

# UrnerBarry

**CONSULTING**

Egg Market Forecast Webinar  
June 2023

# Correction mode? Egg Demand Destruction? HPAI done?

1. The overall view and approach of the egg sector
  1. A quick refresher only
    - Economic Fundamentals
    - Passing on the cost
2. Retail → passing on the cost **SAVINGS** during inflation as inflation subdues
3. HPAI
4. The FORECAST
  1. Shell Eggs
  2. Egg Products



Angel Rubio

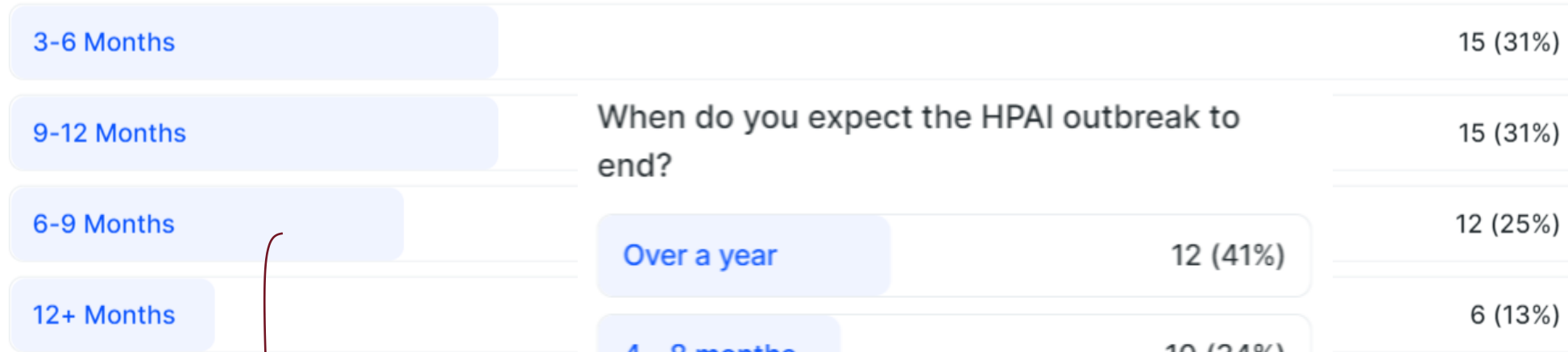
[arubio@urnerbarry.com](mailto:arubio@urnerbarry.com)

 [@arubio01](https://twitter.com/arubio01)

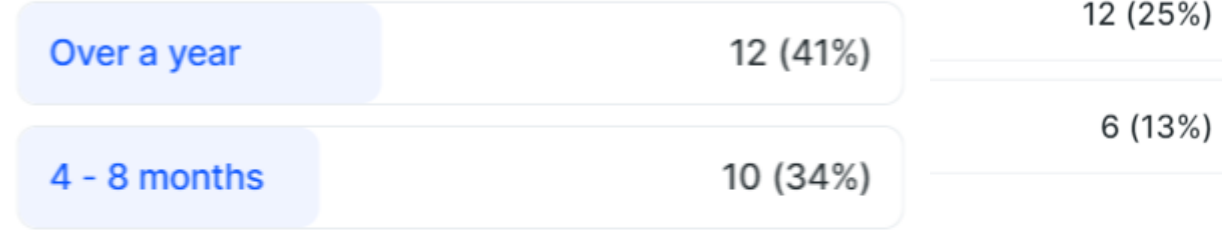
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# Questions from last webinars

How quickly will the industry rebound from this High Path AI event?



When do you expect the HPAI outbreak to end?



With HPAI still affecting layers, when do you think the outbreak is likely to end?

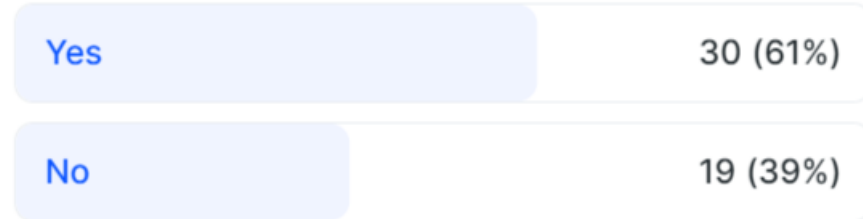


When do you expect the HPAI outbreak to end?



# Questions from last webinar and answers

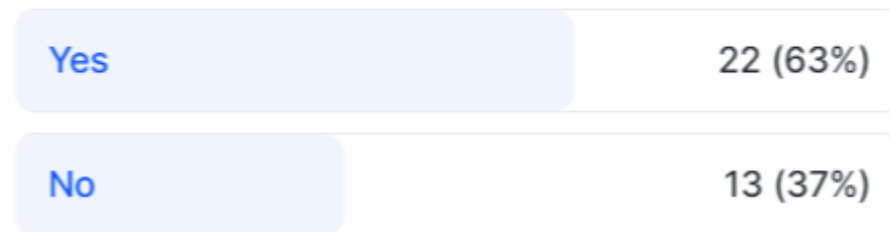
Do you think there could be demand destruction for eggs as a result of persistent high prices? ⋮



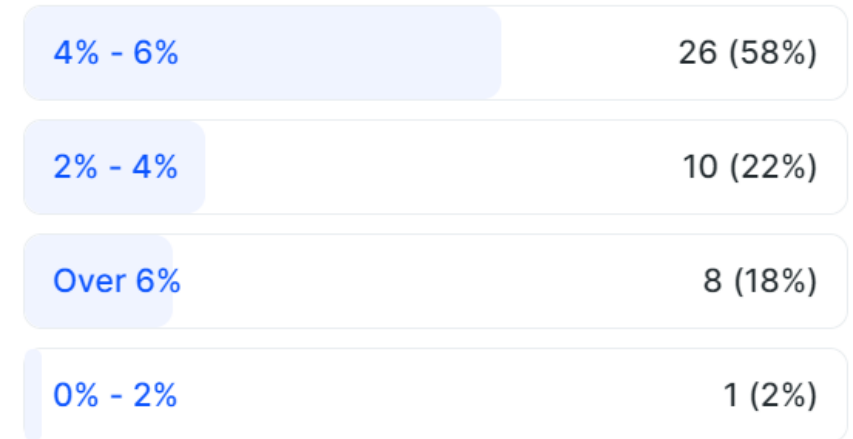
49 votes

3 months ago

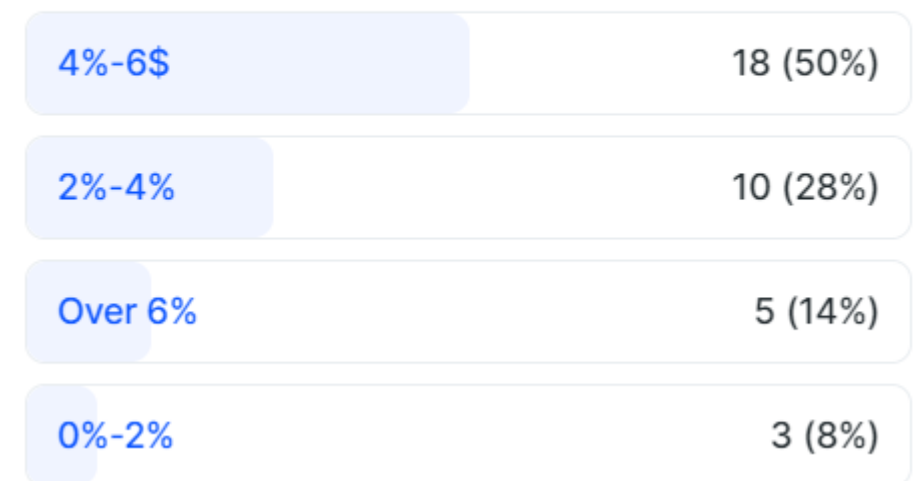
Do you think there could be demand destruction for eggs as a result of persistent high prices? ⋮



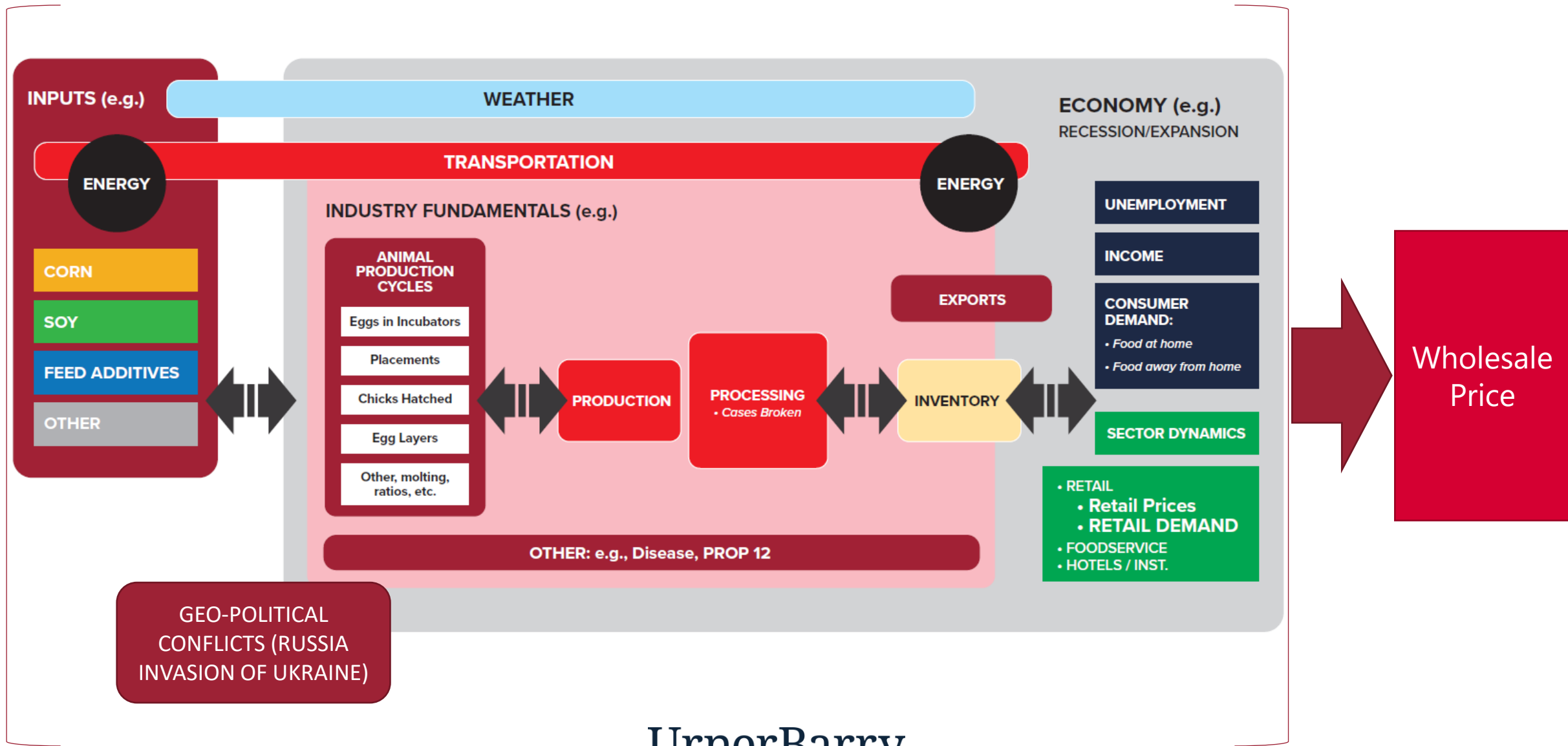
Where do you think inflation will be by the end of 2023? ⋮



Where do you think inflation will be by the end of 2023? ⋮



# A quick refresher 1.0 - Picking what is important, but more importantly → WHEN



# On a list

Input variables considered (when they are **relevant**):

## **Fundamentals**

- Corn Prices (Futures implied forecasts are used)
  - Eggs in incubators
  - Chicks Hatched
  - Intended Placements
    - Production
    - Rate of Lay
    - Exports

- **Egg Layers (All, organic, cage-free, etc.)**

- **Cold Storage**
- Breaking Stock Inventory
- Shell Egg Inventory
  - Cases Broken
  - Retail Purchases
- **Retail Promotions**
- Egg production

## **Economic Indicators**

- Foodservice sales
- Grocery Store Sales
- Hotels and Institutions Sales
  - Food at Home
- Food Away from Home
- Disposable Income

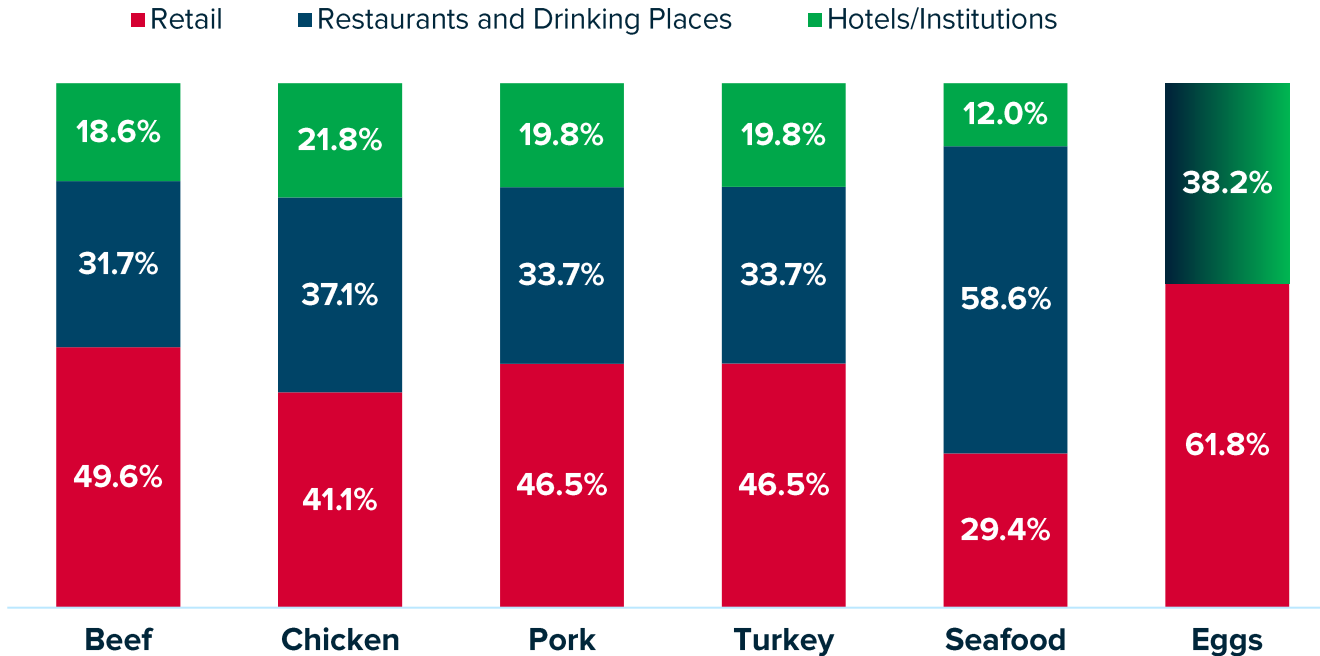
## **KPI Indexes in house**

- Ratios
- in-house % chg. indexes
- Shock indicators (dummy variables)

# A QUICK REFRESHER 1.1

## UB Estimates Foodservice vs. Retail split

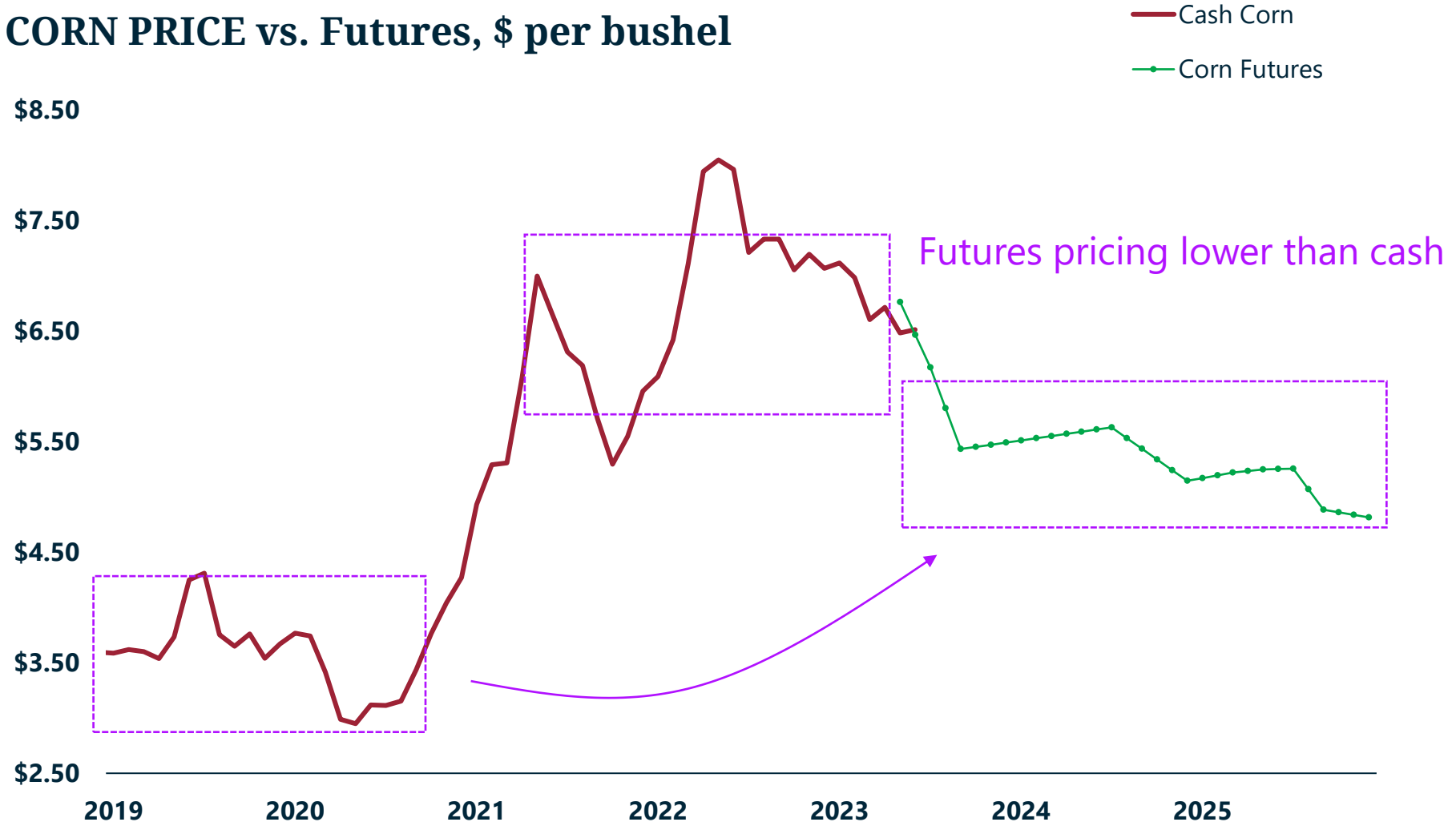
Source: Urner Barry



- Eggs depend more on retail (Grocery Stores) than other proteins.
- Retail sales and feature activity are, therefore, consistently relevant.
- INFLATION → *is it causing people to trade down to lower-priced proteins finally?*
  - *It is still unclear*
    - *Prices to the consumer have adjusted lower (fast)*
    - *Price pressures are coming down*
- Feed costs comparatively lower → futures pricing lower BUT feed costs remain at higher historical levels and thus:
  - *A large component of potential expansion or not*
- Is the California market already settled due to Prop 12 → *No, still volatile and sitting at higher thresholds*

# Feed Inputs

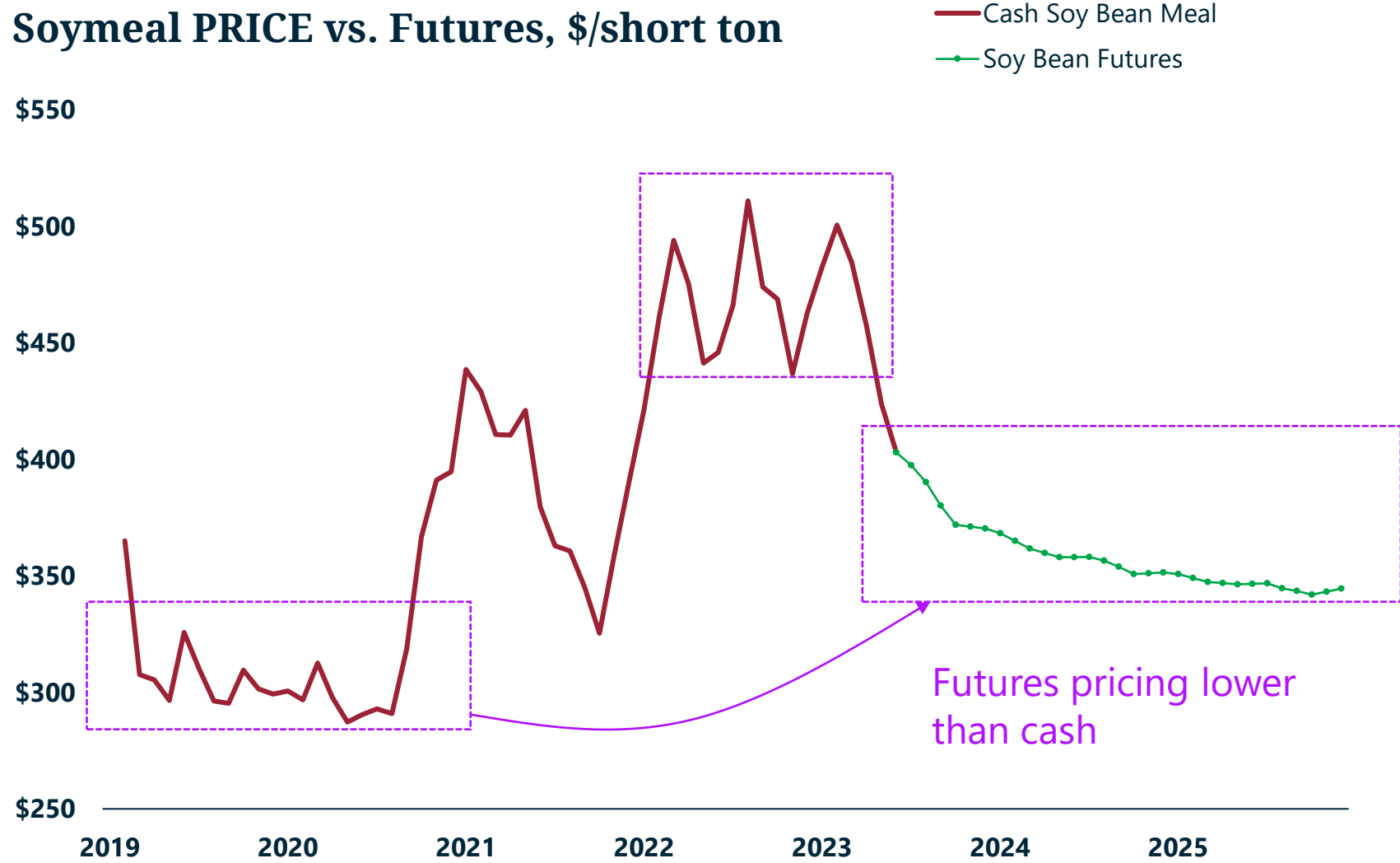
## CORN PRICE vs. Futures, \$ per bushel





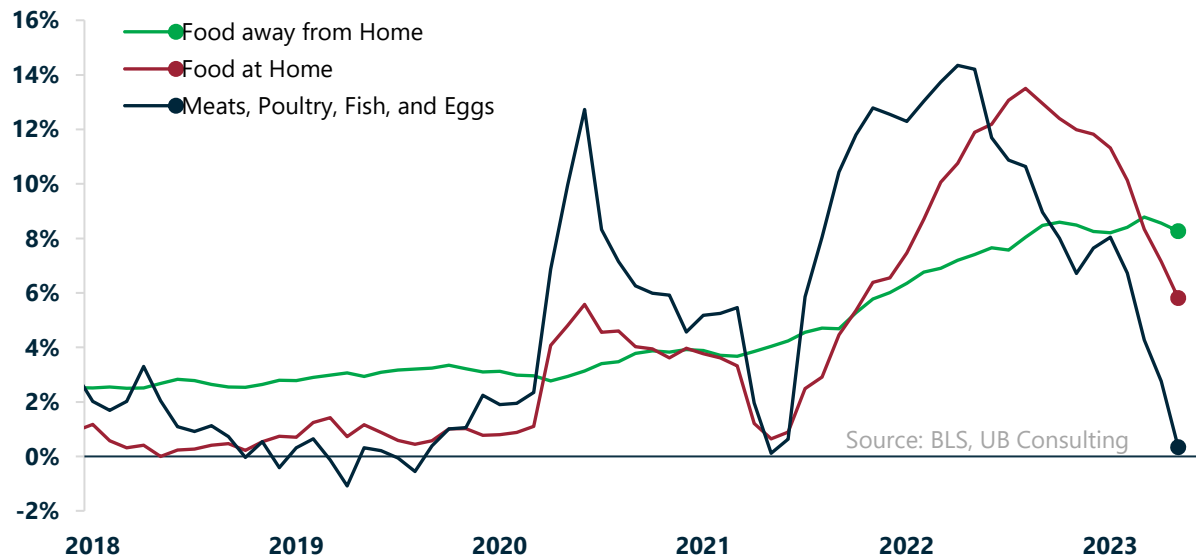
# Feed Inputs

## Soymeal PRICE vs. Futures, \$/short ton

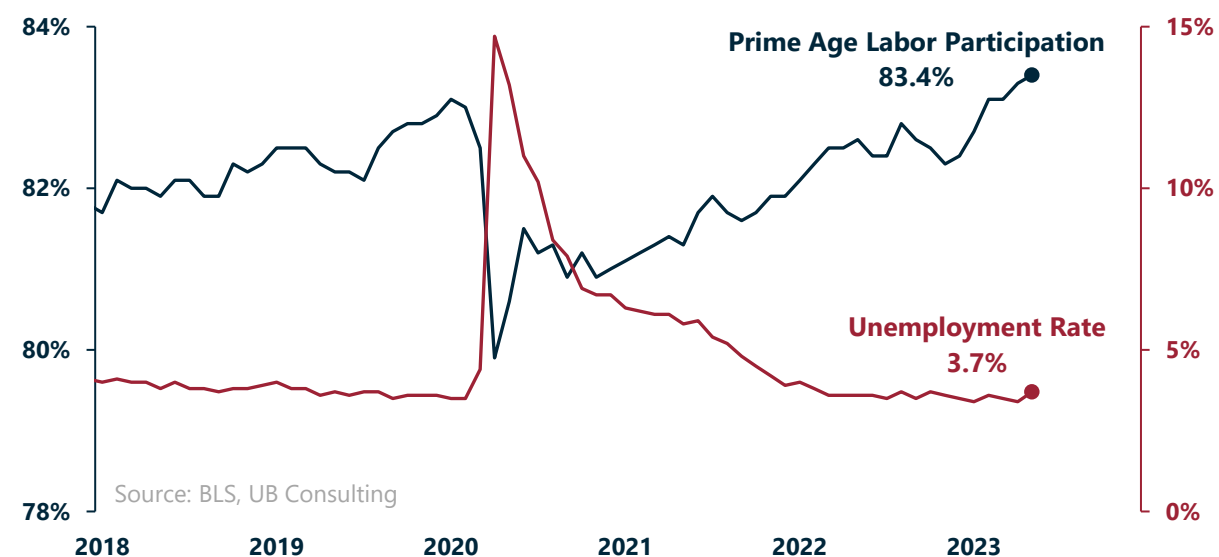


# Quick Economic Layout

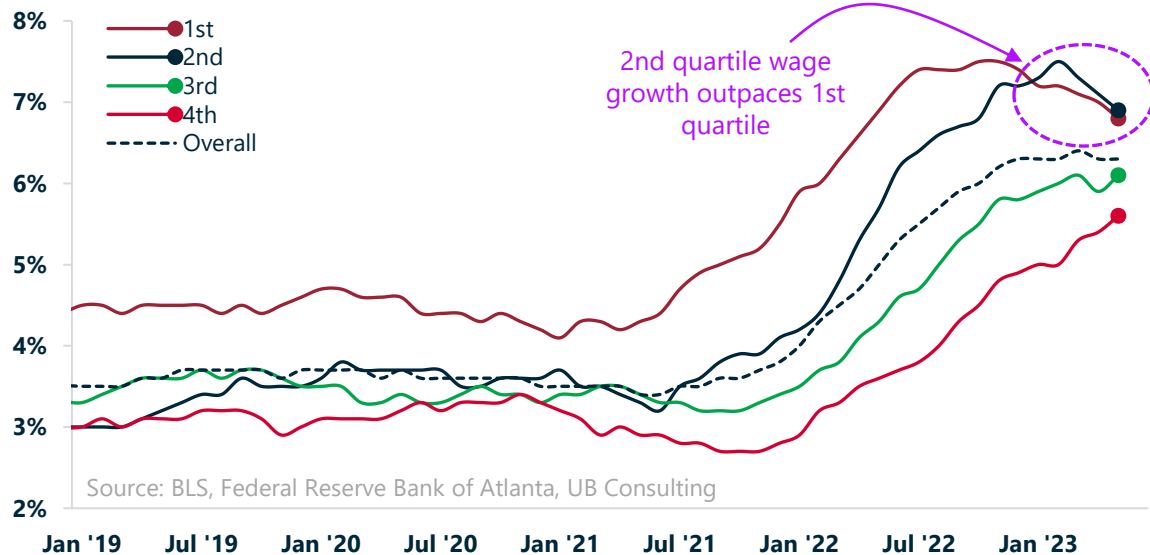
## CPI Inflation Rate for All Urban Consumers



## Prime Age Labor Force Part. vs Unemployment Rate



## Monthly Median Wage Growth by Quartile, 12-Mo MA

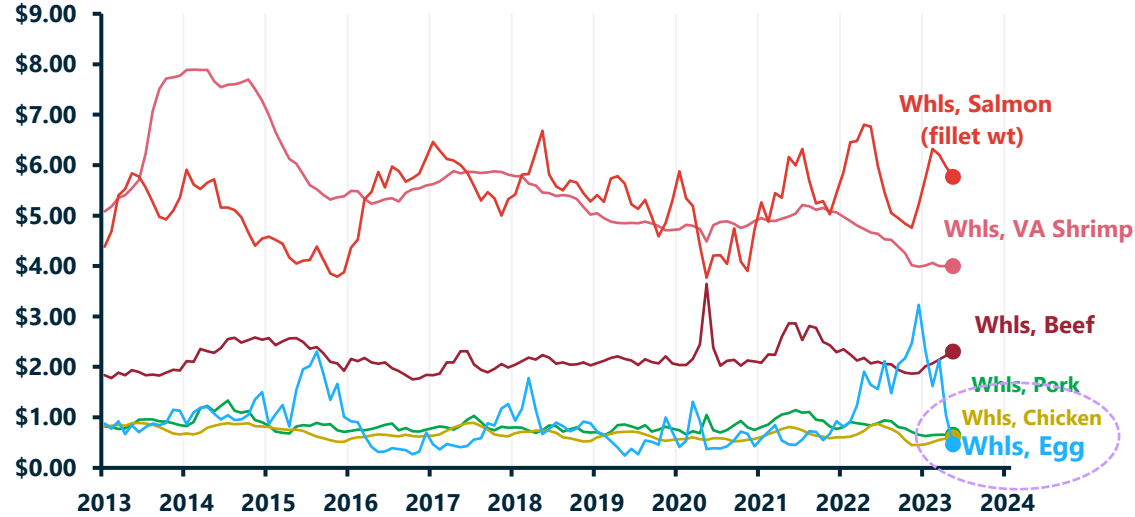


- Protein prices continue to adjust to lower
  - Eggs declined 13.8% MoM in May '23 –the largest decline since 1951
- Food at home → lagging from CPI of proteins
- Labor market remains strong
- Wage growth is still increasing –seeing a slight slowdown in the bottom quartiles
- The Fed paused on interest hikes, but more than likely increase next meeting

# Wholesale

## Inflation Adjusted Prices

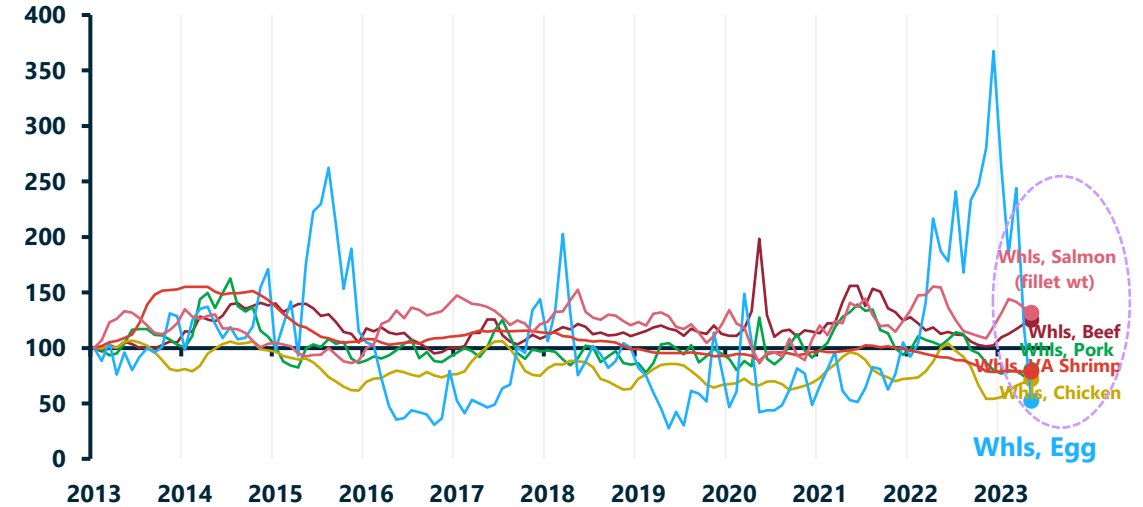
Price comparison between mainstream proteins



- So, on average, there are about 0.72 lbs. in ONE dozen eggs.
- Wholesale prices once again below –(faster in the way down)
- Salmon and shrimp remain nominally at considerably higher prices overall. (not for certain beef cuts)

## Inflation Adjusted Wholesale \$, Indexed

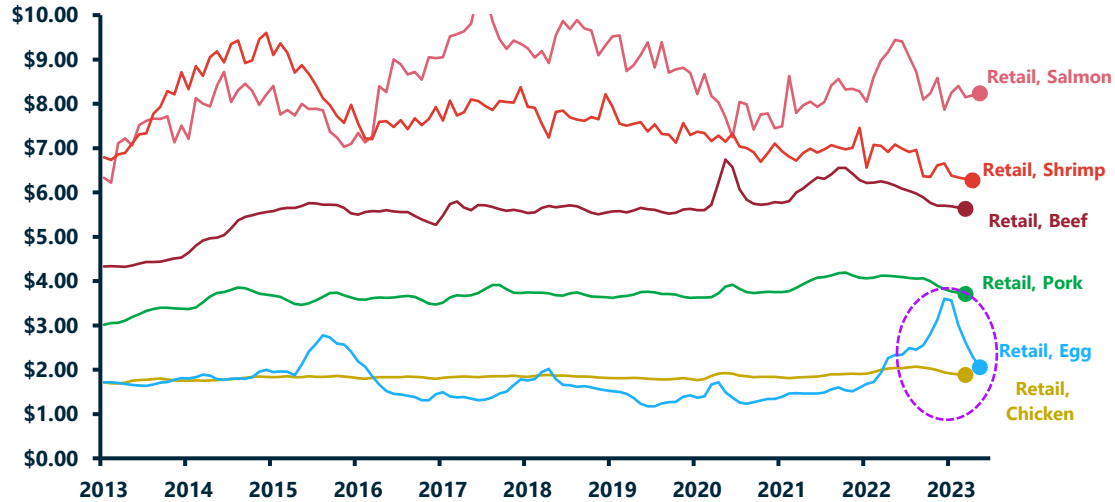
Jan '13 = 100



- When adjusted for inflation (discounting), eggs have corrected drastically downward compared to other proteins
- As mentioned previously, Chicken appears to be a valuable item also given its lack of relative volatility.
- Chicken, in our view, is always the winner when bad times arrive

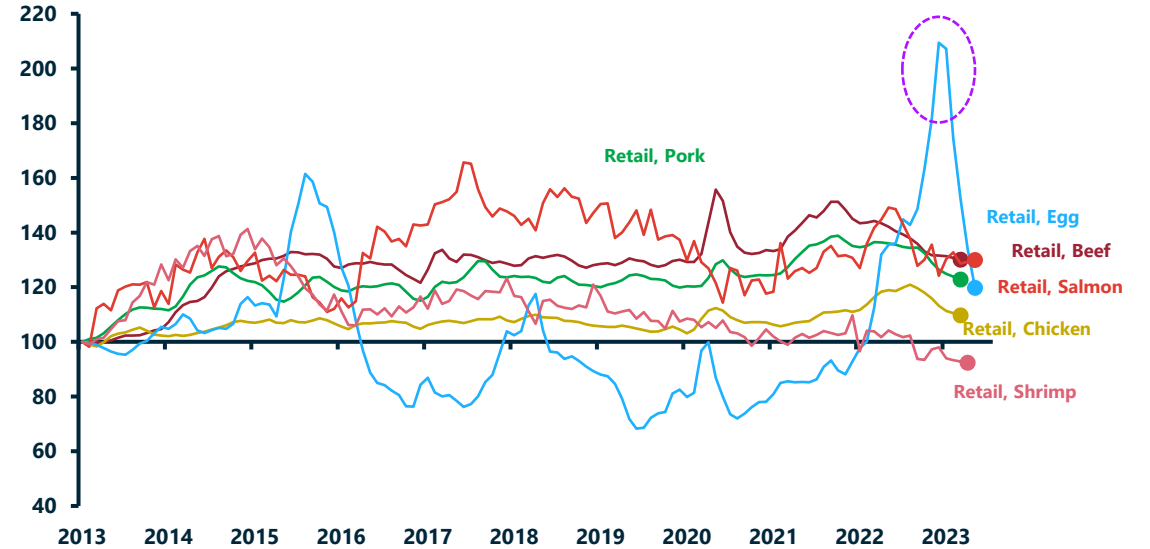
# All Proteins Retail

## Inflation Adjusted Prices



## Inflation Adjusted Retail \$, Indexed

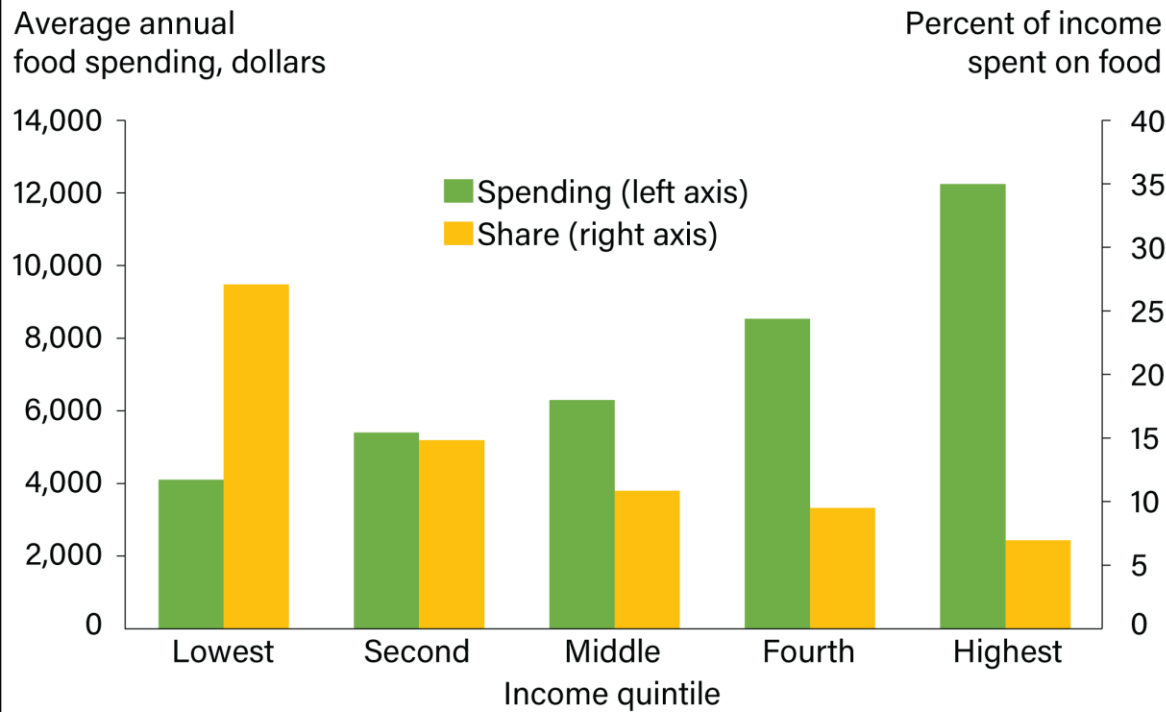
Jan '13 = 100



- From a retail perspective – Consumer:
  - Retail eggs are NOT the lowest priced-protein, but headed that way again.
  - We purposely chose these items in retail to make meaningful comparisons of items people buy at the store (we excluded ground beef on purpose)

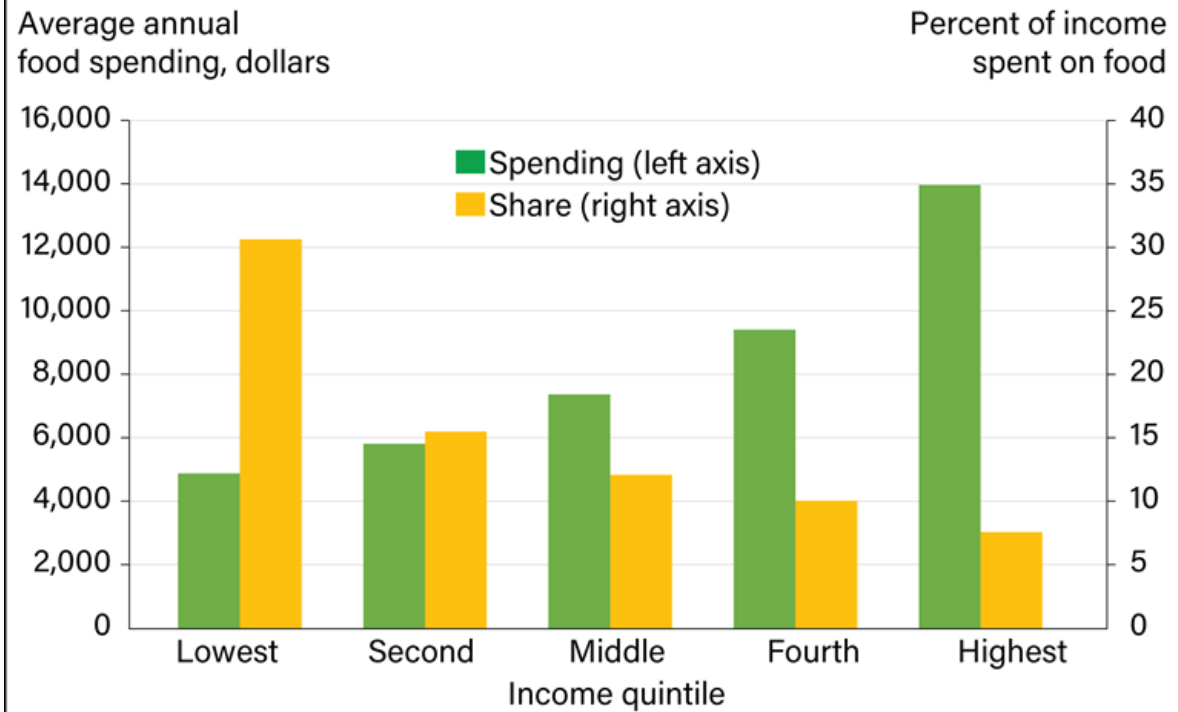
# Food Expenditures

**Food spending and share of income spent on food across U.S. households, 2020**



Source: USDA, Economic Research Service using data from the U.S. Bureau of Labor Statistics, Consumer Expenditure Survey, 2020.

**Food spending and share of income spent on food across U.S. households, 2021**

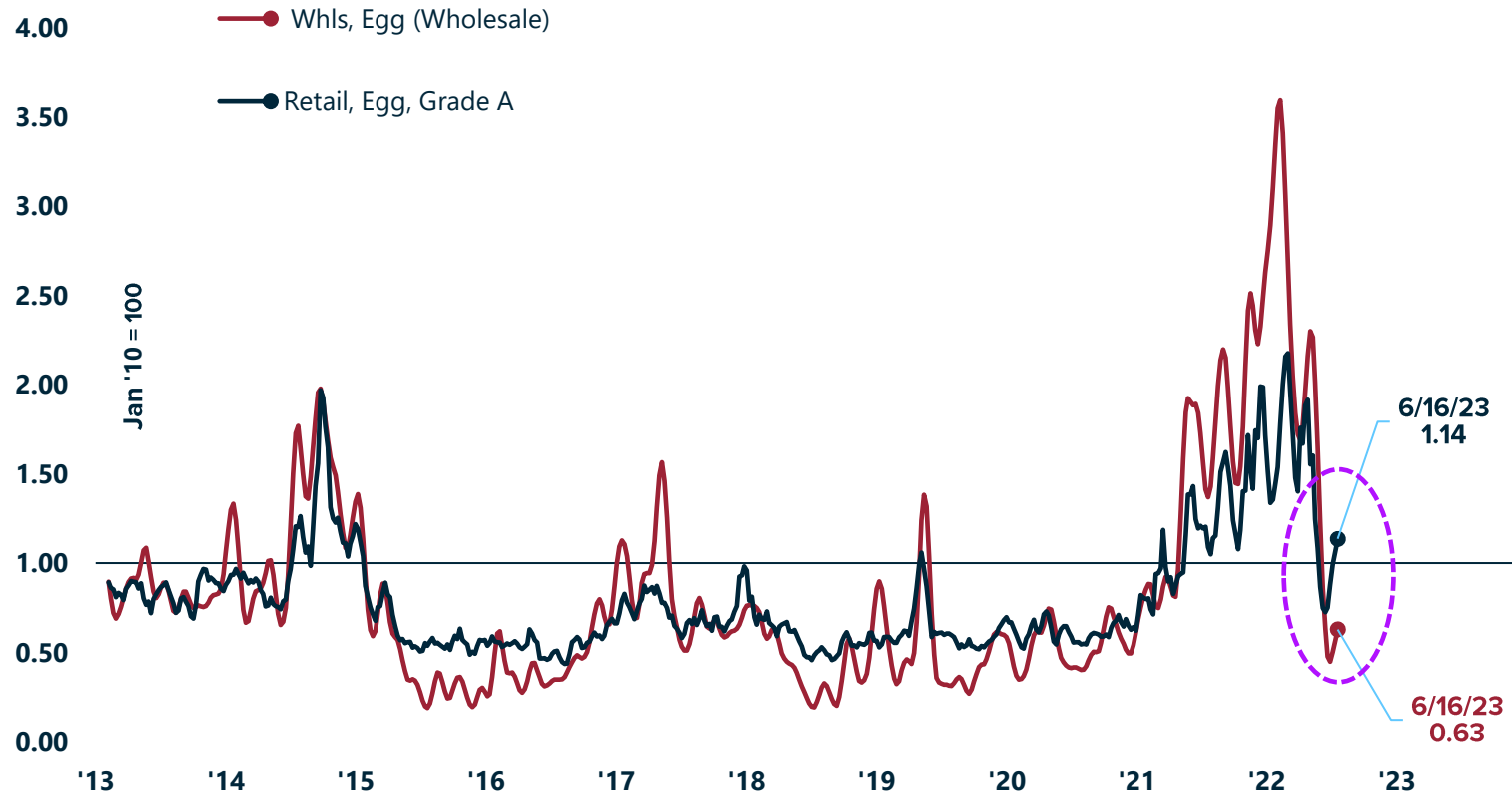


Source: USDA, Economic Research Service using U.S. Department of Labor, Bureau of Labor Statistics, 2021 Consumer Expenditure Survey data.

# POLL QUESTION #1

# Passing on the cost – focus on Retail

## Retail, Egg, Grade A vs. Whls, Egg (Wholesale)



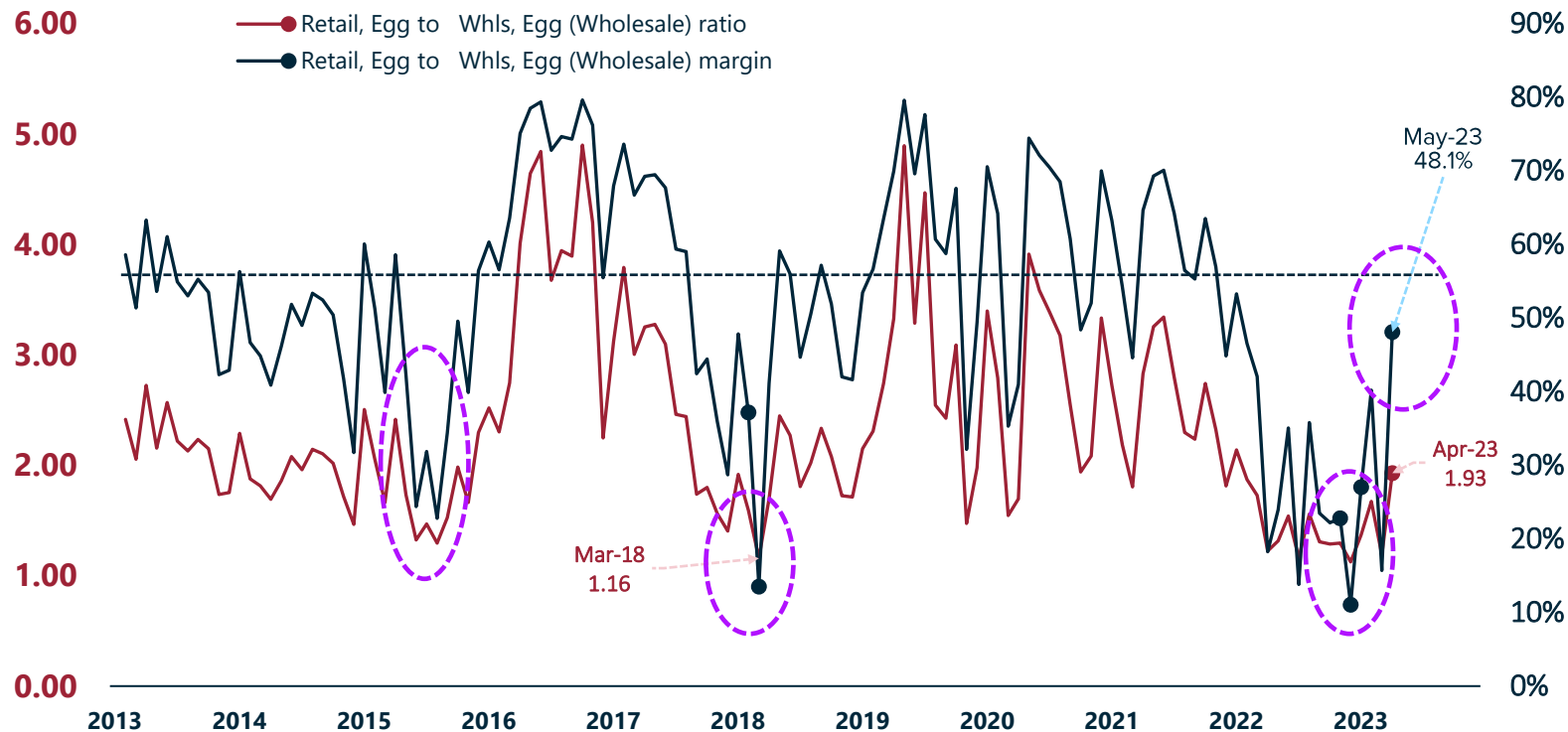
On average, for every 10% change in wholesale price, retail prices to the consumer move 2% in the same direction. Retail prices tend to react within 4-8 weeks of the changes in wholesale prices

- Previous predictions of wholesale to retail have been in line at about 4-8 weeks (1-2 months) on average.
- Lately, wholesale prices to retail have accelerated to about 2 weeks

# Passing on the cost – focus on Retail

\*Based on spot prices/transactions, does not include contracts (or hedged positions)

## Retail, Egg vs. Whls, Egg (Wholesale) (+ UB Retail Est.)



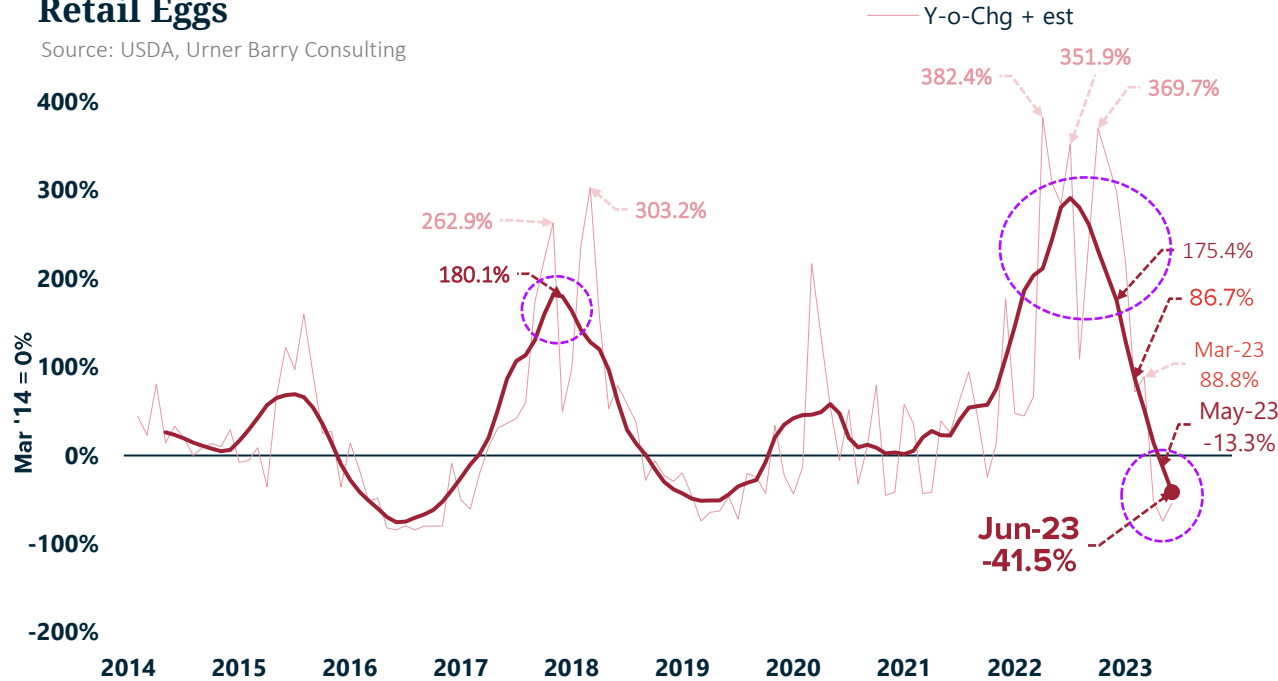
- As of recent months, retailers see the lowest margins (or ratios) of wholesale (purchase) to consumer prices (sold to)
- On avg, since 2013, the margin (Sale price – COGS)/Sale price was about ~53%
- **January at -9.5 %**
- **TODAY → 48 %**  
(almost back to the average ~53%)



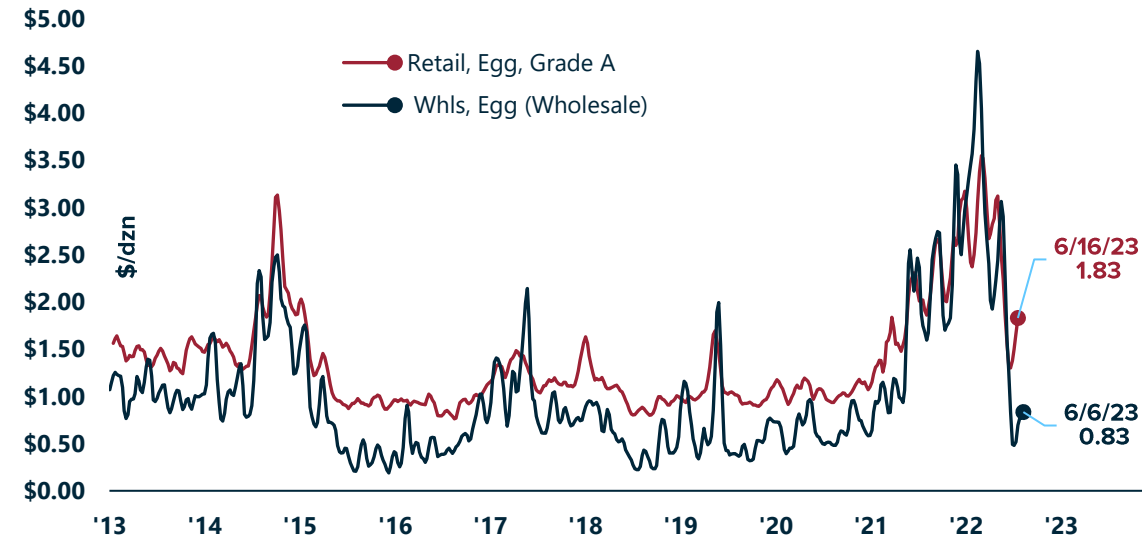
# Passing on the cost – focus on Retail

## Retail Eggs

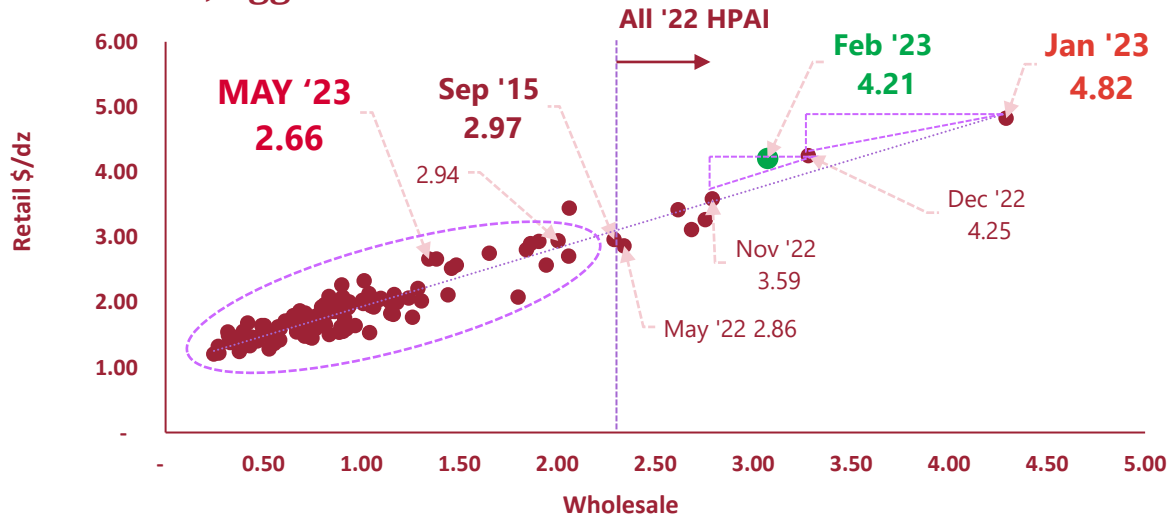
Source: USDA, Urner Barry Consulting



## Retail, Egg, Grade A vs. Whls, Egg (Wholesale)



## Retail, Egg

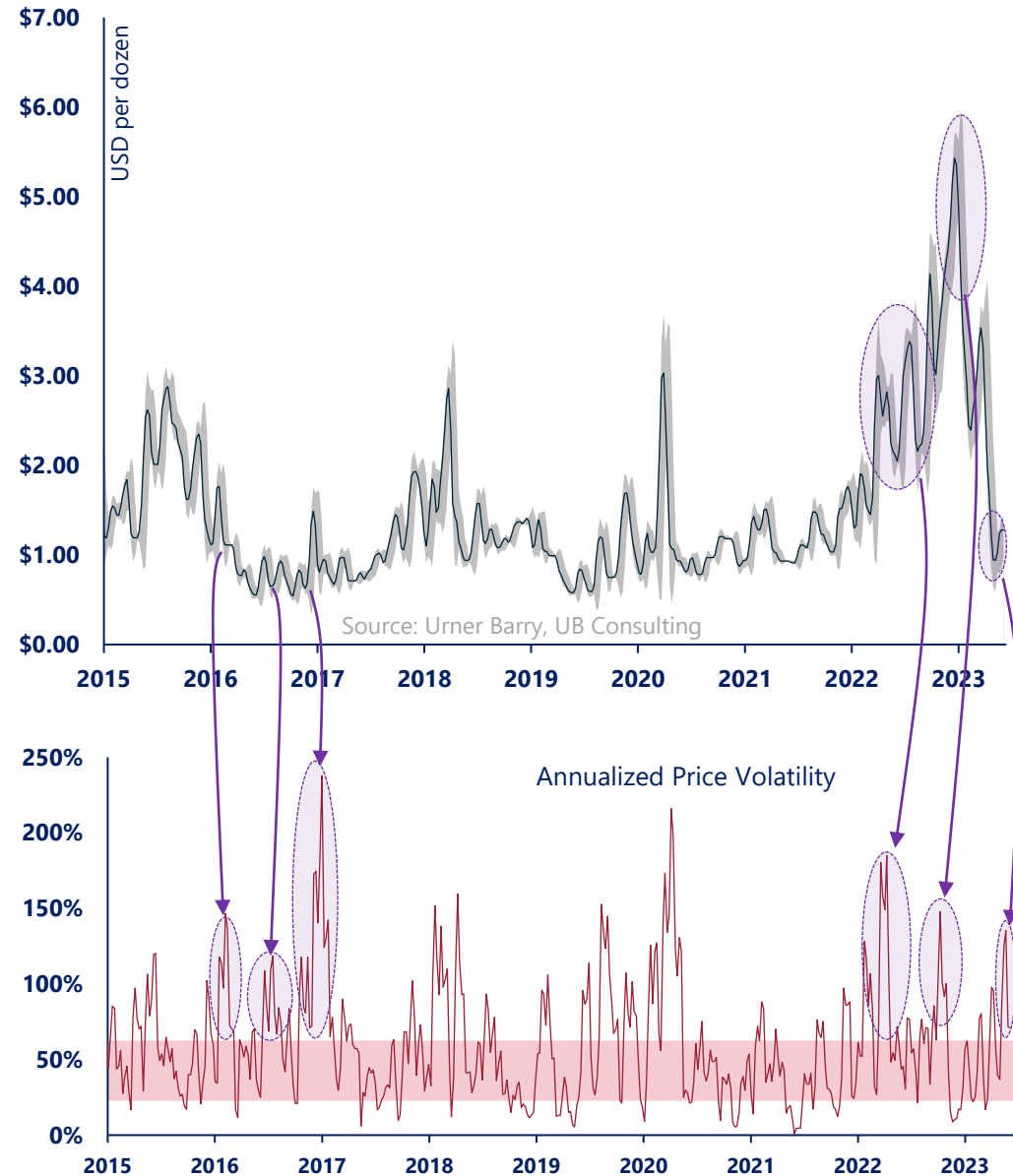


- Current wholesale / retail price relationship back to pre-HPAI, but relatively elevated
- Egg prices to the consumer have come down significantly BUT...
- Retail prices found a bottom, as margins (last slide) improve → market finding equilibrium

\*Based on spot prices/transactions, does not include contracts (or hedged positions)

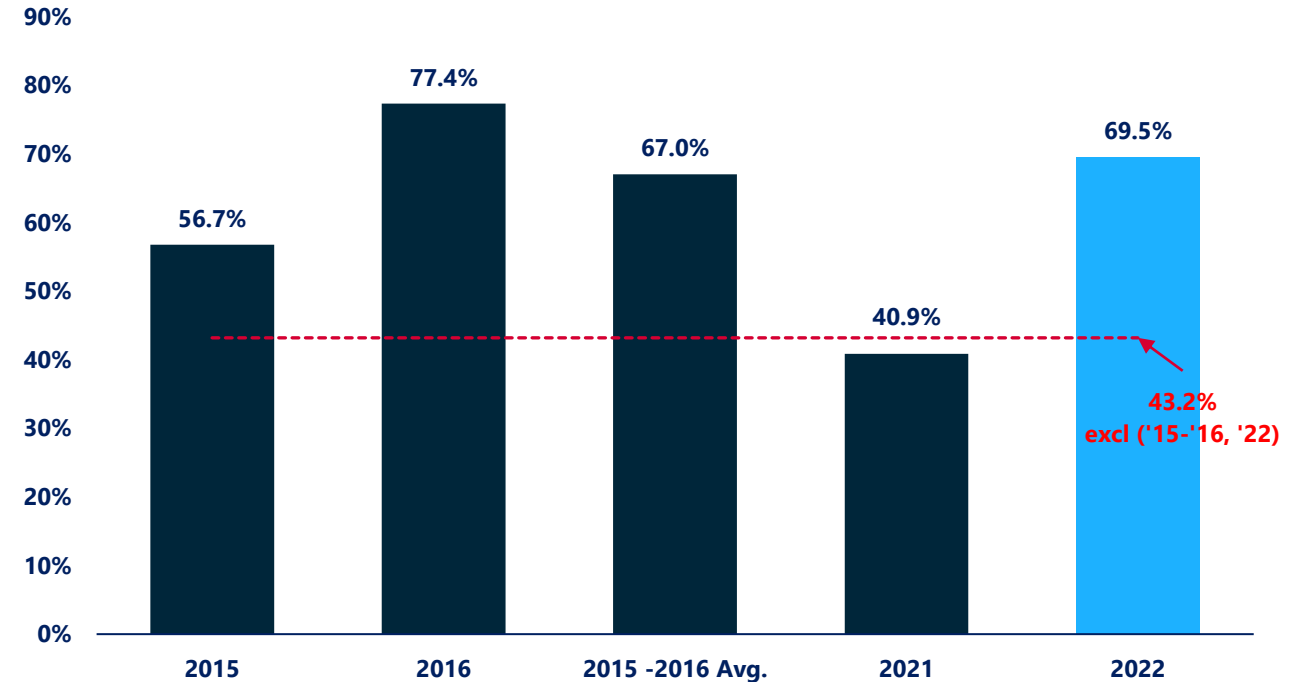
# Shell Egg Price Volatility

## UB Shell Eggs - White Lg, MW



## Average Price Volatility

Source: Urner Barry, UB Consulting



- The **MOST** volatile year was 2016 (when the market recovered from HPAI 2015) followed by 2022
- We could see increased volatility in 2023 with the market reaching more normal price levels.

# POLL QUESTION #2

# HPAI 2015 vs 2022

## HPAI 2015 (heading into)

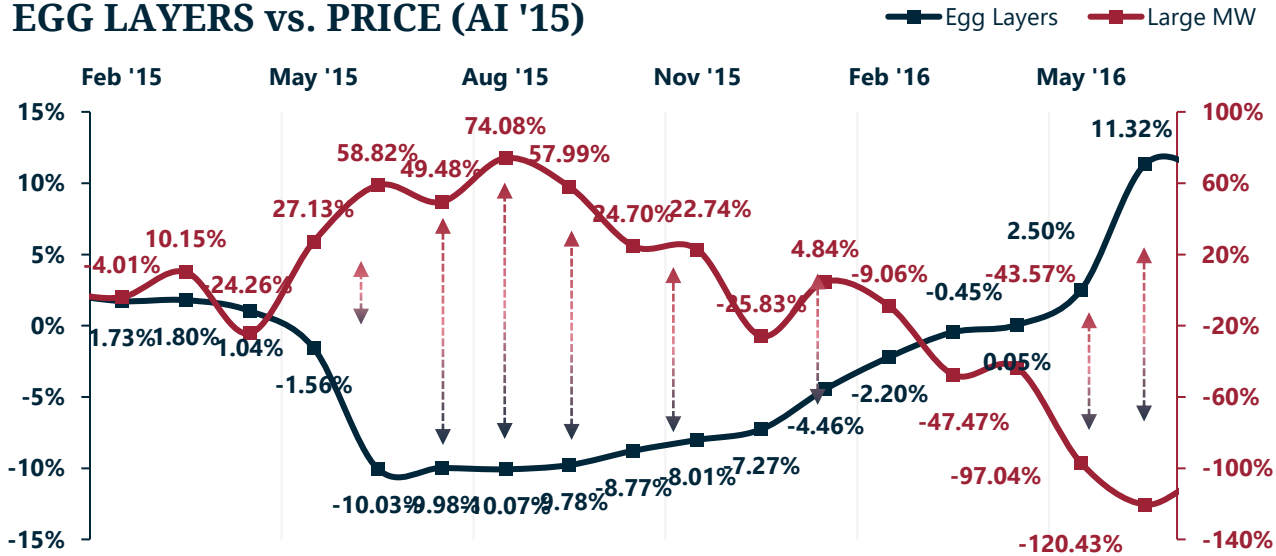
- FEW OUTBREAKS
- Stable Corn prices
- Stable growth in Egg Layers
- NO PANDEMIC
- No Supply Chain disruptions
- Lower energy costs
- Steady employment costs
- No major geo-political events that disrupted markets
- More normal rates of inflation
- No trade disruptions
- Steady income growth
- ....

## HPAI 2022 (heading into **and through**)

- SEVERAL OUTBREAKS
- High Corn prices (above \$5.00 throughout 2021)
- Steady decline in Egg Layers as market transitioned—gradually—to CF
- PANDEMIC
- Massive Supply Chain Issues
- High Energy Costs
  - Transportation (fuel)
- Rising employment costs
  - production lines, transportation, etc.
- Major Geo-Political disruption (Russia-Ukraine)
- Massive trade disruptions
- Volatile Income levels
- **Inflation—coming down**
- **Likelihood of a recession**

# 2015 AI, impact

## EGG LAYERS vs. PRICE (AI '15)

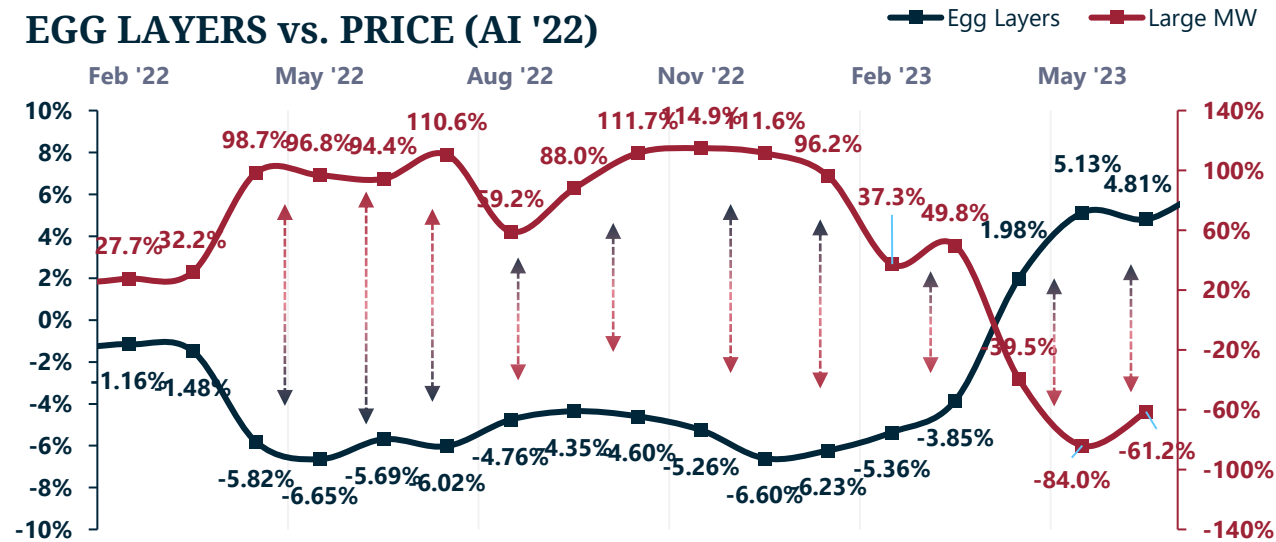


- On average, for every 1 percent decrease or increase in egg layers (boom and bust of AI '15), prices moved nearly 4-7 percent in the opposite direction.

## THE MOVEMENT DOWN WAS FASTER THAN THE WAY UP (m-o-m)

- Relationships are considerably stronger when shocks occur
- Market appears slightly less sensitive
- The model(s) have already priced in all fundamentals + shock factor changes.
- Last time, the downward correction removed some of this sensitivity, but – over the last 3 months (on the way down) it is back now to 16-fold !**

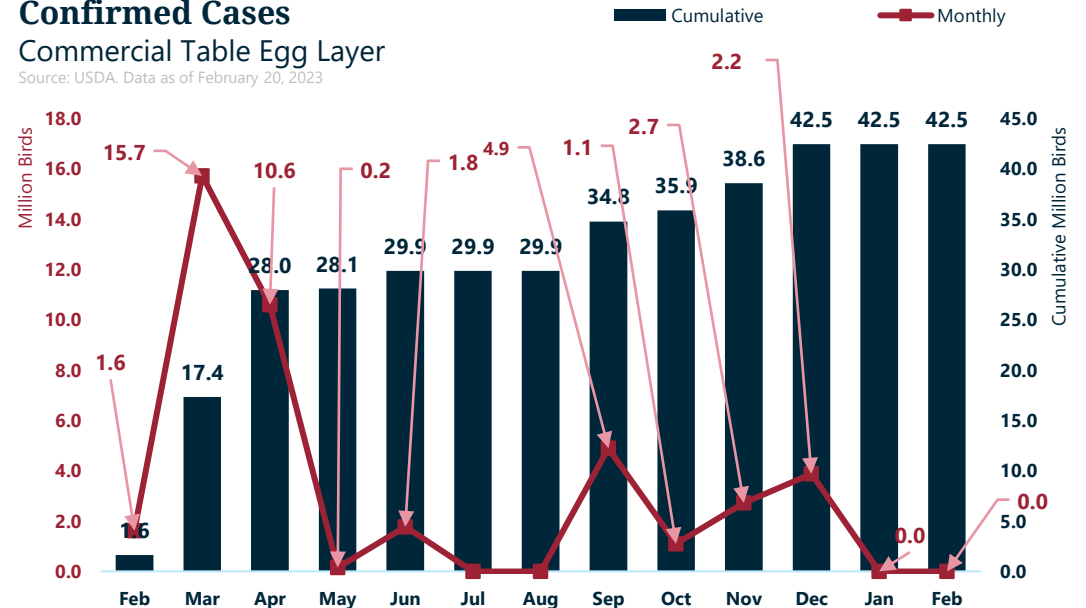
## EGG LAYERS vs. PRICE (AI '22)



## Confirmed Cases

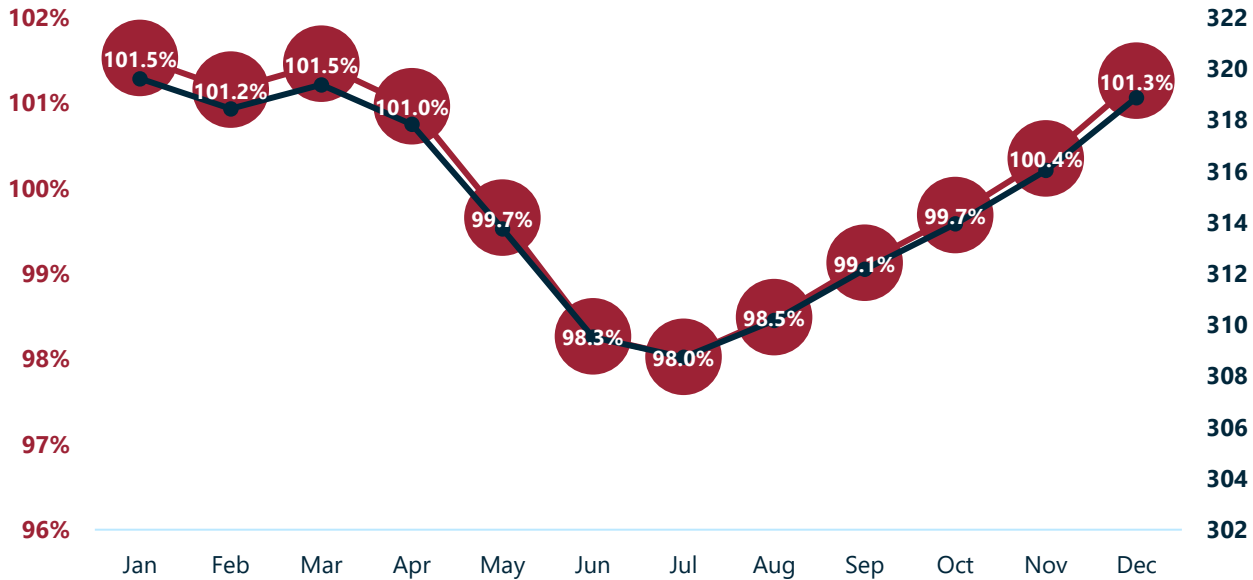
### Commercial Table Egg Layer

Source: USDA. Data as of February 20, 2023



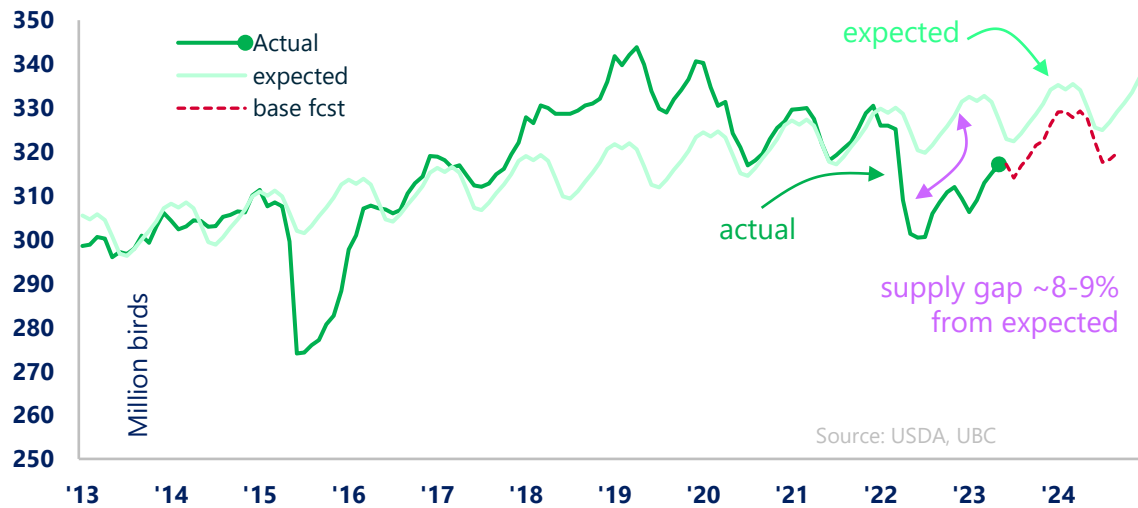
# Consider a 8 percent drop in Egg Layers from expected

## Seasonal Factor used (SF)



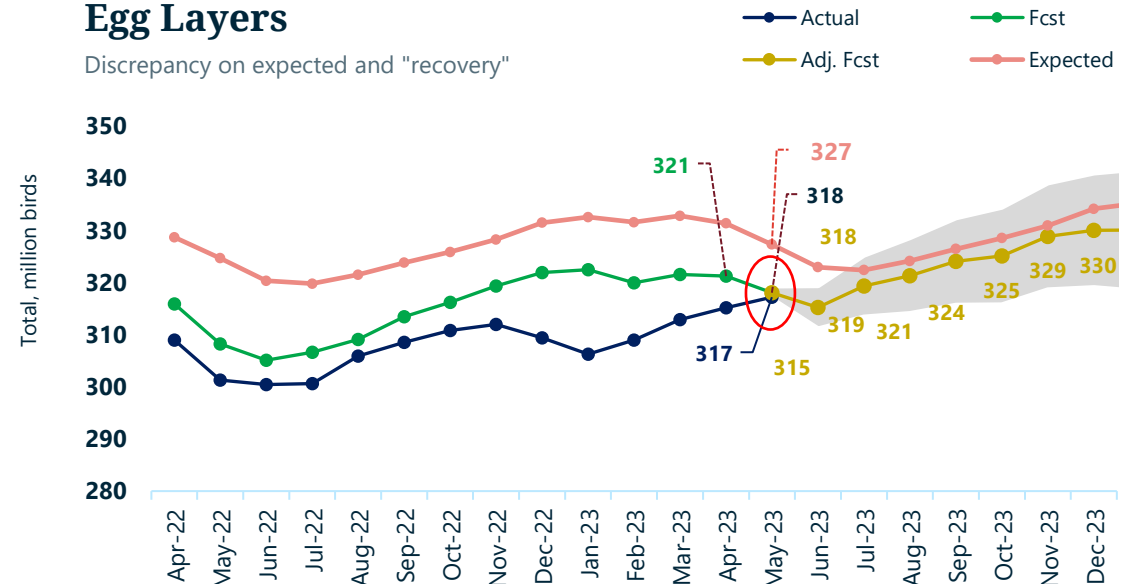
- Expected layers are based on historical AND population growth
- '22 – '23 running about an 8-9% gap (less now, at about 5%)
- Forecasts (fundamental) + seasonality + recovery vs. expected getting closer
- We expect Egg Layers to continue their recovery
- However, wholesale prices have adjusted considerably lower, near pre-pandemic thresholds.
- There is a demand destruction argument – still to be seen

## Egg Layers



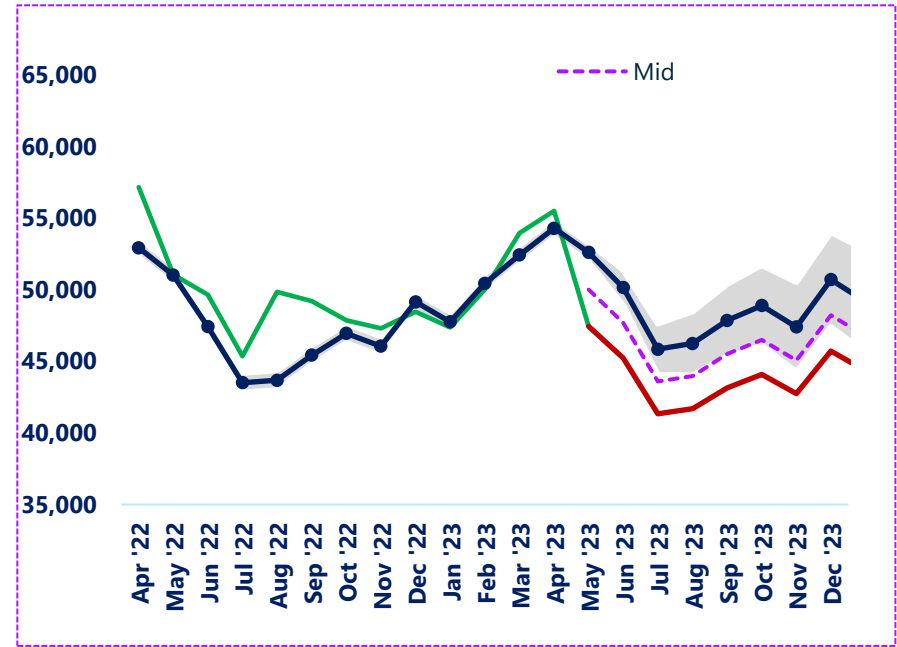
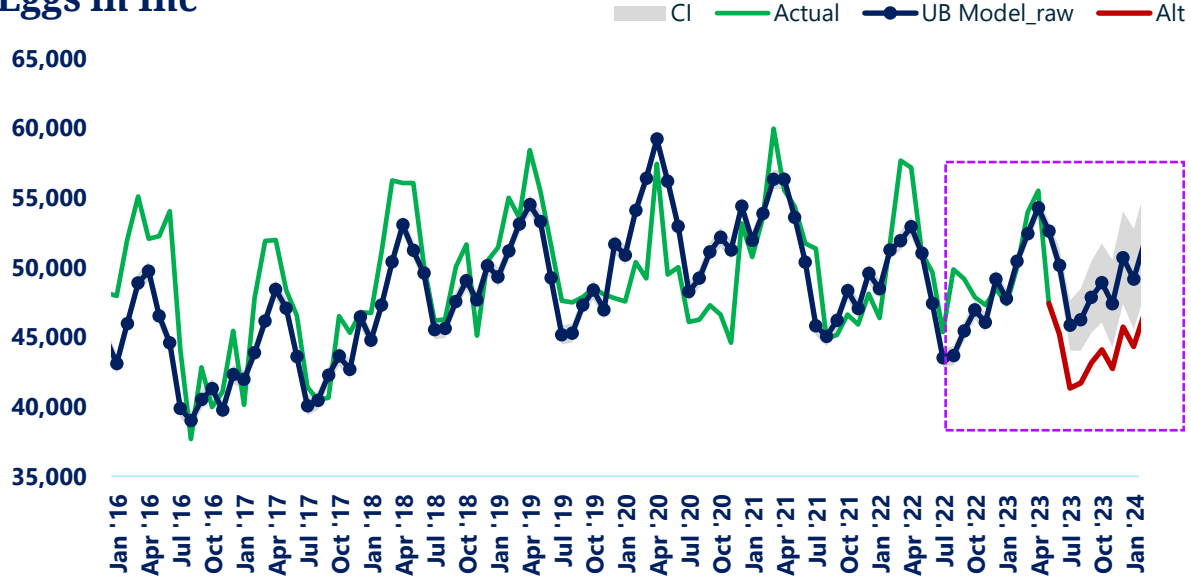
## Egg Layers

Discrepancy on expected and "recovery"



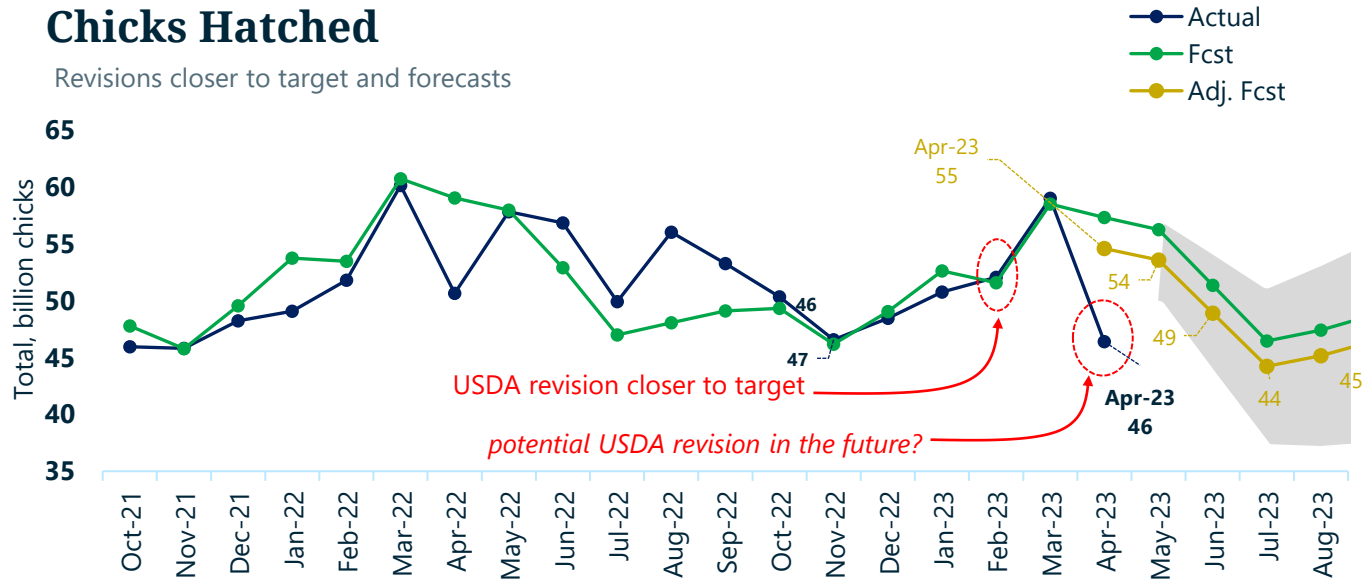
# Other relevant factors at play Inventory

## Eggs in Inc



## Chicks Hatched

Revisions closer to target and forecasts



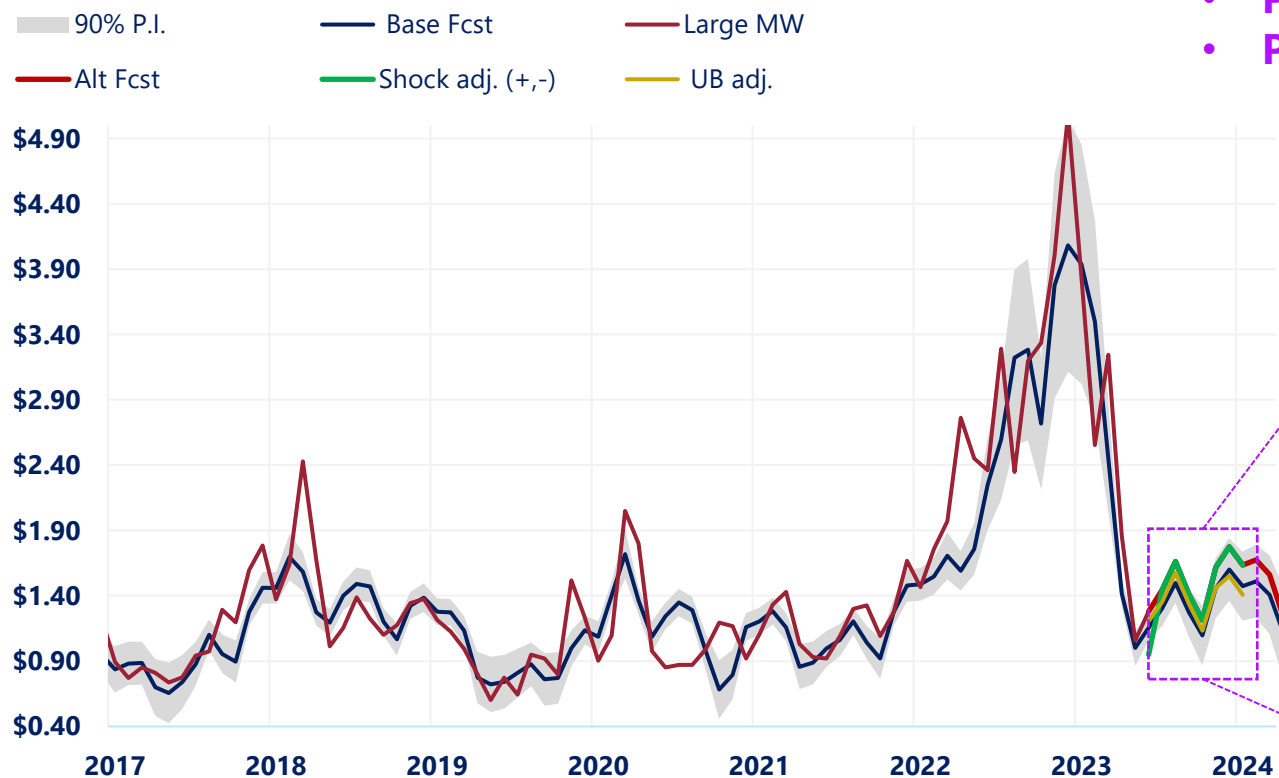
- Large drop in egg sets for May
- Could there be a revision?
- If not, we can expect the recovery to be slower
- Again, it is only one data point

# POLL QUESTION #3

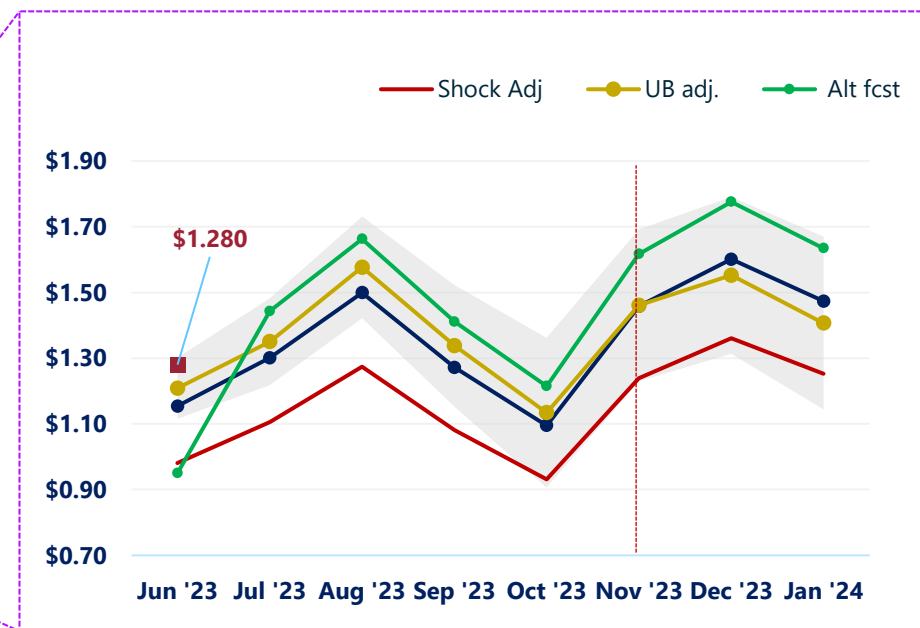


# Midwest Large

## Long Term Model, Large MW

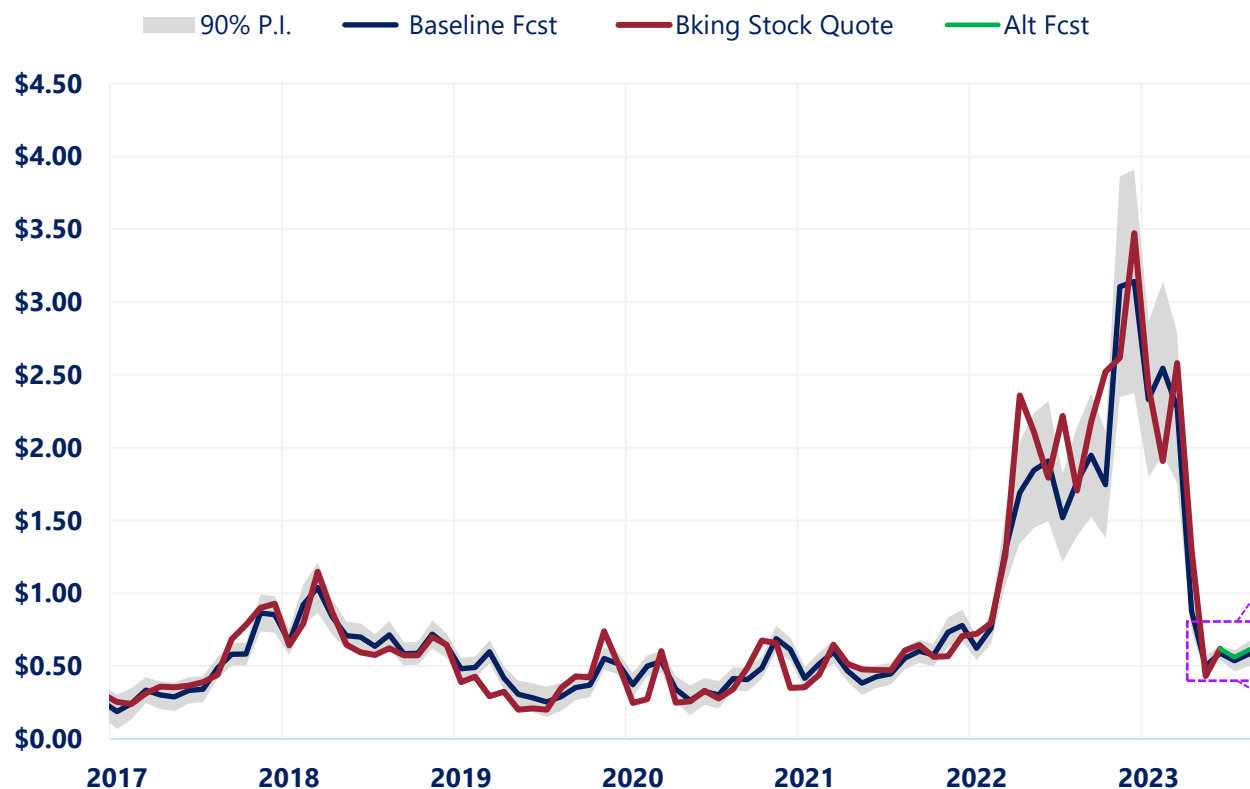


- Market is much more settled, and consistent with more FUNDAMENTALS (egg layers, cases broken, inventory, etc.)
- Price supportive at ~\$1.10
- Price resistant at ~\$1.80

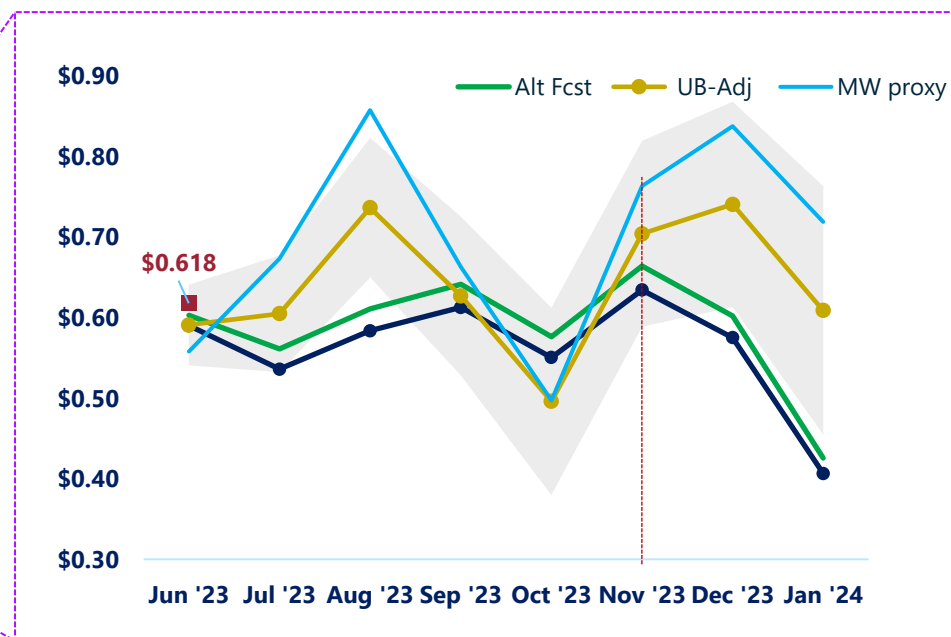


# Breaking Stock

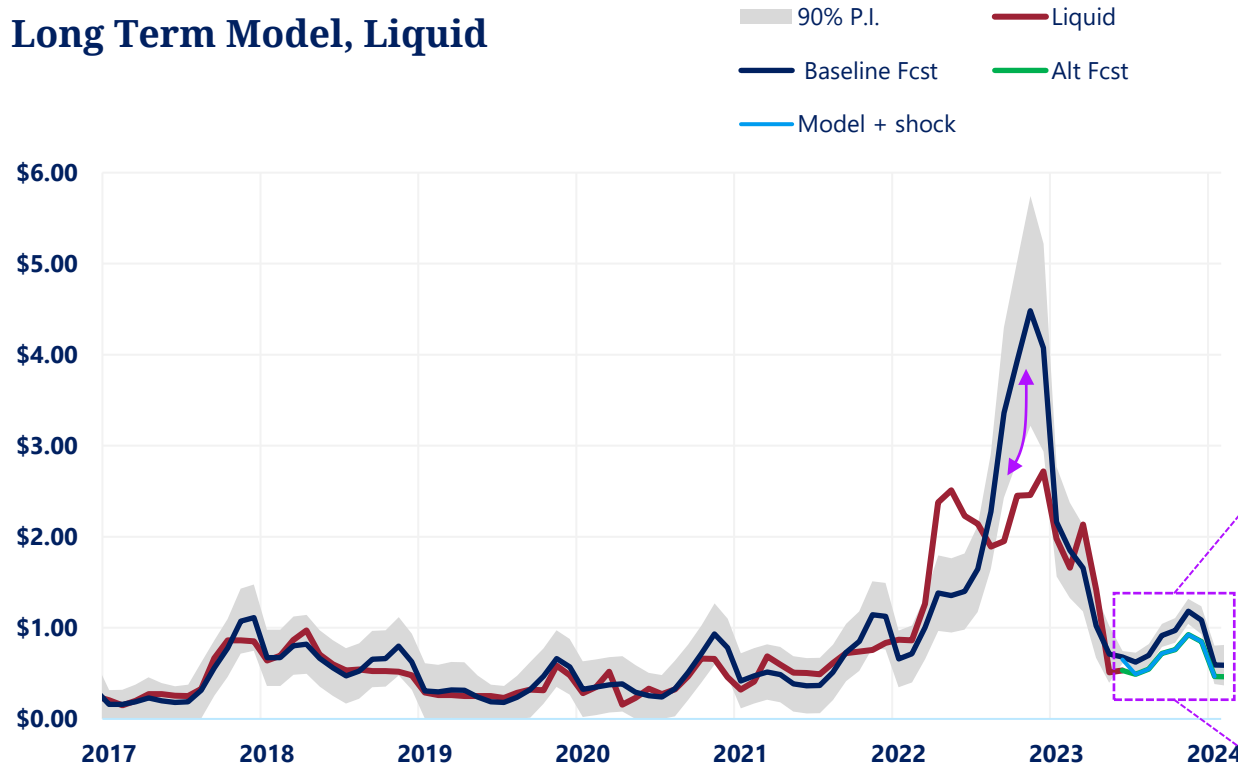
## Long Term Model, Bking Stock Quote



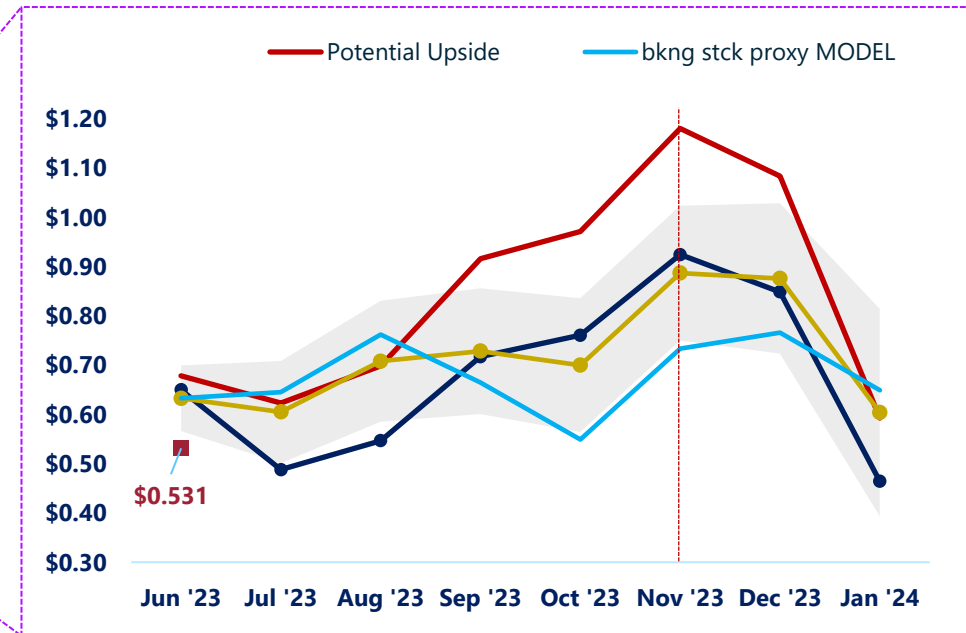
- Market is much more settled
- Model depends on fundamentals AND proxy
- Breaking stock inventory could suffer from:
  - strong demand for egg products
  - Cold storage replacement
- Price supportive at ~\$0.50
- Price resistant at ~\$0.85



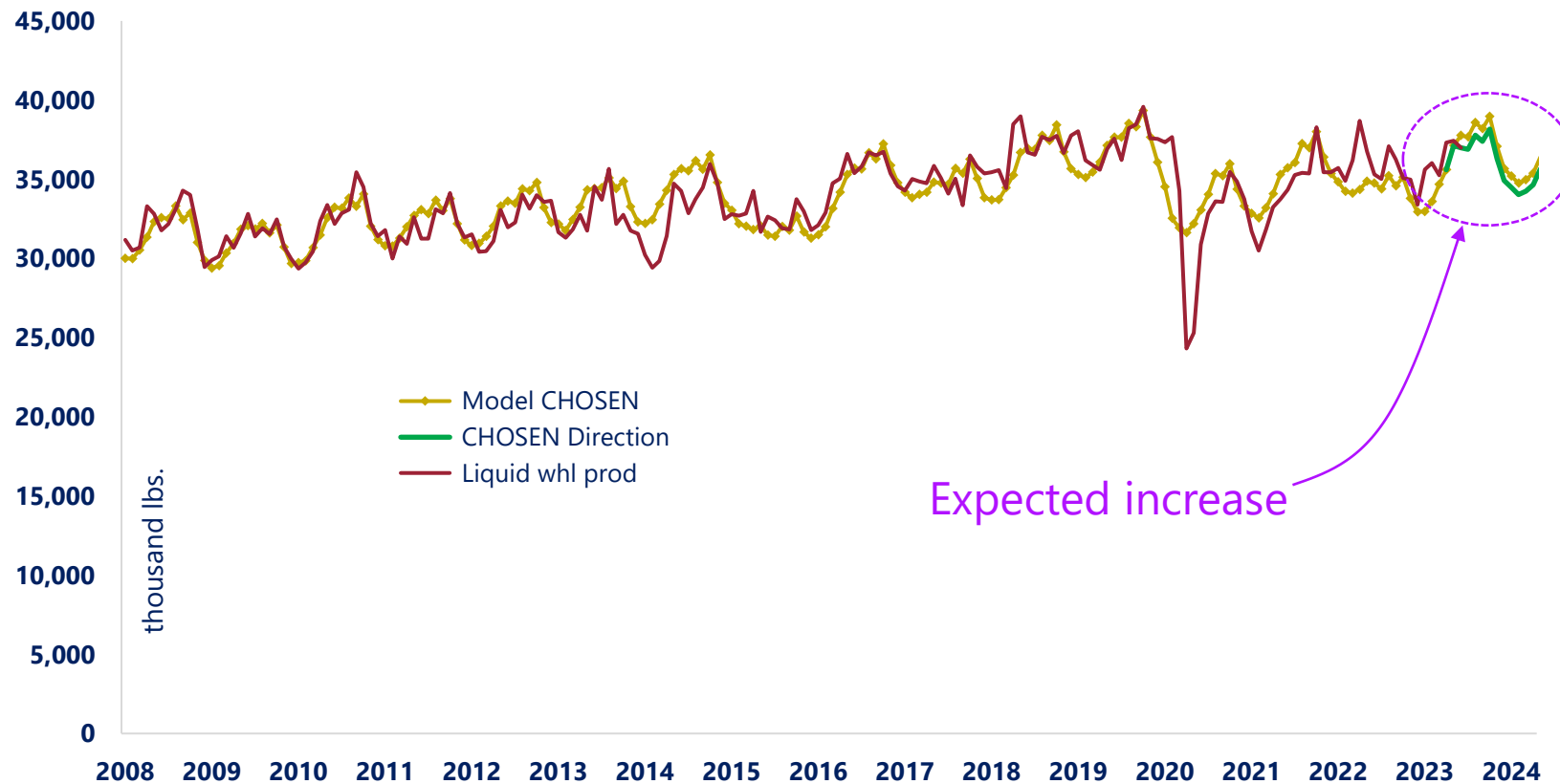
## Long Term Model, Liquid



- Liquid settling but could be slightly undervalued.
- Model depends on fundamentals and proxy
- Upside potential is high given:
  - Cold storage
- Price supportive at ~\$0.55
- Price resistant at ~\$1.00 +

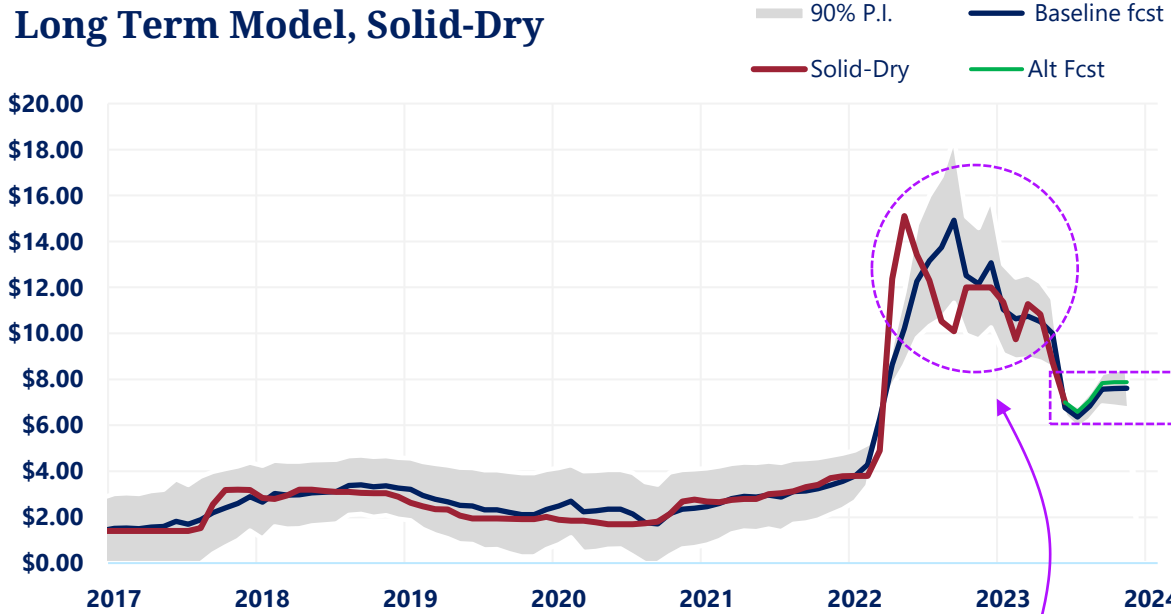


## Liquid whl prod Model through slope, and SF



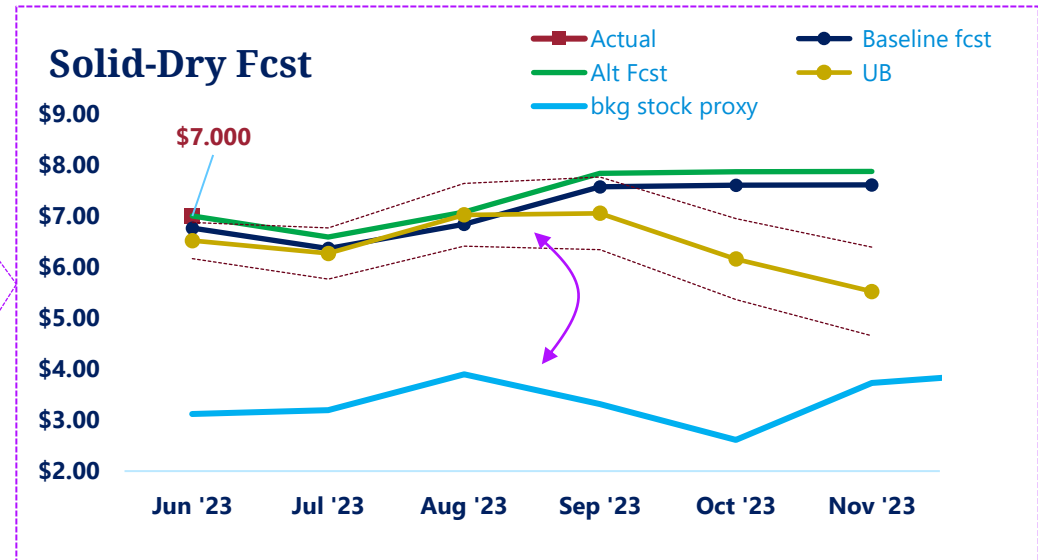
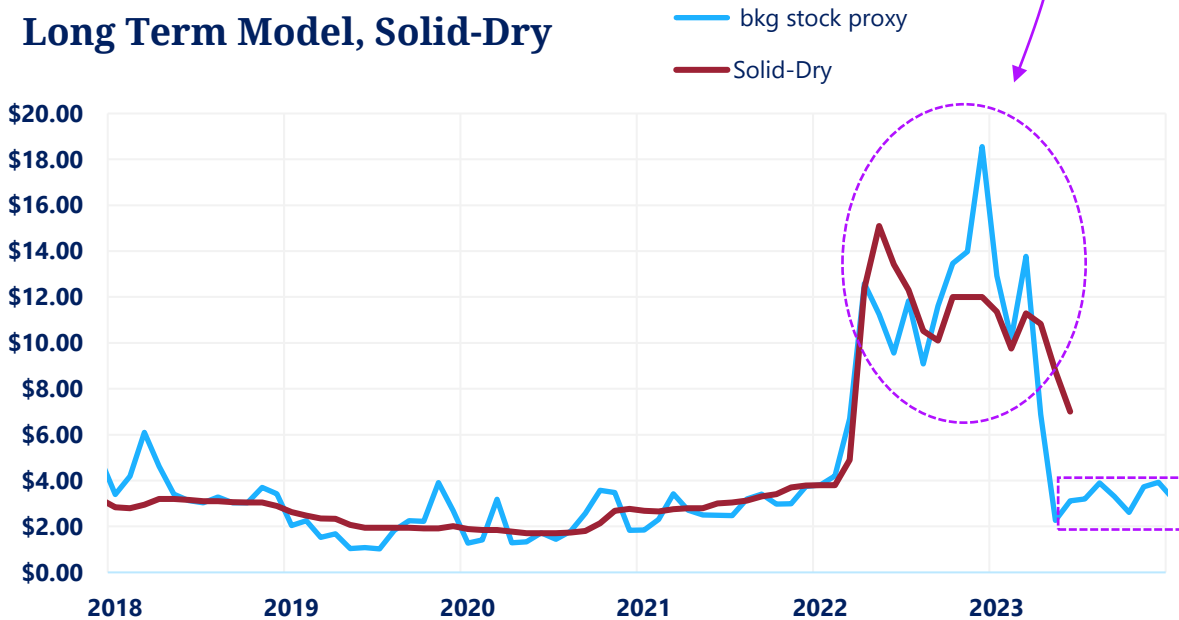
# Dry Whole

Long Term Model, Solid-Dry

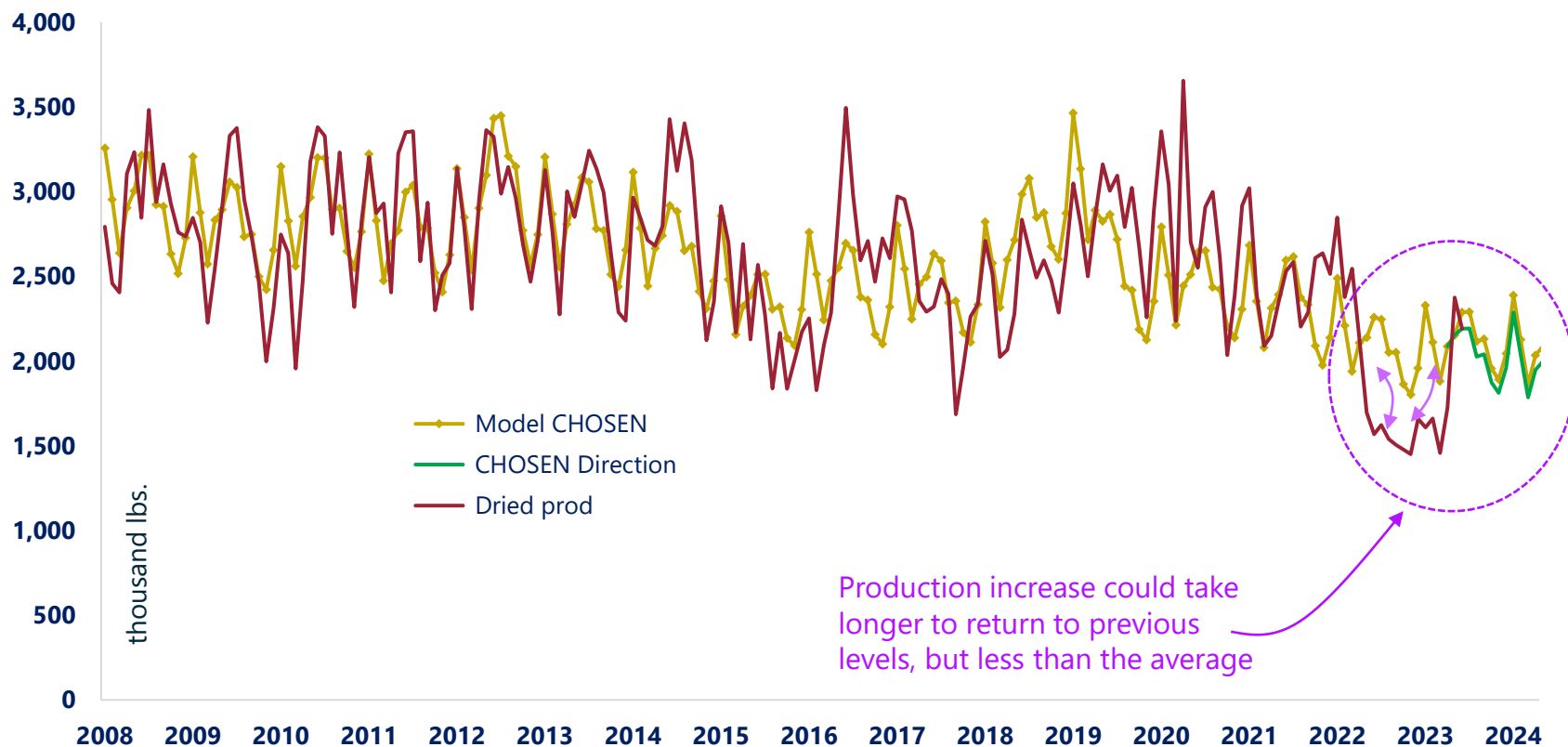


- Large discrepancy on dry egg
- Several reasons:
  - Production playing catch up
  - Inventory (no data)
  - Cold storage – only data
  - Proxy pricing
- Price supportive as low as ~\$3.00
- Price resistant as high as ~\$7.00

Long Term Model, Solid-Dry

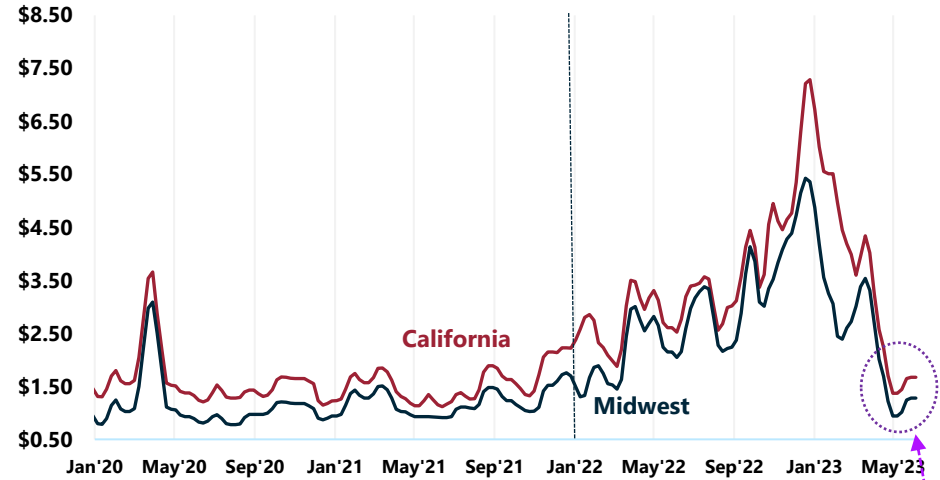


## Dried prod Model through slope, and SF



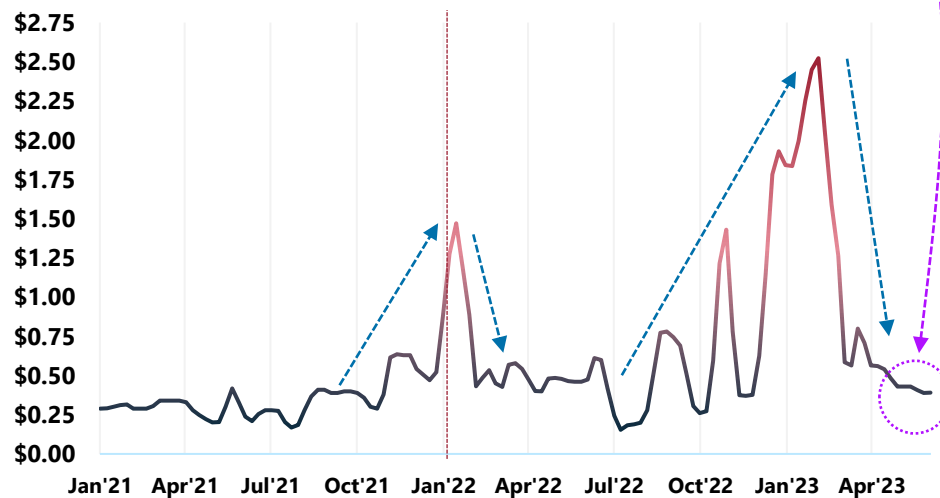
# CALIFORNIA, cage free

UB Shell Egg Quote



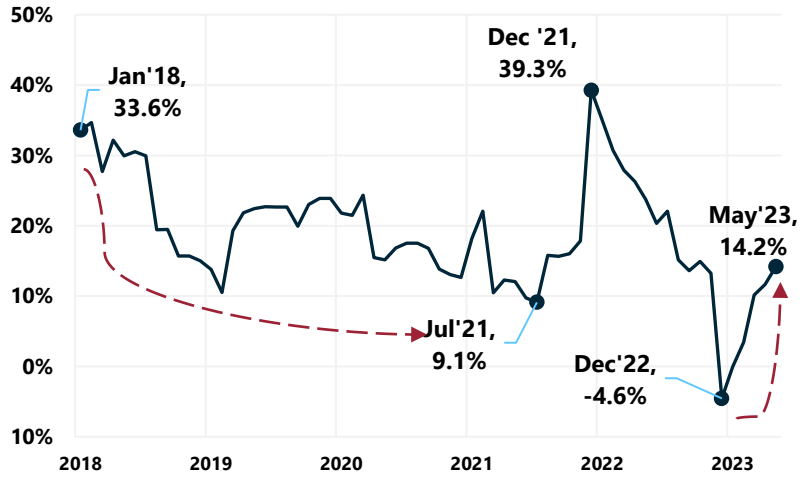
Source: Urner Barry

UB Shell Egg Spread, California vs Midwest



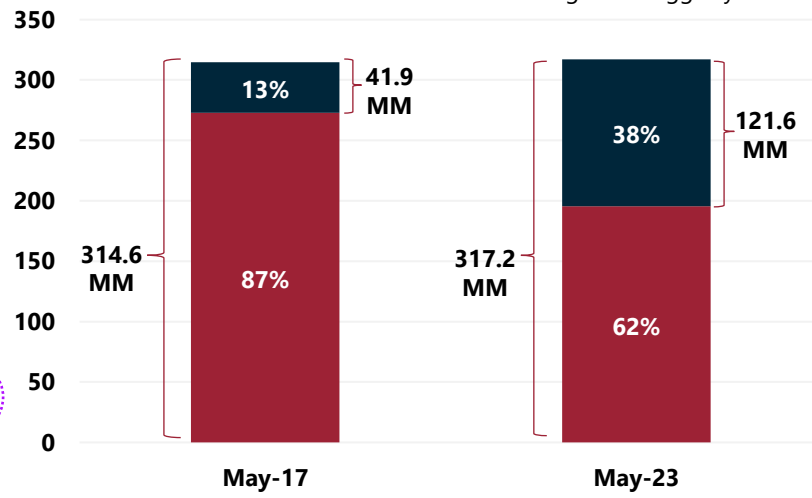
Source: Urner Barry

Cage-Free Layers YoY %  $\Delta$



Source: USDA, Urner Barry Consulting

Monthly Egg Layers by Type

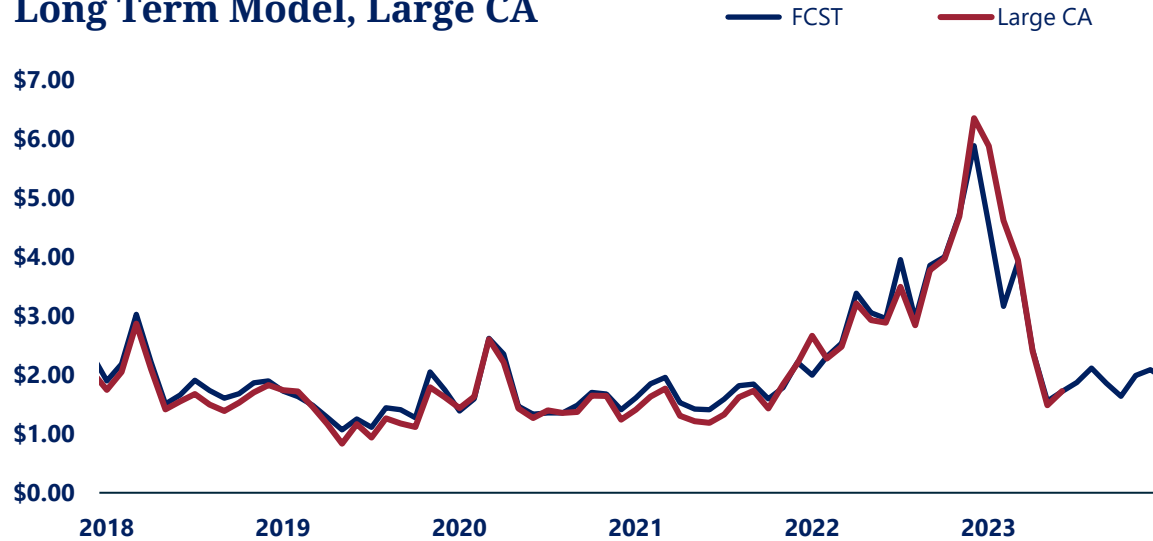


Source: USDA, Urner Barry Consulting

- Cage-free layers represent approximately 38% of the market – an increase of 190% from May 2017.
- On a year-over-year basis, we have been witnessing a deceleration of cage-free layers from the December 2021 peak.
- The market witnessed negative growth in cage-free layers in December 2022 and January 2023 (the first negative YoY % chg, since the creation of the data series)
  - Since, however, the population has been growing.
- The spread b/w California and Midwest reached record levels in February 2023 – reaching a high of \$2.52 (since the spread has corrected nearly 84.5%)
- Prior to 2020, the average weekly spread was \$0.31. For the week of June 5<sup>th</sup> the average spread was \$0.39 (still approximately 25.3% higher)

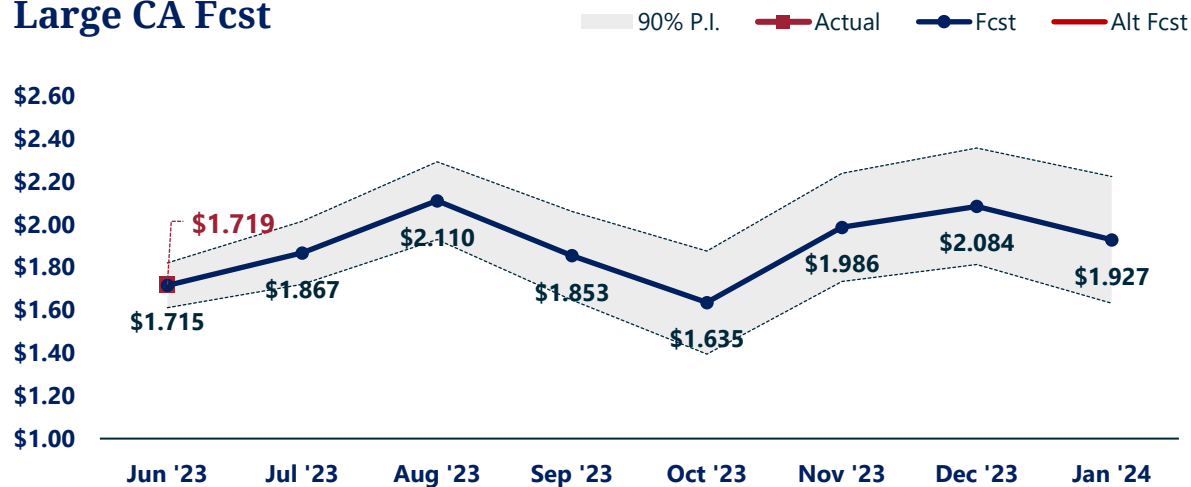
# CALIFORNIA, cage free

Long Term Model, Large CA



- Model suggests support at ~\$1.40 - \$2.30
- Proxy with MW Large, back to historical thresholds
- Thing to keep an eye-on
  - The rate at which cage-free layers get added relative to overall, AND conventional
  - Ongoing disruptor as more states implement cage-free requirements

Large CA Fcst





# Thank you

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