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## Pork Producer Optimism Dampened by Triple Threats

### *Key Points:*

- Across the board in animal protein, producers have been dealing with input inflation. Pork producers in particular have been struggling, as hog values languished through mid-year and have not kept pace with costs.
- In what is expected to be a short-term boost to pork values and hog prices, buyers scrambled to gain pork inventory ahead of new mandates from California Proposition 12. The U.S. Supreme Court ruled on May 11 to uphold Prop 12, which bans the sale of pork in California from farms using gestation crates.
- Although hog prices were under severe pressure to start 2023, retail price points have been slow to respond, limiting consumption growth.
- One-quarter of U.S. pork is exported. China's sharp drop in import demand has unsettled the U.S. industry but a bright spot is Mexico, which is boosting imports to keep up with growing per-capita consumption.
- In the long run, low hog values, high costs, and tepid demand have dissuaded producer expansion, which is stunting U.S. pork production.



## Introduction

In 1987, the National Pork Board launched its well-known ad slogan, “Pork: The Other White Meat,” in an attempt to align its products closer to chicken and turkey amid the low-fat craze of the era. The campaign appeared to work initially, boosting per-capita pork consumption from 49 lbs. in 1987 to 52 lbs. in both 1988 and 1989. Unfortunately, U.S. pork consumption since then has remained essentially flat, averaging 50 lbs. over the past decade. In the meantime, chicken consumption nearly doubled from 57 lbs. in 1987 to 102 lbs. in 2022.

Despite a recent seasonal boost, the outlook for pork leaves much to be desired. This year, pork producers and consumers alike are facing more than their usual share of adversity:

- 1) **Operating costs have skyrocketed.** Everything from feed to construction to labor are all longer-term hurdles with no end in sight. While rising operating costs have hit all animal protein producers, additional factors (addressed below) are compounding pork producers’ challenges.
- 2) **Retail pork prices have remained persistently high** through the first half of the year, despite the wholesale cutout value being 35% lower than last summer’s highs. And while chicken’s incredible growth rate has also cut into beef’s volume share on the dinner plate, the price of beef continues to escalate. In fact, the wholesale cutout price spread between beef and pork climbed to \$2.30/lb. ahead of July 4th promotions, which was record high for the period.
- 3) **Export demand has tumbled since 2020 when U.S. pork exports peaked at 7.28 billion pounds.** In 2022, volume was 13% lower and unit price remains stagnant at \$1.24/lb. Although Mexico has stepped in as a bigger destination for U.S. pork as of late, the global macroeconomic outlook continues to deteriorate, most notably in China, the world’s largest pork importer.

But all may not be lost. USDA’s latest *Hogs and Pigs* report suggested the total hog inventory is about even with where it was a year earlier and supply stabilization could be a good thing. If retail prices begin to return to a normal level it should help demand recover in the long term. Additionally, popularity of backyard barbecuing has encouraged disappearance of some of the cuts of pork like loins that have historically struggled, and other overlooked categories like pizza toppings are helping disappearance in an otherwise difficult situation.

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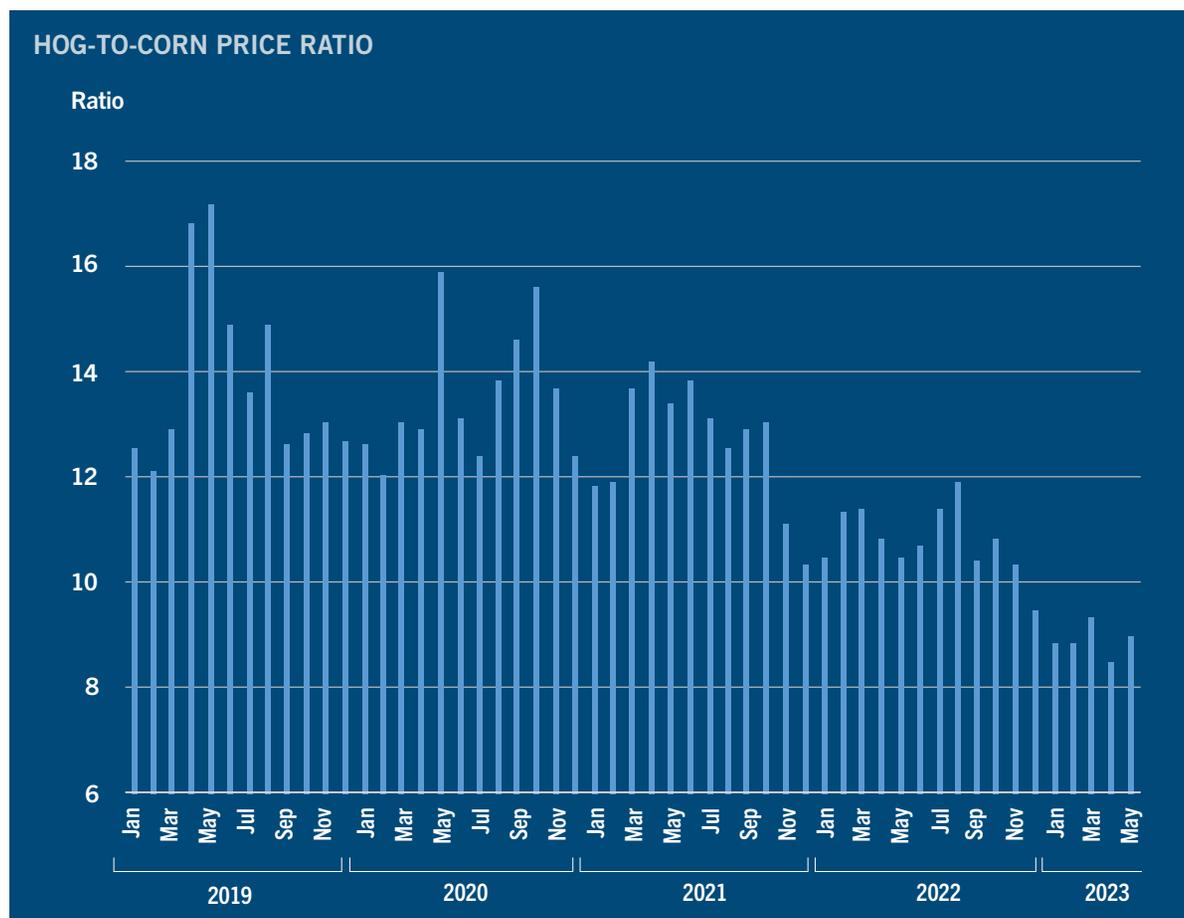
## Operating Costs

### Climbing feed costs outpace hog prices

Feed costs, a major component of hog production, have been higher in recent years – which would be fine if hog prices kept up with those higher costs. Unfortunately, even with the run-up in hog values in summer 2023, the hog-to-corn price ratio, or the number of bushels of corn equal to the hundredweight price of live hogs, remains historically low.

Year-over-year during 2022, feed costs alone were up 19% but hog values were up just 14% and came under pressure during the first six months of 2023. Over the long run, the disparity between hog prices and feed costs is even larger. During the 12 months ended June 2023, live basis negotiated purchases of barrows and gilts averaged \$67/cwt., up 45% from the average from 2016-2020. Comparatively, corn and soybean prices were up 78%.

An outlook for elevated corn and soybean prices would diminish hog producers' appetite to expand barn capacity even if conditions otherwise were ideal. But other costs have been rising too. ■



Source: USDA-ERS

\*Hog/corn ratio is the number of bushels of corn equal in value to 100 pounds of all hogs, live weight. The lower the ratio, the higher the cost to produce a hog.

## Operating Costs

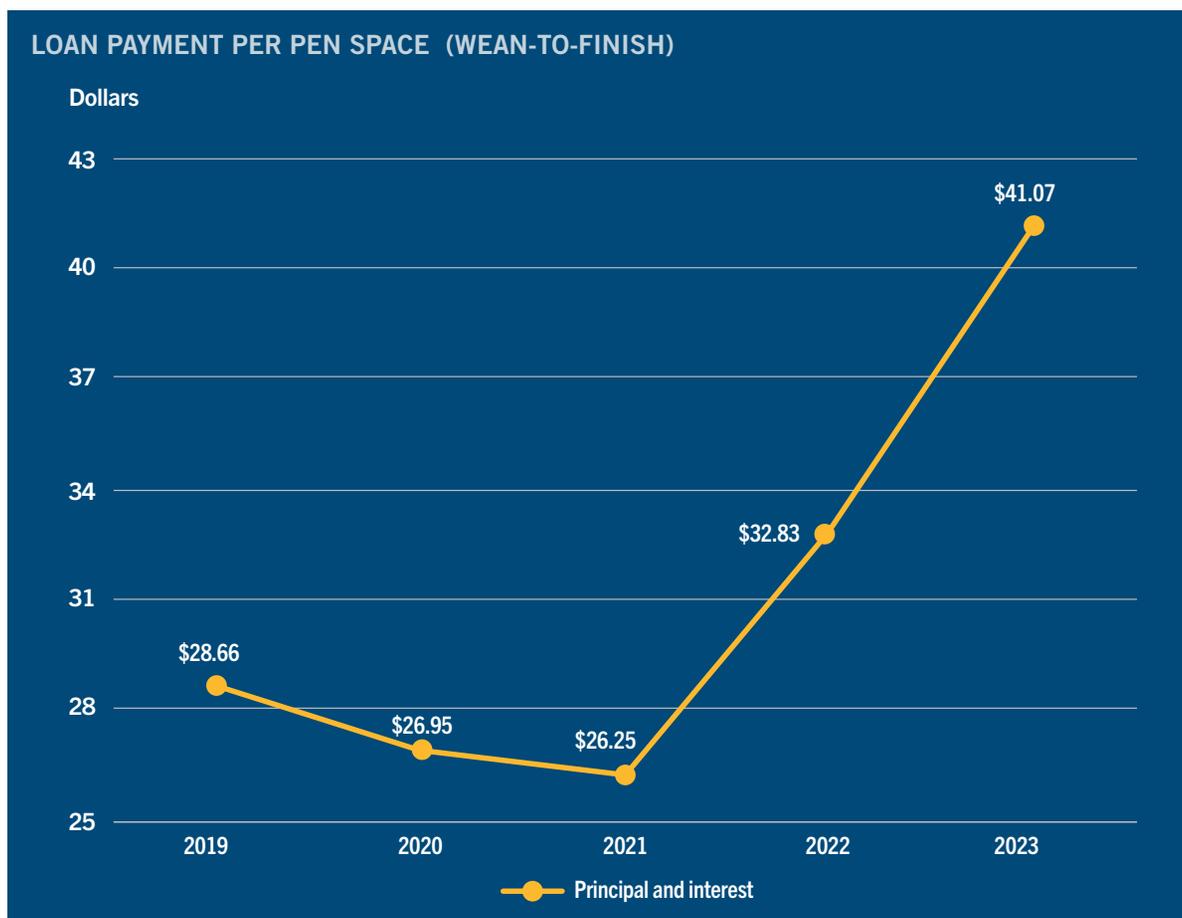
### Skyrocketing construction and interest rates nearly double borrowing costs

For producers who are contemplating whether to replace aging swing housing or add new infrastructure, capital costs are front of mind. These non-feed costs have risen exponentially in recent years.

Operating interest, variable costs and fixed costs were up 17.5% YoY during 2022, which is stifling capital investment and expansion as well. A recent study by National Hog Farmer magazine and Compeer Financial found that the per-head construction and interest expense for building a new wean-to-finish facility has risen by over 50% in the past two years.<sup>1</sup>

In addition to higher fixed capital costs, weekly median wages for farm workers hit a record high of \$915 in April, up 24% from the year earlier.

While these costs are rising, it is worth noting that the rapid increase in fertilizer prices from 2021 to 2022 was a positive for hog production. However, with the mean-reversion in fertilizer markets, gains in manure by-product values have declined. ■



Source: National Hog Farmer, Compeer Financial

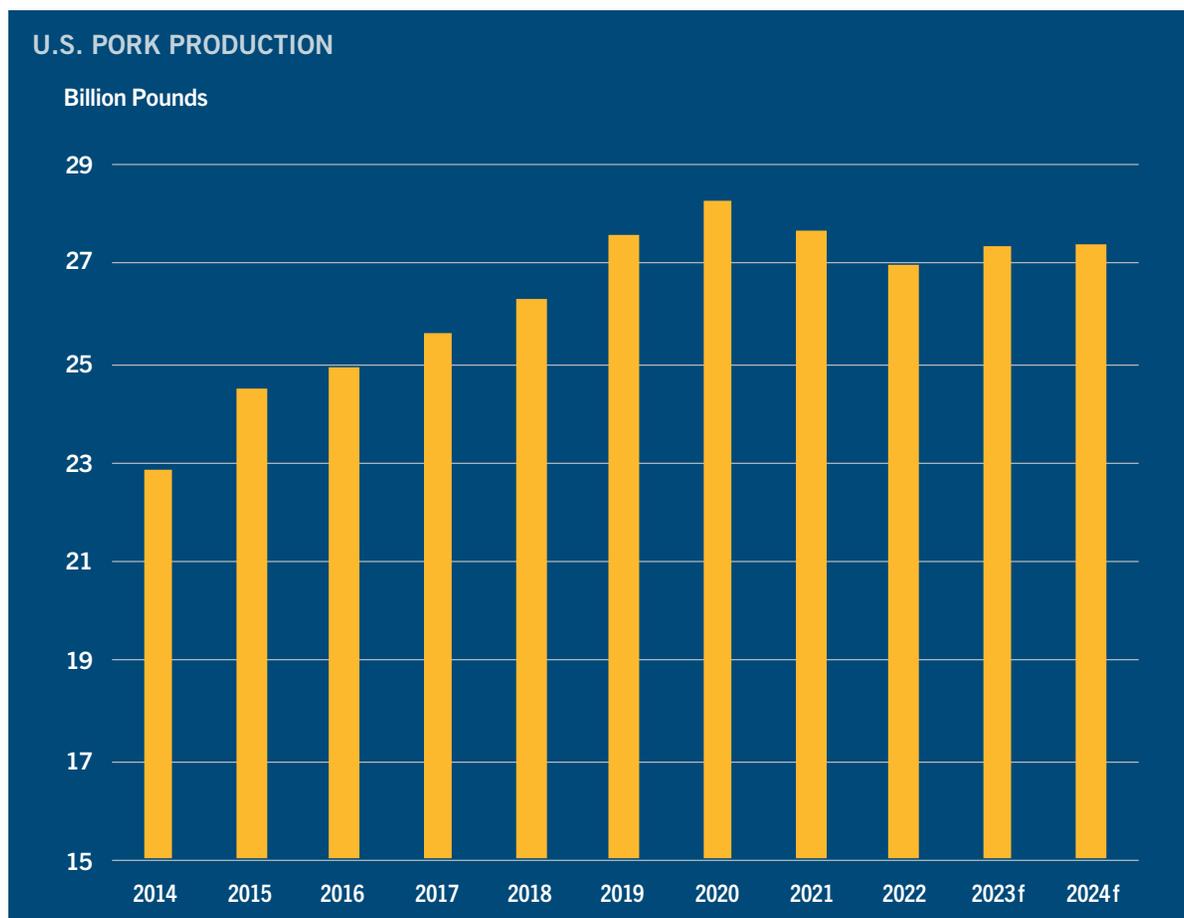
## Operating Costs

### Producers' evaporating returns are stunting U.S. pork production

The latest USDA *Hogs and Pigs* report confirmed what most anticipated: Hog production is stagnating. At 72.4 million head, the June 1 inventory of all hogs and pigs was about flat YoY, and down 0.6% from the previous month. The breeding herd was also down, declining 1% YoY.

After climbing at an average rate of more than 2% from 2015 to 2020, U.S. pork production then peaked at more than 28 billion pounds annually. In the time since, rising cost structure and tepid domestic and international demand have flattened pork production.

Per Iowa State University calculations, since 2018 the estimated returns for a farrow-to-finish operation have been \$7.30/head. That is a 66% drop from the 2013-2017 period when the average return was \$21.38/head. Consequently, the pork industry has stopped growing. ■



Source: USDA-ERS

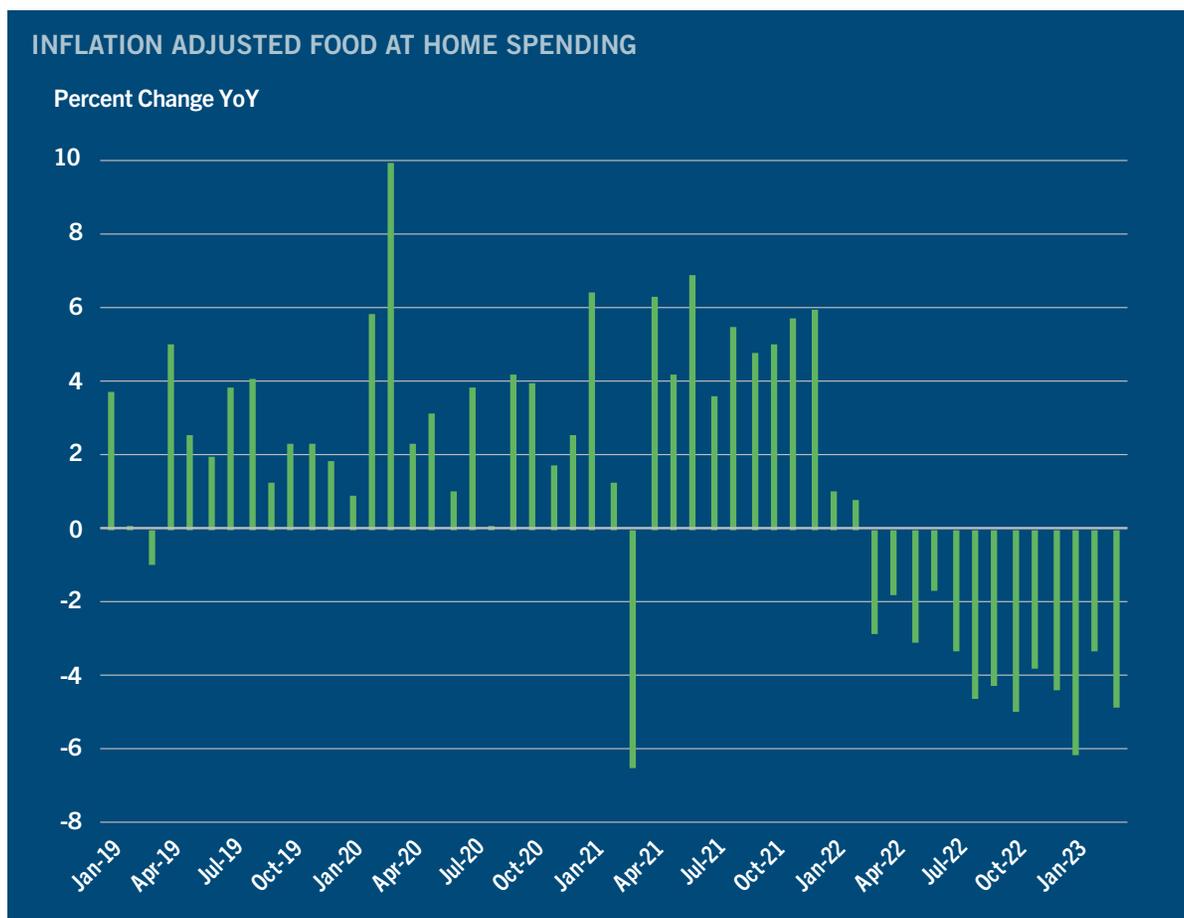
## Retail Prices

### Shrinking spending for food-at-home has limited pork valuation

Outside of bacon, pizza toppings and breakfast-type items, pork is usually consumed at home. This is why during the COVID pandemic lockdown, when food options were either take-out or at home cooking, pork thrived in 2020-21. But as food service has reopened in full in 2022-23, moving key pork items takes more effort.

Additionally, real spending growth at the grocery store has fallen substantially, but has not grabbed attention because inflation is showing phenomenal growth. This has been great for the grocery store, but not good for the farmer who sells by the unit.

Thus, the cumulative effect of these higher input costs is bumping up against a shrinking share of pork valuation. From 2011 to 2018, the producers' share of retail pork price was 16%. And during the pandemic, as a result of higher interest in pork trimmings and other items, that share soared to as high as 18%. But more recently, that share has declined to less than 12%. ■



Source: Calculated by USDA, Economic Research Service from various sources, June 1, 2023.

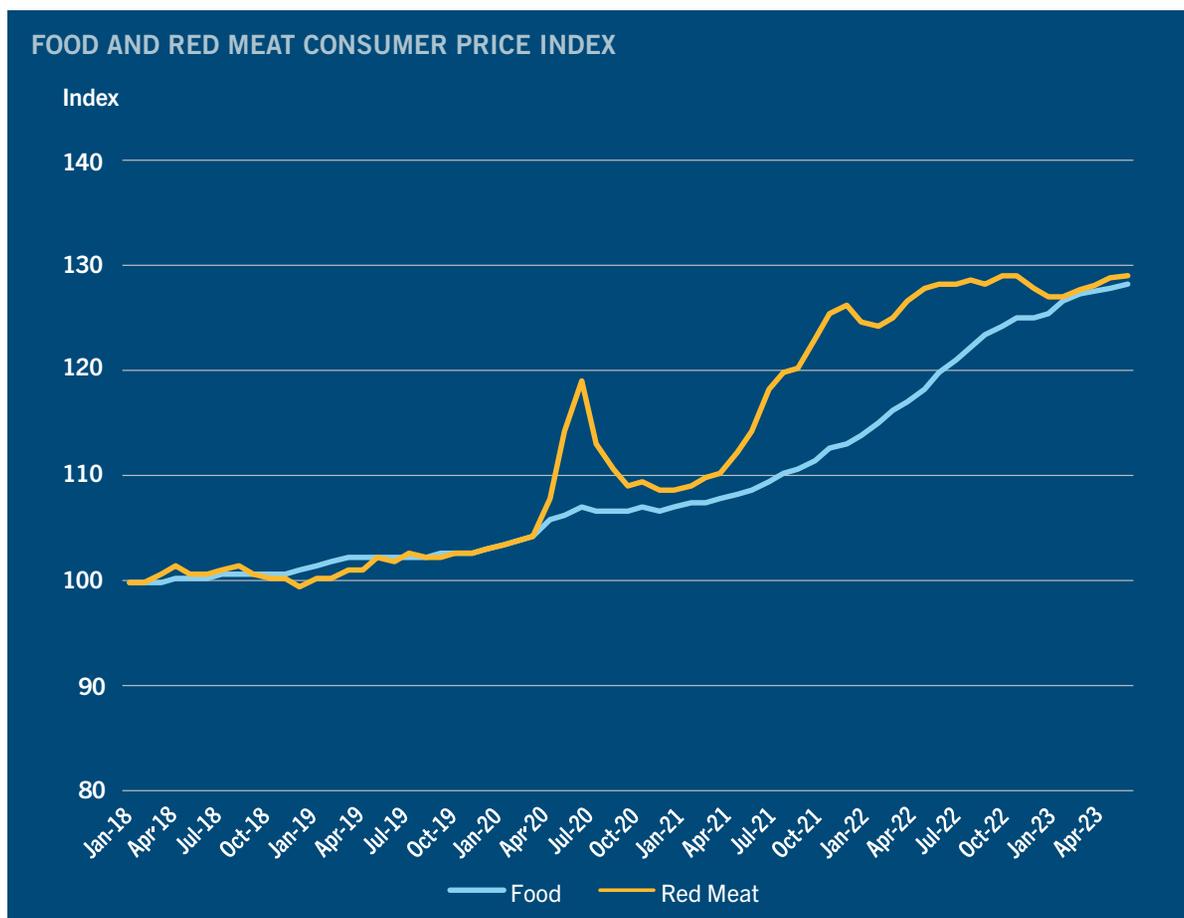
## Retail Prices

### Food CPI is catching up with meat CPI

For years, red meat prices (beef and pork) generally trended with food price inflation in the Consumer Price Index. Then consumer behavior made a massive shift towards purchasing food at retail during the lockdowns of the COVID pandemic, and red meat prices rose significantly in 2020. But it looks now as if the rest of the food dollar may be catching back up.

The swift rise in red meat prices at retail during 2021 and 2022 was fairly equally weighted between pork and beef. However, while fresh beef retail prices turned deflationary in Q3 2022, pork prices were still rising at about 6% YoY. The most recent retail data puts consumer-level pork prices at about a 5% discount YoY, while up 21% from pre-pandemic levels

Retail and wholesale pork prices have nearly doubled over the last 20 years while hog prices largely remained suspended near their 2000 levels, at least through 2020. And while hog values appreciated from 2021 to 2022, they have probably peaked, and collapsed. We do not expect consumers will see much relief this year despite softer hog and pork values. ■



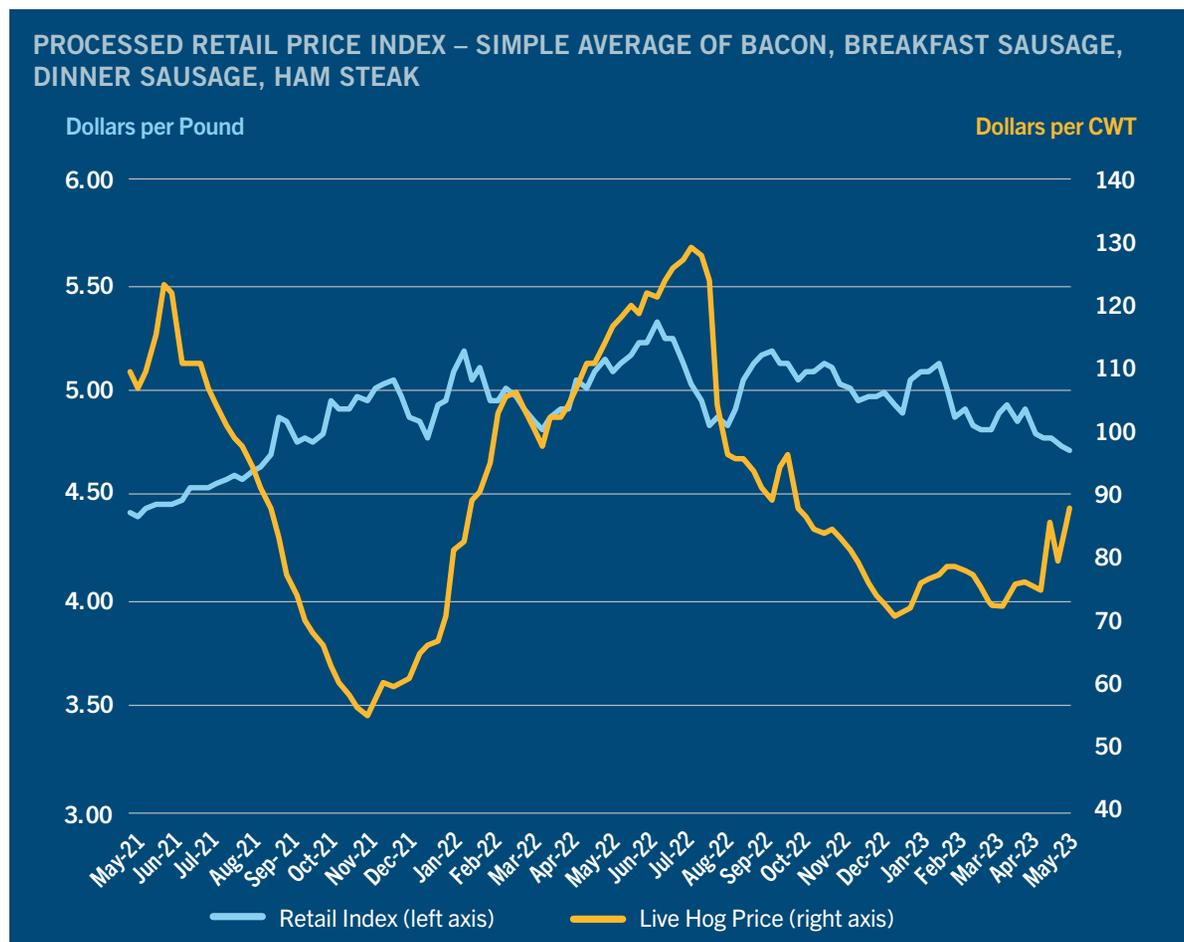
Source: Bureau of Labor Statistics

## Retail Prices

### Popularity of bacon, pizza toppings can't support hog prices by themselves

Roughly two-thirds of domestic pork winds up in further processed bacon, sausage or hams. One-third winds up in retail meat space. Domestic demand for items like bacon and sausage have performed well at retail in recent years. Pizza toppings in particular were very popular in 2020-2021. In other words, the trimmings complex as a whole received strong support. However, demand for pork cannot rest on these items alone.

Big items like loins are struggling to gain the same attraction that boneless skinless breast meat or ground beef enjoy. The fact that bacon is the No. 1 consumed pork item in the U.S. but only makes up about 16% of the dressed carcass is at least moderately concerning. ■



Source: LMIC, USDA-AMS

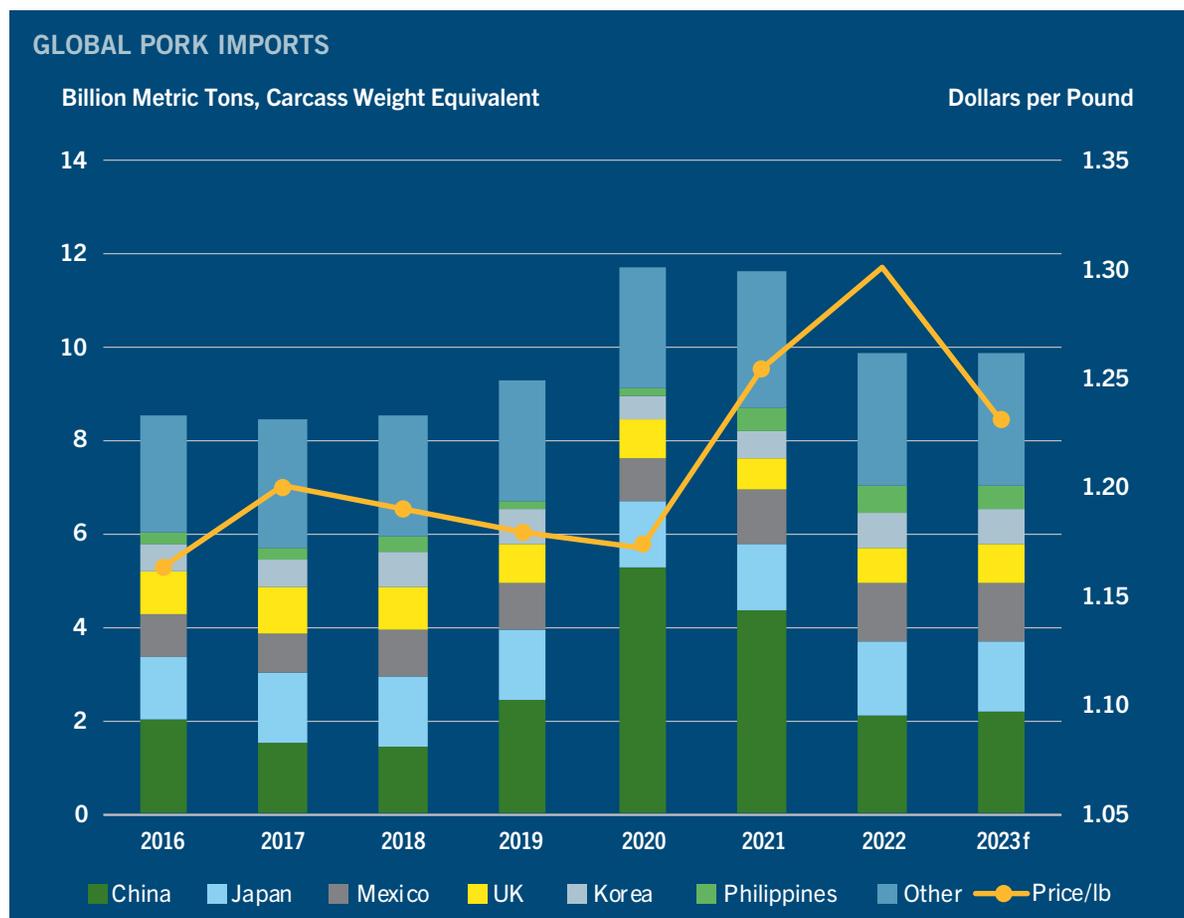
## Export Demand

### China's pork needs slip, stressing exporters

Approximately 25% of U.S. pork goes to export markets, the most of any of the U.S. processed animal proteins. Much of the success of U.S. pork depends on export market conditions.

When African Swine Fever (ASF) decimated China's domestic hog herd in 2018, annual U.S. pork exports to China tripled in 2019, and then again doubled the following year. Since then, China's needs for pork have again rapidly deflated as its domestic herd rebounded.

But as China is scaling back its pork imports, Mexico is scaling up as its per-capita pork consumption takes off. U.S. pork exports to Mexico eclipsed 2.3 billion pounds in 2022, a record high for any single destination and about 37% of all U.S. pork exports. Mexico has long been a top destination for U.S. pork but today's export volume represents a 45% jump from 2016 levels. ■



Source: USDA-FAS

## Export Demand

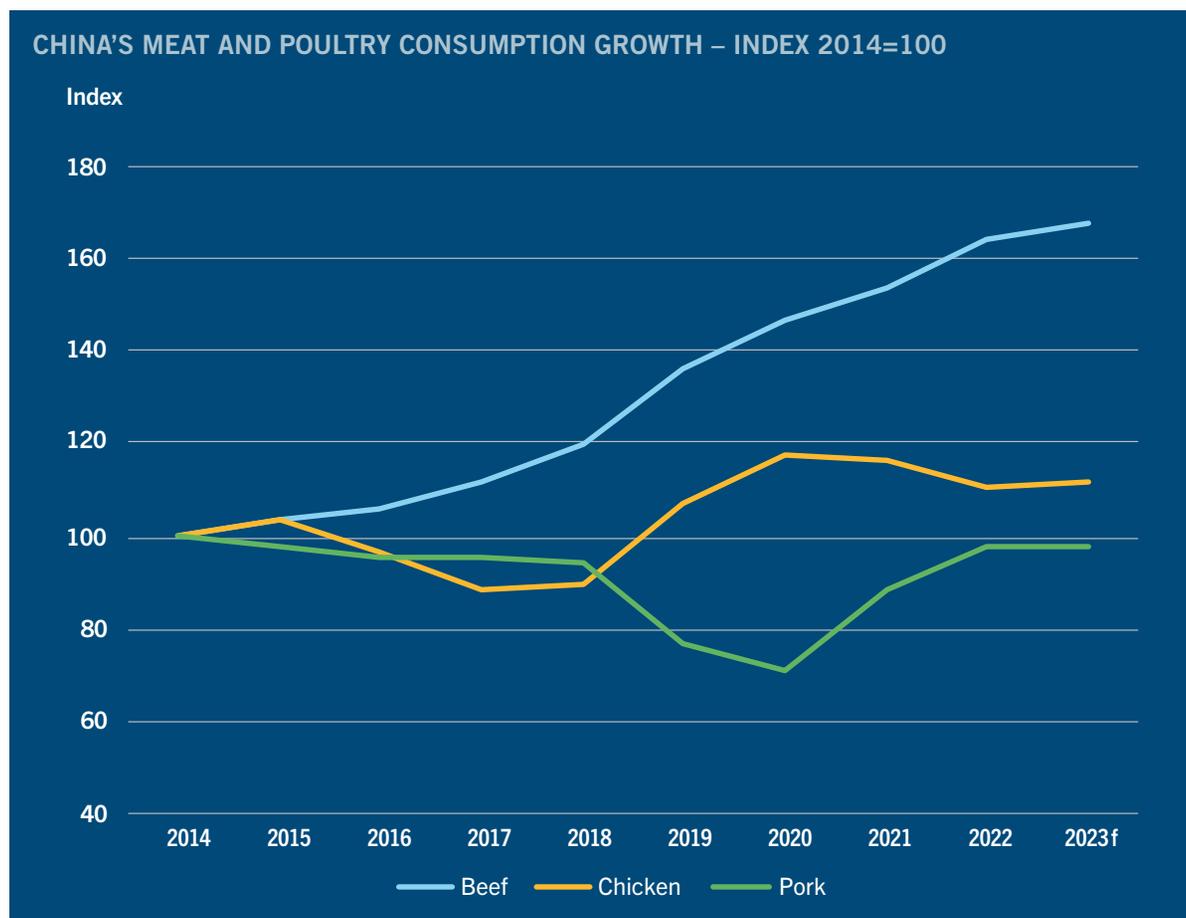
### As Chinese pork industry recovers, Chinese consumers discover beef

With China's hog supplies rebounding, its reliance on foreign pork supplies declined significantly just as consumers turned to beef and chicken. This casts doubt on the U.S. growth opportunity to China – consumer of nearly one-third of the world's pork.

Despite a 60% drop in pork imports from 2020 to 2022, China's consumption of pork is nearly back to the long-term average. Alternatively, China's beef consumption is up nearly 70% from 2014 levels, and chicken is up more than 12%.

So while ASF contributed to significant short-run growth for U.S. pork exports to China, lack of long-term commitment has left producers less confident.

But not all is lost on the export front. While U.S. pork exports are down about 17% from 2020 levels, they are up about 8% YoY, and up 15% from 2019 levels. Another major global pork producer, the European Union, has seen its total swine herd decline by more than 5% in 2022, which the USMEF expects will encourage U.S. pork exports to top destinations.<sup>2</sup> ■



Source: USDA-FAS, CoBank



## Conclusion

Elevated cost structure, murky demand from foreign and domestic consumers, increasing hog market volatility and new regulations on sow confinement all ultimately fall on the shoulders of hog producers who find uncertainty unsettling. In addition, hog prices are well below the current cost structure, contributing to expectations that hog supply in 2023 is stagnating.

Not only are market conditions pressuring hog and pork supplies, but higher construction costs and interest rates are trampling hog producers' future expansion plans. The economics are critically challenging producers' decision to meaningfully add to swine-raising capacity. This is especially true for those who are new to hog farming. With working capital tied up in hog inventory, there is little room for expansion, at least for the rest of 2023.

But even if the cost structure warranted additional production, demand is a part of the puzzle that needs addressing. Despite lower hog prices, retail price points are expected to remain stubbornly high in 2023, limiting consumption growth. And while pork could benefit from marketing its quality attributes, it seems consumers have not yet connected with the quality aspects of pork like they do graded and branded beef. ■

## References

<sup>1</sup> "Update on interest rates and building costs," *National Hog Farmer*, Jan. 18, 2023.

<sup>2</sup> "Declining EU pork production creates opportunities for U.S. gains," *National Hog Farmer*, May 10, 2023.

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