Warehouse owners and companies that are not actively growing their box sales may not benefit from the rental programs offering warehousing as part of the program. If you have no need for additional warehousing space and have stable rental rates or own your own warehousing, you may not have been affected by the massive shift in commercial real estate.

**Advantages of Renting**

**1. Storage Is Not Required**:

Renting Seed boxes from Seedbox Solution significantly lowers operating costs by including the cost of warehousing and servicing in the rental price. The customer no longer needs to be concerned about how their incremental boxes will be stored or how they will be serviced and readied for the next season. After renting, customers can return boxes to approved return locations and then it’s on the Seedbox team to get them processed and stored for next year.

**2. Zero Maintenance Cost**

With the persistent increase in the prices of goods and services in the United States i.e., inflation, Seedbox Solution rental program can help you save on the costs listed below.

- Purchasing equipment and materials for maintenance. When seed boxes are not in use, it results in lost time, reducing business productivity. Our seed box rental program eliminates the possibility of production delays brought on by maintenance requirements.
- Washing, replacing service parts, and repairing the seed boxes.
- financing urgent fixes for unforeseen equipment failures
- finding, acquiring, and stacking inventories of critical parts
- minimizing labor costs for technicians
- Keeping track of equipment records, such as service times, wear and tear, and part replacements.

**ACCESS THE NEWEST TECHNOLOGY**

Renting equipment from Seedbox Solution gives you access to the newest products with the most recent technology, like our latest product the GEN250, with minimal capital investment. The past ten years has seen considerable advancement in farm equipment technology, which has allowed farmers and seed companies to manage their projects and increase profitability. The most recent technology makes jobs simpler, safer, and faster. Whether you buy or rent, Seedbox Solution provides the latest technology, with your bottom line in mind.

## EXECUTIVE SUMMARY

In the past few years, the cost of gas, freight, warehouse space, interest rates, agriculture products, and fertilizers has soared significantly in the United States, and statistical study shows that this trend will likely continue.


*- Refer to the preceding study chart for clarity.*

# To RENT or To BUY?

**Rental is recommended if**

- Your goal is to maximize return on investment while managing your capital.
- If the number of boxes in your fleet has increased to the point that you don't have the time or resources to maintain and clean them.
- If you are transporting your boxes long distances where the cost of freight is becoming more expensive.
- If you would like to have access to the newest products with the most recent technology, like our latest product the GEN250, with minimal capital investment.

**Buying is recommended if**

- If you have a small fleet, and those boxes stay local to your operation, and you do not anticipate any more box expansion.
- If you have no need for additional warehousing space or own your own warehousing