

# THE IMPACT OF INFLATION ON THE PORK CATEGORY

RETAIL ADVISORY COMMITTEE (RAC) /  
PACKER PROCESSOR INDUSTRY COUNCIL (PPIC) FALL MEETING  
DENVER, CO  
OCTOBER 6, 2022

---

DR. GLYNN T. TONSOR  
EMAIL: [GTONSOR@KSU.EDU](mailto:GTONSOR@KSU.EDU)  
TWITTER: [@TONSORGLYNN](https://twitter.com/TONSORGLYNN)



# Roadmap of Today's Discussion

1. Broadly Highlight Economic Situation
2. Share Recent Research Findings w/ Dr. Jayson Lusk
  - What Has Caused the Increase in Retail Pork Prices? (June 2022)
  - How Has Economy-Wide Inflation Impacted Consumer Sensitivity to Pork Prices (Sept. 2022)
3. Leverage Meat Demand Monitor Insights
4. Provide Context & Encouragement

<https://www.agmanager.info/livestock-meat/meat-demand>

A graphic featuring a black rounded rectangle with the words "MILLION DOLLAR QUESTION" in a yellow, dotted, marquee-style font. The rectangle is centered on a background of green and yellow US 100 dollar bills.

# MILLION DOLLAR QUESTION

# Are we in a recession?



# Are we in a recession?

➤ “...committee broadly defines a recession as a ***significant decline in economic activity spreading across the economy, lasting more than a few months.*** The committee considers a wide range of indicators...”

Federal Reserve Bank, 2009

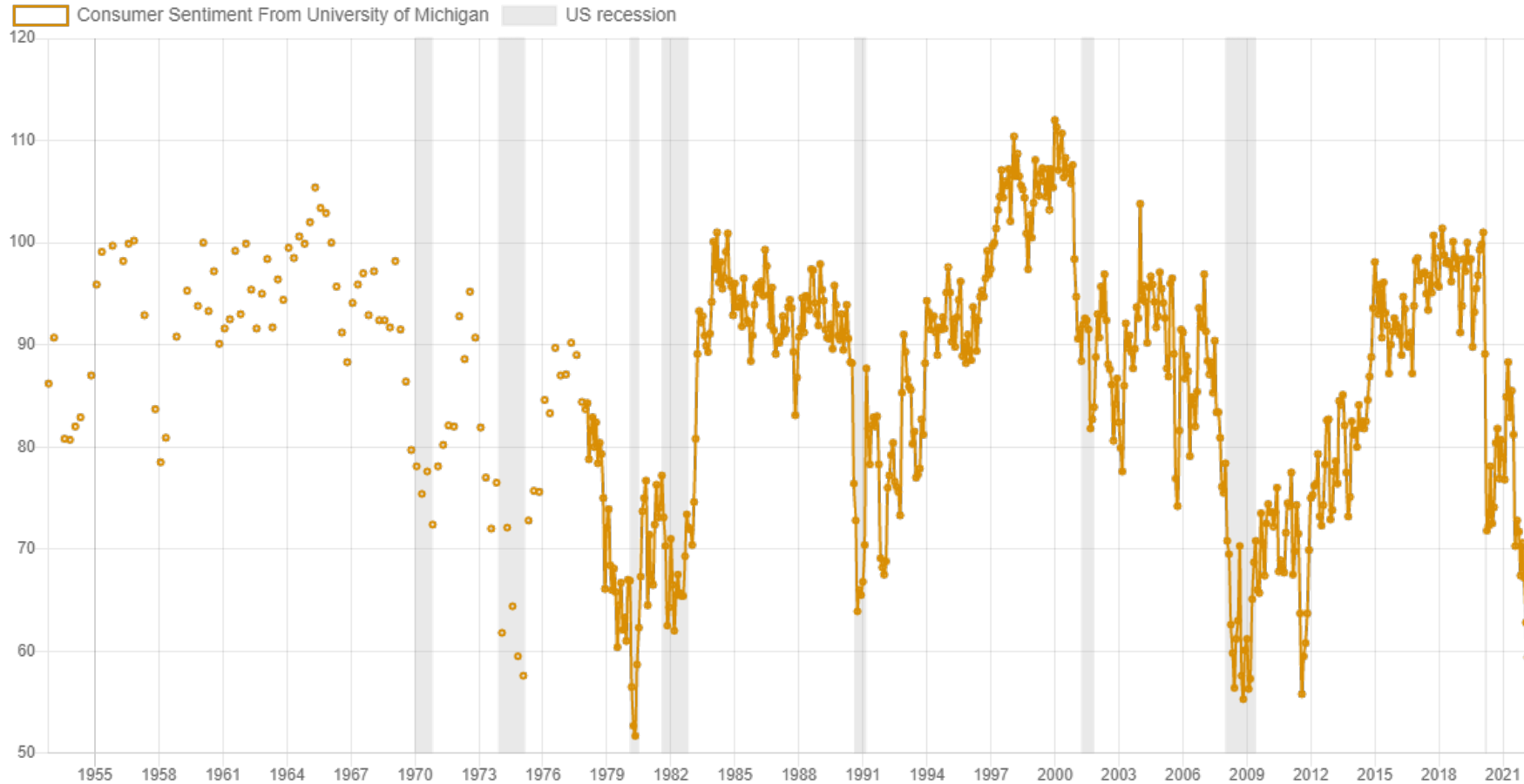
# Are we in a recession?

➤ “...committee broadly defines a recession as a ***significant decline in economic activity spreading across the economy, lasting more than a few months.*** The committee considers a wide range of indicators...” [Federal Reserve Bank, 2009](#)

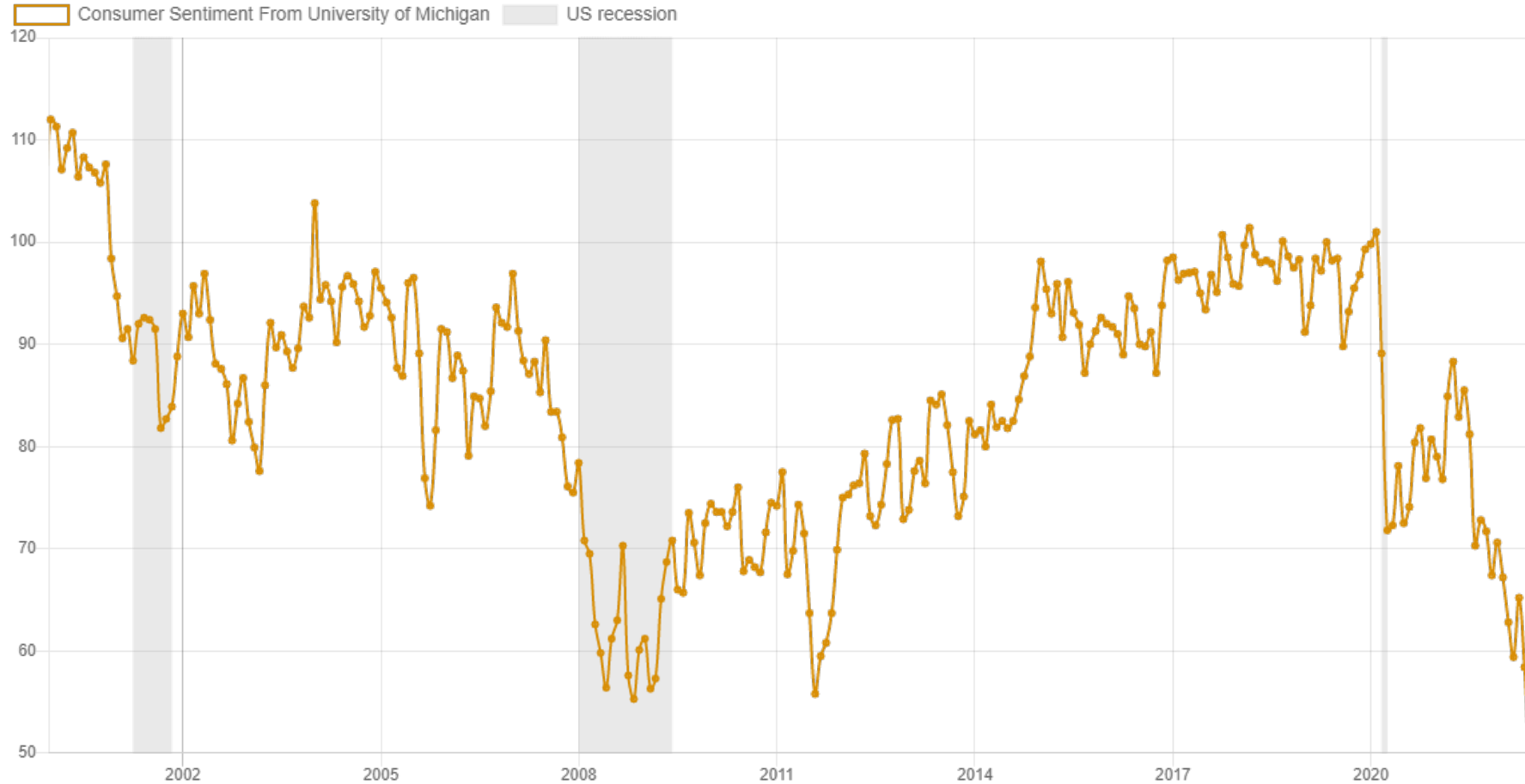
➤ While NOT a macroeconomist, GT's take:

Regardless of formal definition, and hence official Yes/No scoring of recessions, consumer behavior matters!

# Consumer Sentiment Evolves & Matters for Demand

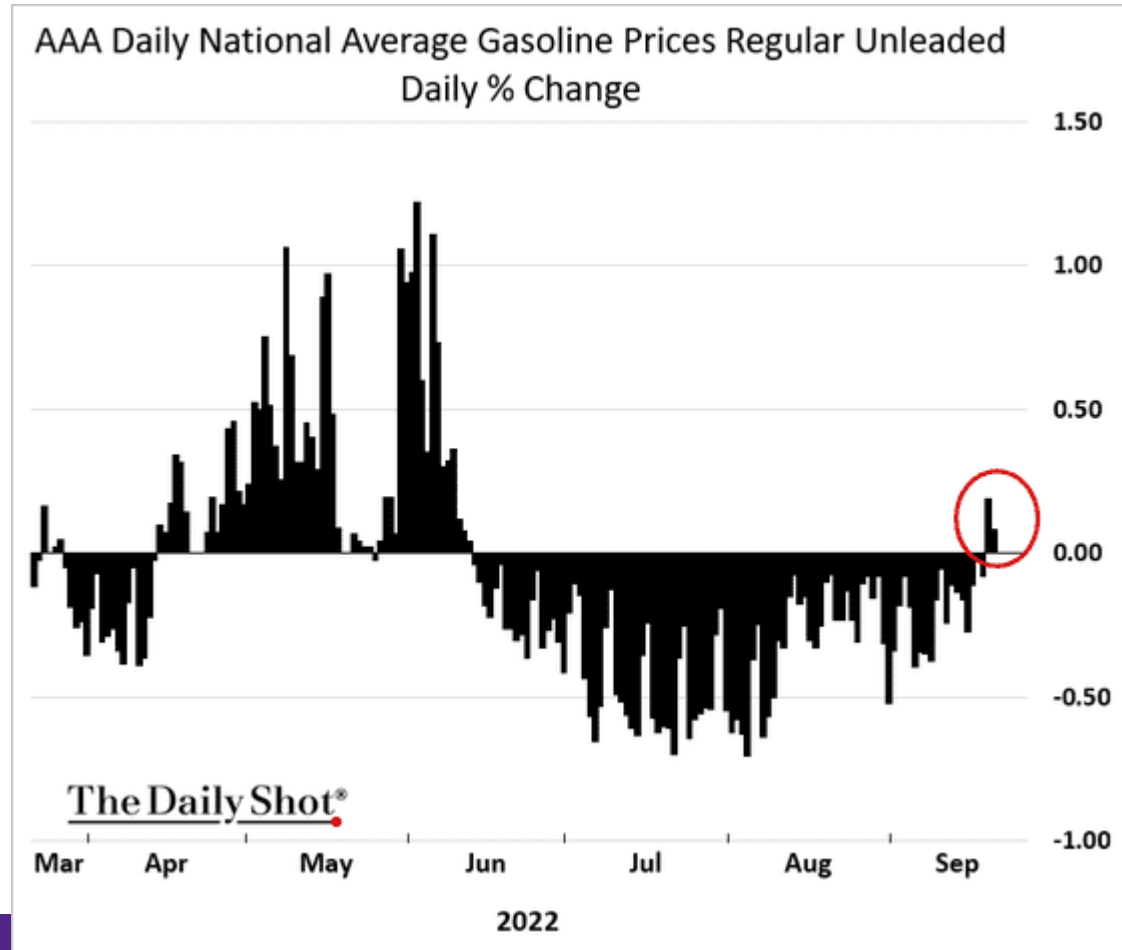


# Consumer Sentiment Evolves & Matters for Demand

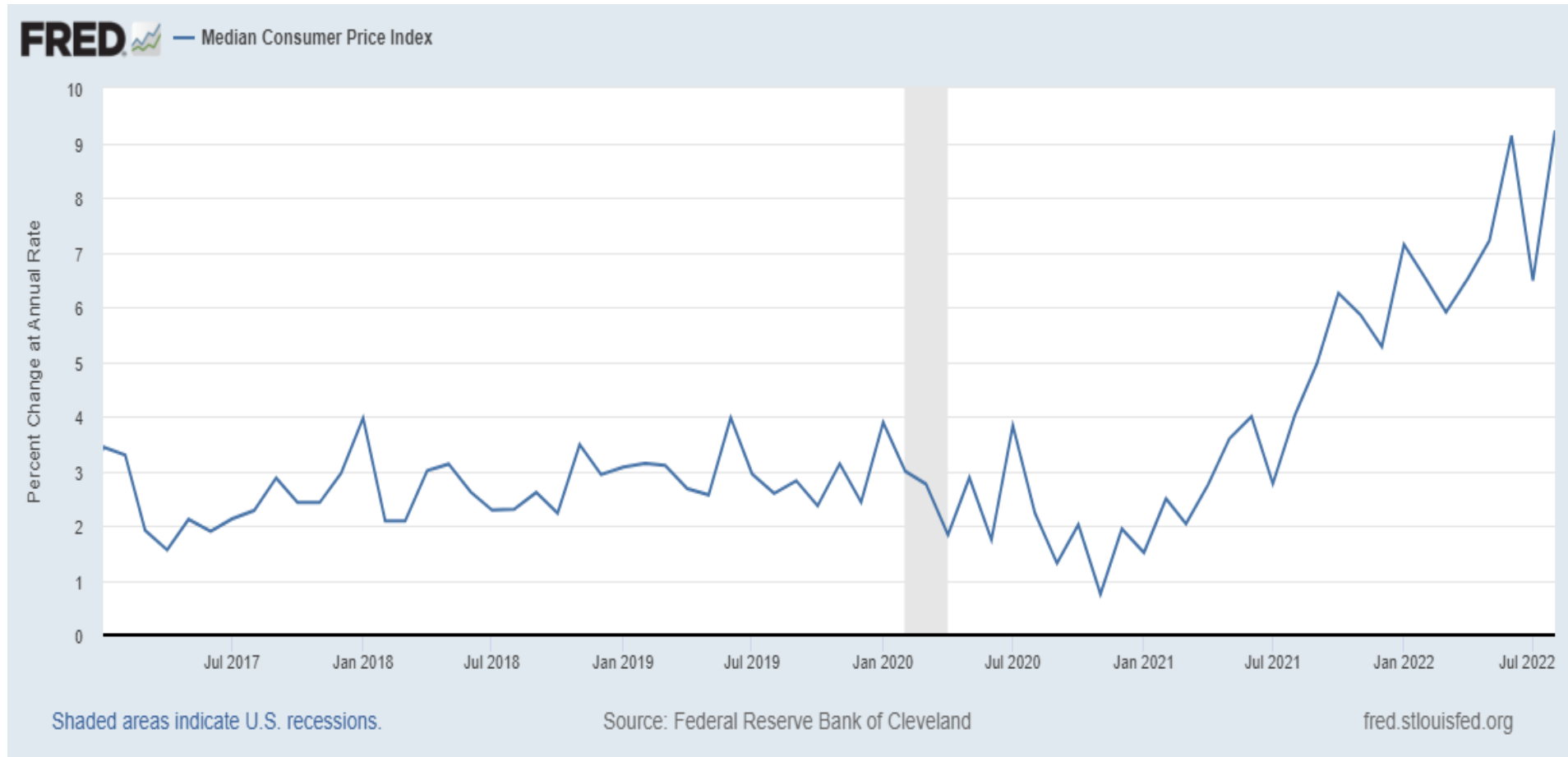




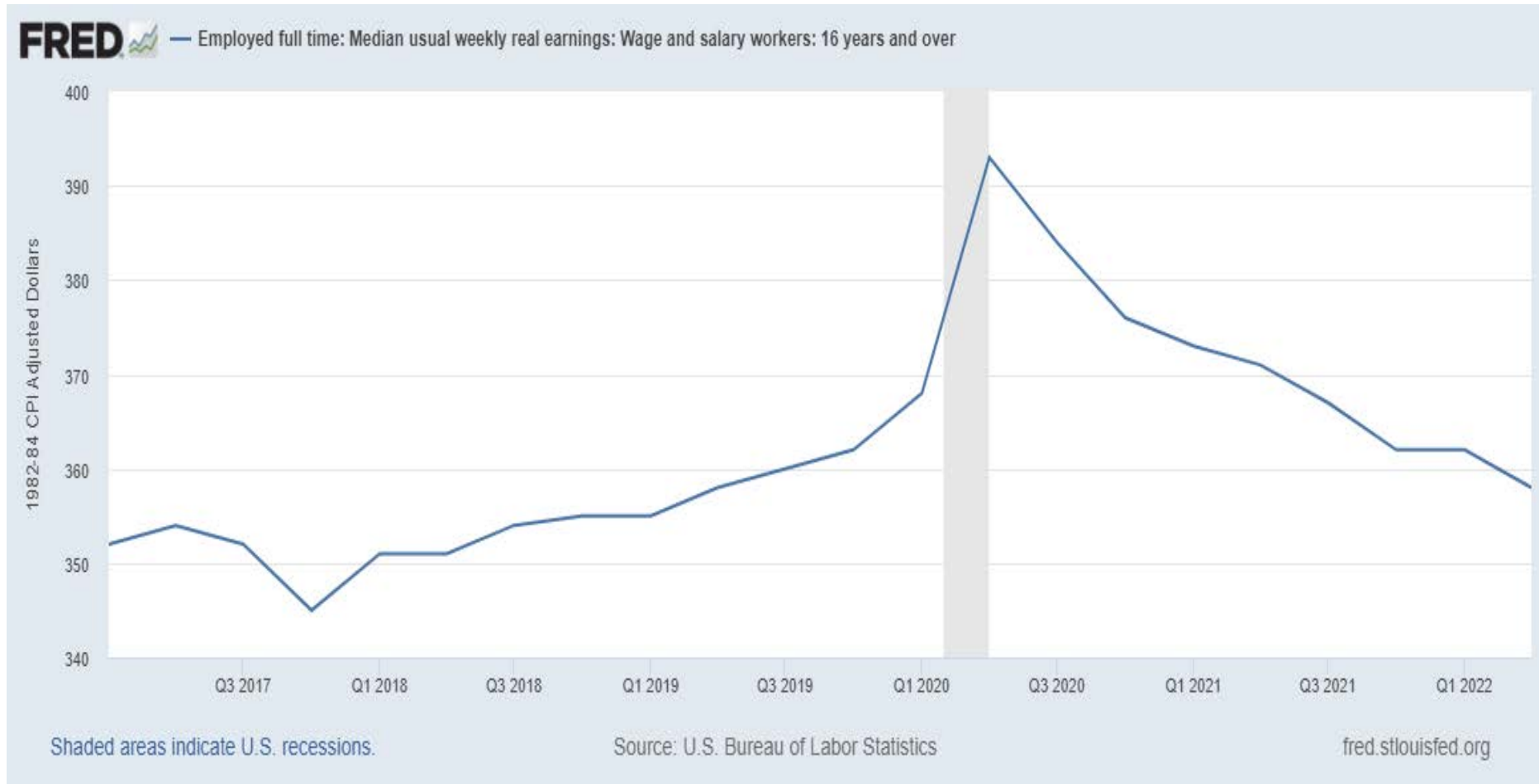
# Consumer Sentiment Evolves & Matters for Demand



# Inflation in U.S. Highest in 4 Decades



# Real Wages Are Key



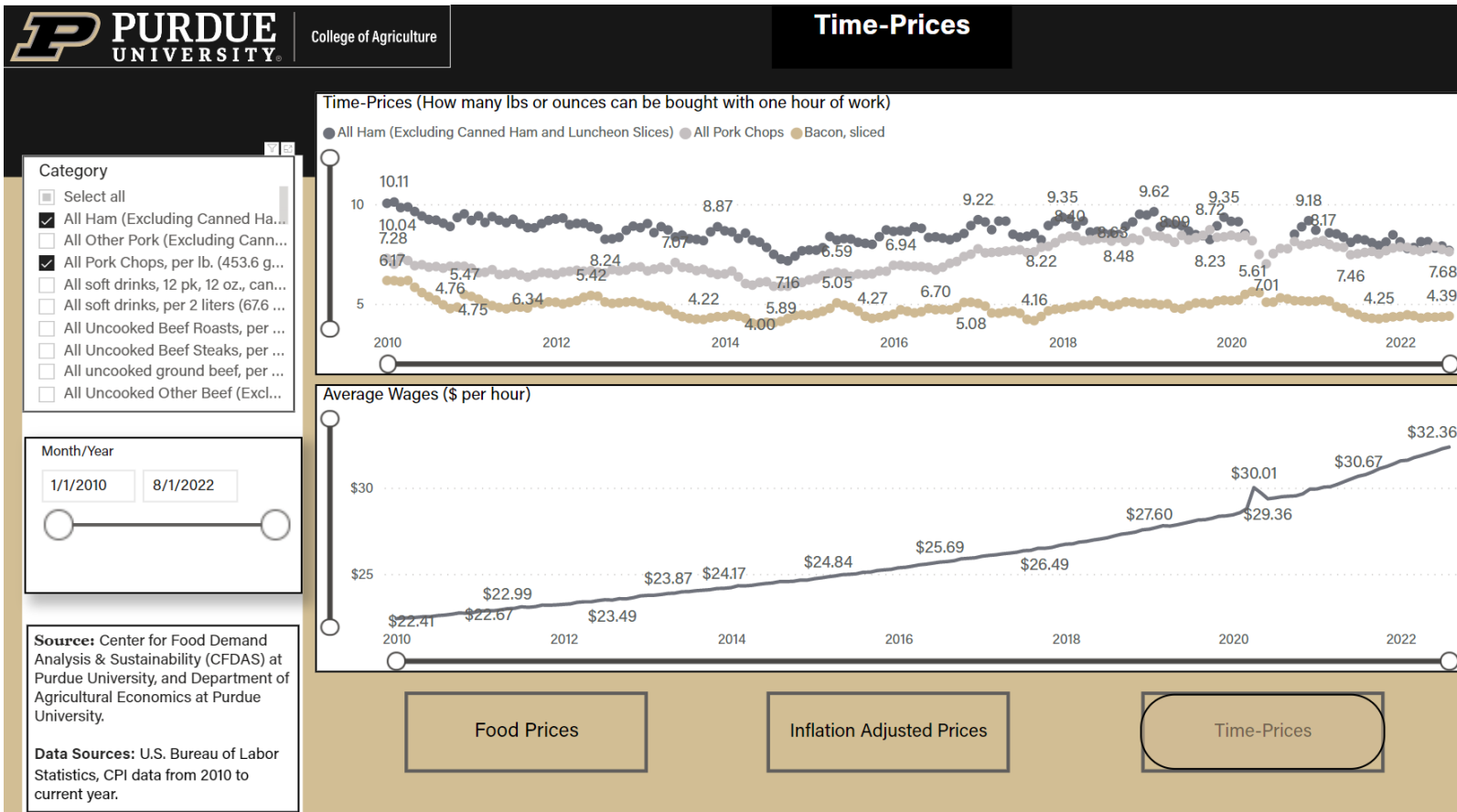
# Purdue's Dashboard: Pork Prices (\$/lb) Relative to Average Wages (\$/hr)

Jan. 2020, 1 hr work =

9.1 lbs ham  
8.4 lbs pork chop  
5.1 lbs bacon

Aug. 2022, 1 hr work =

7.7 lbs ham  
7.6 lbs pork chop  
4.4 lbs bacon

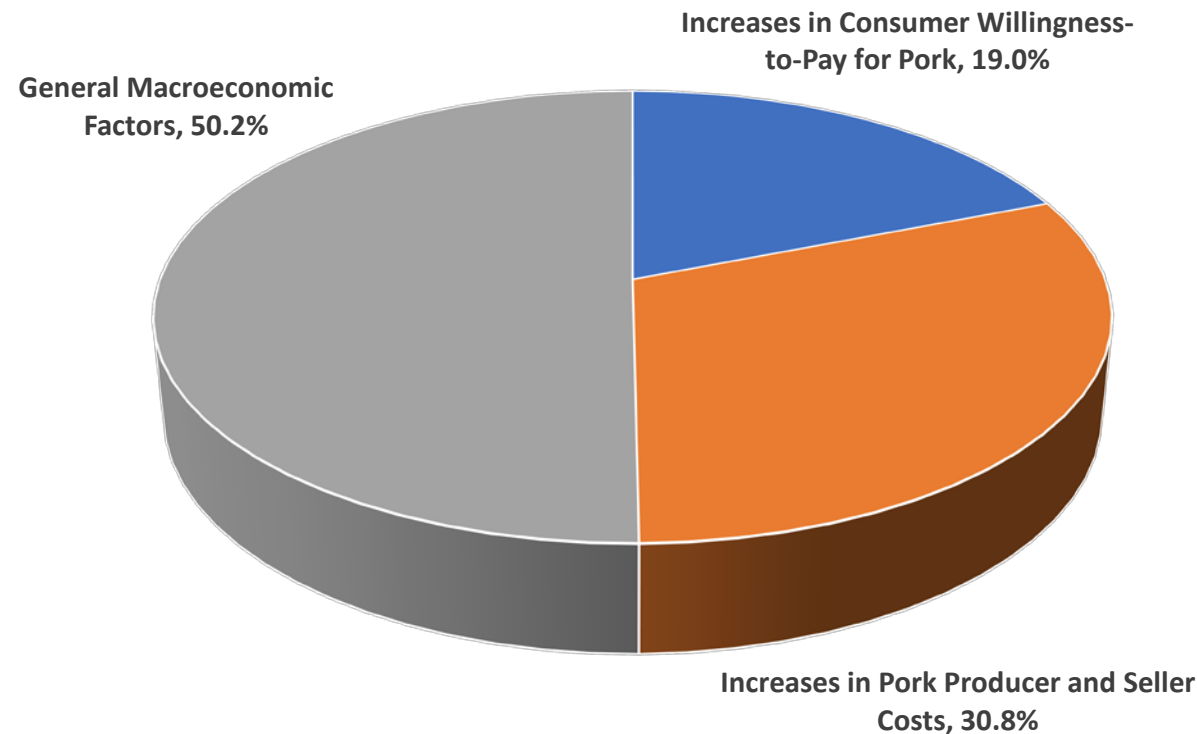


# What Underlies Higher Retail Pork Prices?

- Supply-Drivers
  - “Pushing up” prices?
- Demand-Drivers
  - “Pulling up” prices?
- Broader Macroeconomic Drivers
  - Historic increase in money supply underpin general inflation?

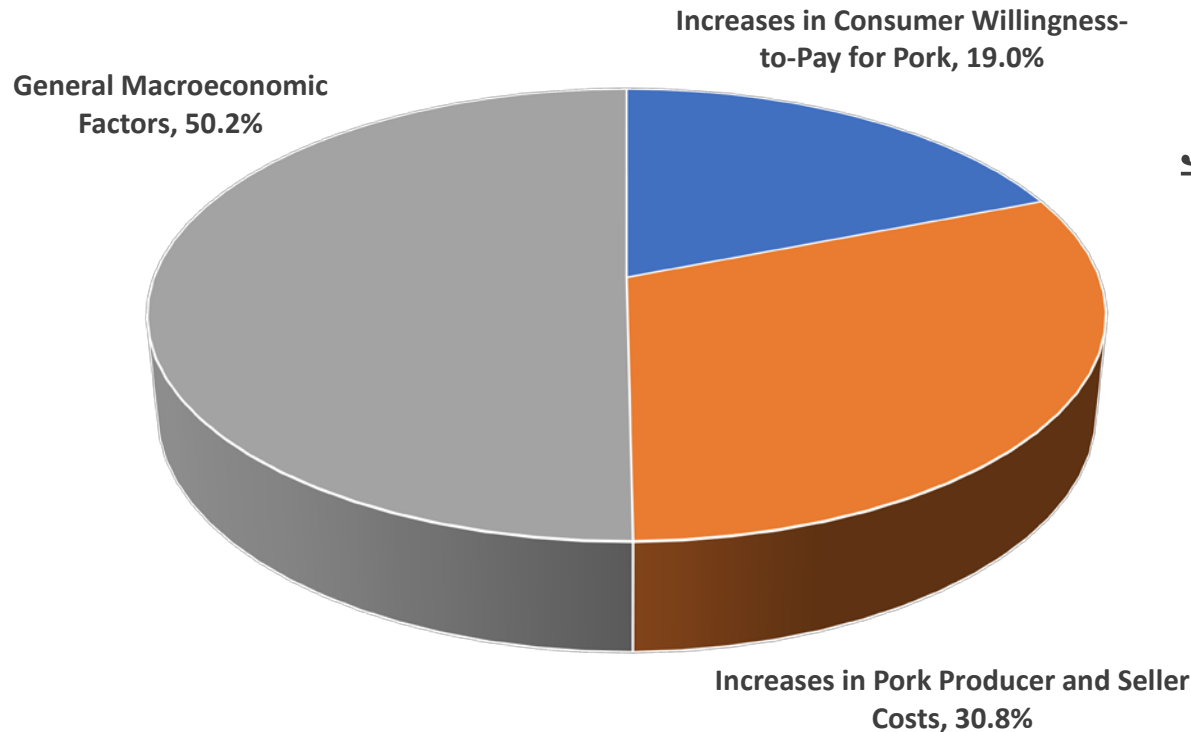
# What Underlies Higher Retail Pork Prices?

## Relative Drivers of Change in Retail Pork Prices January 2020 to April 2022



# What Underlies Higher Retail Pork Prices?

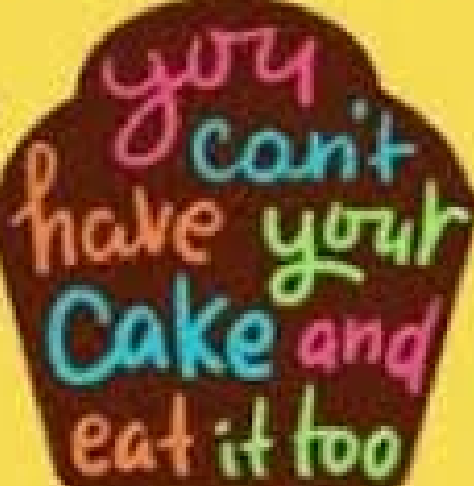
## Relative Drivers of Change in Retail Pork Prices January 2020 to April 2022



Jan 2020 – Apr 2022, Nominal Retail Pork +27.3%

- +13.7% from macroeconomic pressures
- +8.4% from inner-industry supply-side factors
- +5.2% from pork demand factors

# ENGLISH PROVERB



you  
can't  
have your  
cake and  
eat it too

You can't  
have your  
cake and  
eat it too



# ENGLISH PROVERB

you  
can't  
have your  
cake and  
eat it too

You can't  
have your  
cake and  
eat it too



There are no solutions; there are  
only trade-offs.

— Thomas Sowell —

AZ QUOTES

# How is Elevated Inflation Impacting Pork Price Sensitivity?

## First Consider Econometric Evidence from IRI Data

- Jan 2017 – Aug 2022, 51 U.S. Retail Pork Markets (n=14,208)

**Table 1. Own-Price Elasticity Estimates, Across CPI-Delineated Regimes (Mixed Model Approach)**

CPI Regime	Loin	Ribs	Shoulder	Breakfast Sausage	Dinner Sausage	Bacon	Pork (Aggregate)
CPI Regime 1 (Under 2.5%)	-0.488	-1.286	-1.746	-3.972	-1.122	-1.773	-0.676
CPI Regime 2 (2.5%-3.0%)	-0.547	-1.399	-1.680	-4.141	-1.218	-1.798	-0.830
CPI Regime 3 (3.0%-4.0%)	-0.466	-1.596	-1.646	-4.068	-1.256	-1.783	-0.677
<b>CPI Regime 4 (Over 4.0%)</b>	<b>-1.003</b>	-1.467	-1.961	-4.299	-1.088	-1.789	<b>-1.246</b>

# How is Elevated Inflation Impacting Pork Price Sensitivity?

■ Jan 2017 – Aug 2022, 51 U.S. Retail Pork Markets (n=14,208)

**Table 2. Own-Price Elasticity Estimates, Across Calendar Years (Mixed Model Approach)**

Year	Loin	Ribs	Shoulder	Breakfast Sausage	Dinner Sausage	Bacon	Pork (Aggregate)
2017	-0.713	-1.932	-1.700	-4.387	-1.497	-1.604	-0.781
2018	-0.491	-1.706	-1.747	-4.081	-1.403	-2.235	-0.721
2019	-0.512	-1.917	-1.673	-3.914	-1.498	-2.256	-0.923
2020	-0.411	-1.556	-1.633	-3.841	-1.283	-2.069	-0.735
2021	-0.728	-1.273	-1.801	-4.020	-0.934	-1.384	-0.999
2022 (January-August)	<b>-1.037</b>	-1.805	-1.830	-4.222	-1.605	-1.931	<b>-1.182</b>

# How is Elevated Inflation Impacting Pork Price Sensitivity?

- Jan 2017 – Aug 2022, 51 U.S. Retail Pork Markets (n=14,208)

- Implication Example Consideration:

- *If price sensitivity increasing in LOIN category should industry adjust marketing, promotion, featuring activity of LOIN products?*

# How is Elevated Inflation Impacting Pork Price Sensitivity?

Now Consider Trends in Meat Demand Monitor (MDM)

# Monthly Meat Demand Monitor, Methods, and Supporting Information

Home / Livestock & Meat / Meat Demand / Monthly Meat Demand Monitor [Survey Data]

**KANSAS STATE UNIVERSITY** | Agricultural Economics

[Sign up for weekly email updates.](#)

[K-State College of Agriculture Links](#)

[Agronomy](#)

[Animal Science](#)

[Kansas Ag Mediation Service \(KAMS\)](#)

[Extension Agent Link](#)

## Livestock & Meat

[Projected Feeder Cattle Prices](#)

[Cattle Finishing Returns](#)

[Meat Demand](#)

[Maps - Meat Demand](#)

[Meat Demand Research Studies](#)

[Monthly Domestic Meat Demand Indices \[USDA/BLS Data\]](#)

[Monthly Export Meat Demand](#)

## Monthly Meat Demand Monitor [Survey Data]

[Add to Favorites](#)



The Meat Demand Monitor (MDM) project is funded in-part by the beef checkoff and the pork checkoff. Monthly reports and supporting documentation are available here.



[Meat Demand Monitor Dashboard \(National Maps & State-Level Summaries\)](#)

[LINK](#)

## Monthly Meat Demand Monitor

Title	Author	Date	Downloads
<a href="#">Meat Demand Monitor - August 2022</a>	Tonsor	September 1, 2022	<a href="#">Downloads</a>
<a href="#">Meat Demand Monitor - July 2022</a>	Tonsor	August 5, 2022	<a href="#">Downloads</a>
<a href="#">Meat Demand Monitor - June 2022</a>	Tonsor	July 1, 2022	<a href="#">Downloads</a>

# How is Elevated Inflation Impacting Pork Price Sensitivity?

## Trends in Meat Demand Monitor (MDM)

- Q2.2021 to Q2. 2022
  - Reported household income: up 0.3%
  - Spending on food for at-home consumption: up 6.4%
  - Spending on food for away-from-home consumption: up 1.4%

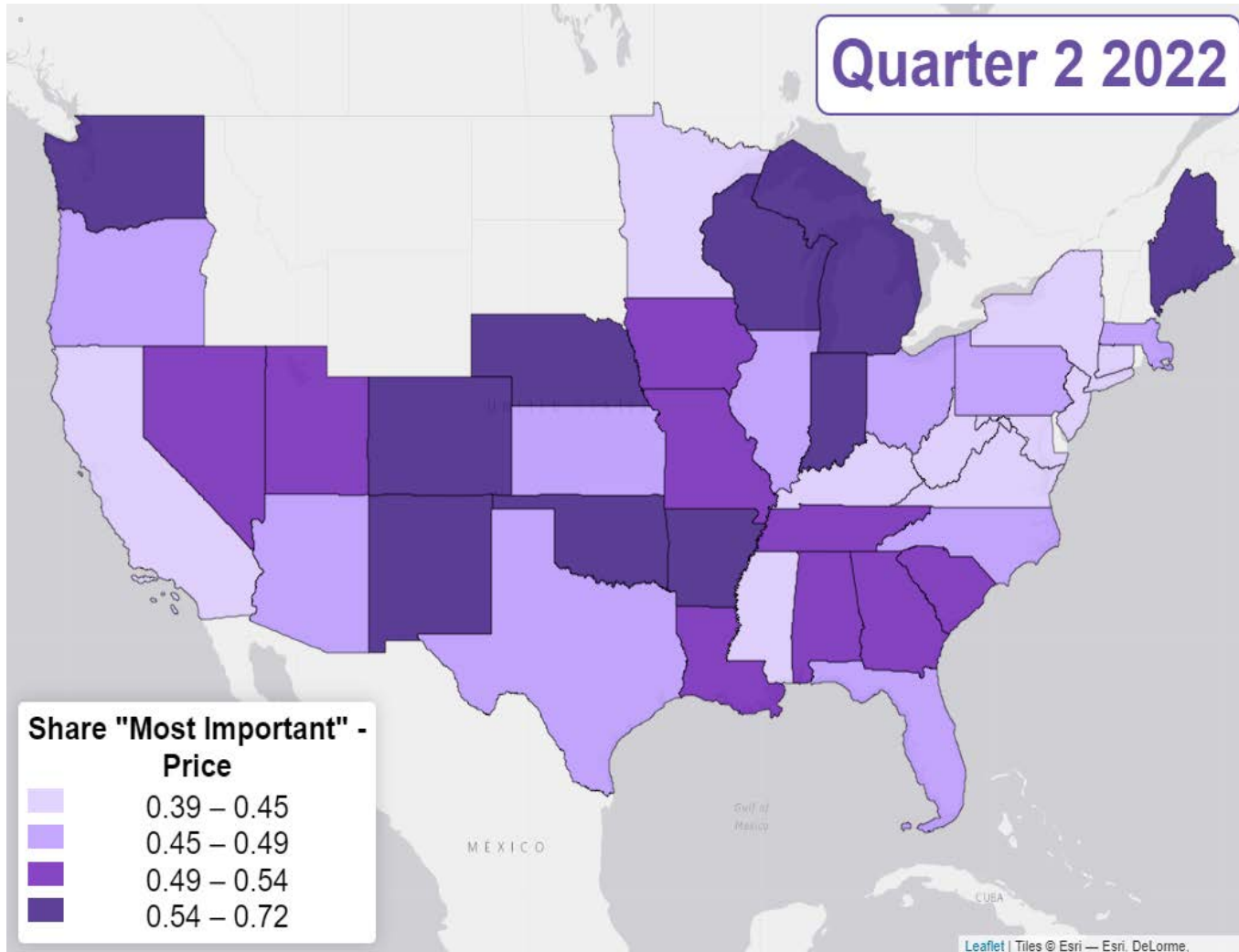
# How is Elevated Inflation Impacting Pork Price Sensitivity?

## Trends in Meat Demand Monitor (MDM)

- Q2.2021 to Q2. 2022
  - Reported household income: up 0.3%
  - Spending on food for at-home consumption: up 6.4%
  - Spending on food for away-from-home consumption: up 1.4%
- Protein Values & Relative Role of Price
  - Q2.2021 46.3% indicated Price was a top 4 consideration
  - Q2.2022 48.2% indicated Price was a top 4 consideration



## Share Indicating Price is Top Protein Purchasing Factor, Q2.2022 (Source: Meat Demand Monitor Dashboard)



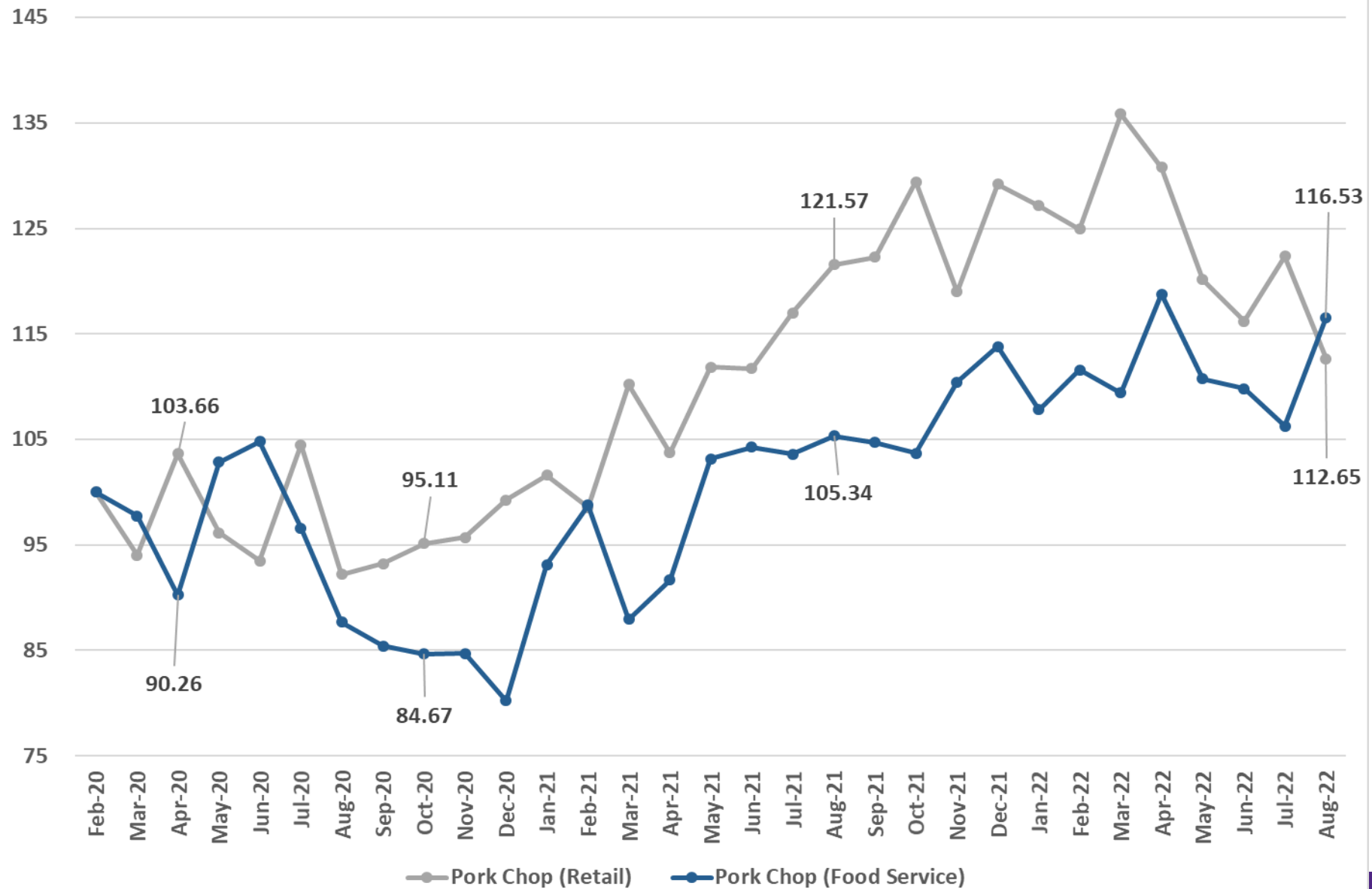
Q2-2022

Nationally: 48%

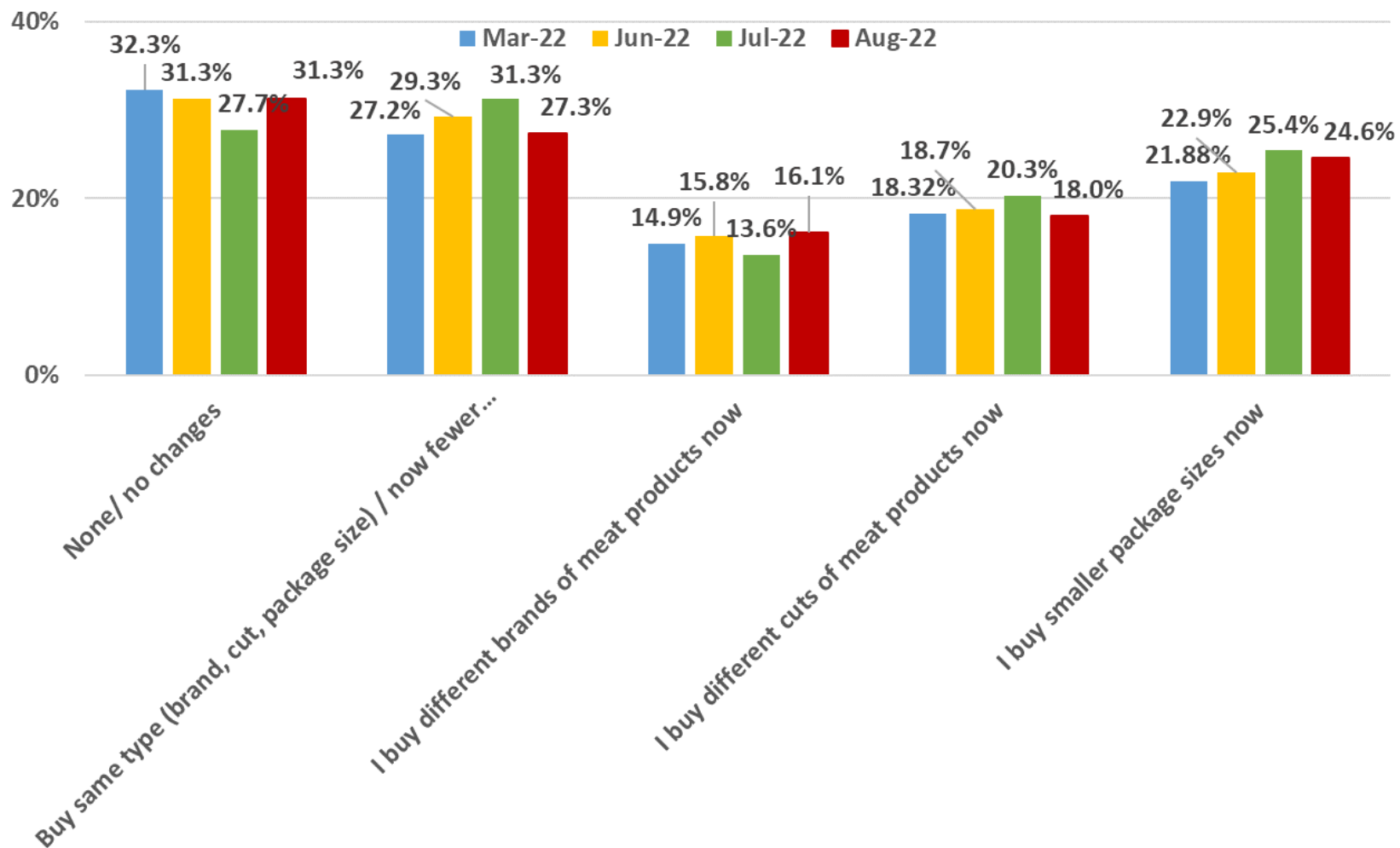
CO: 72%

VA: 39%

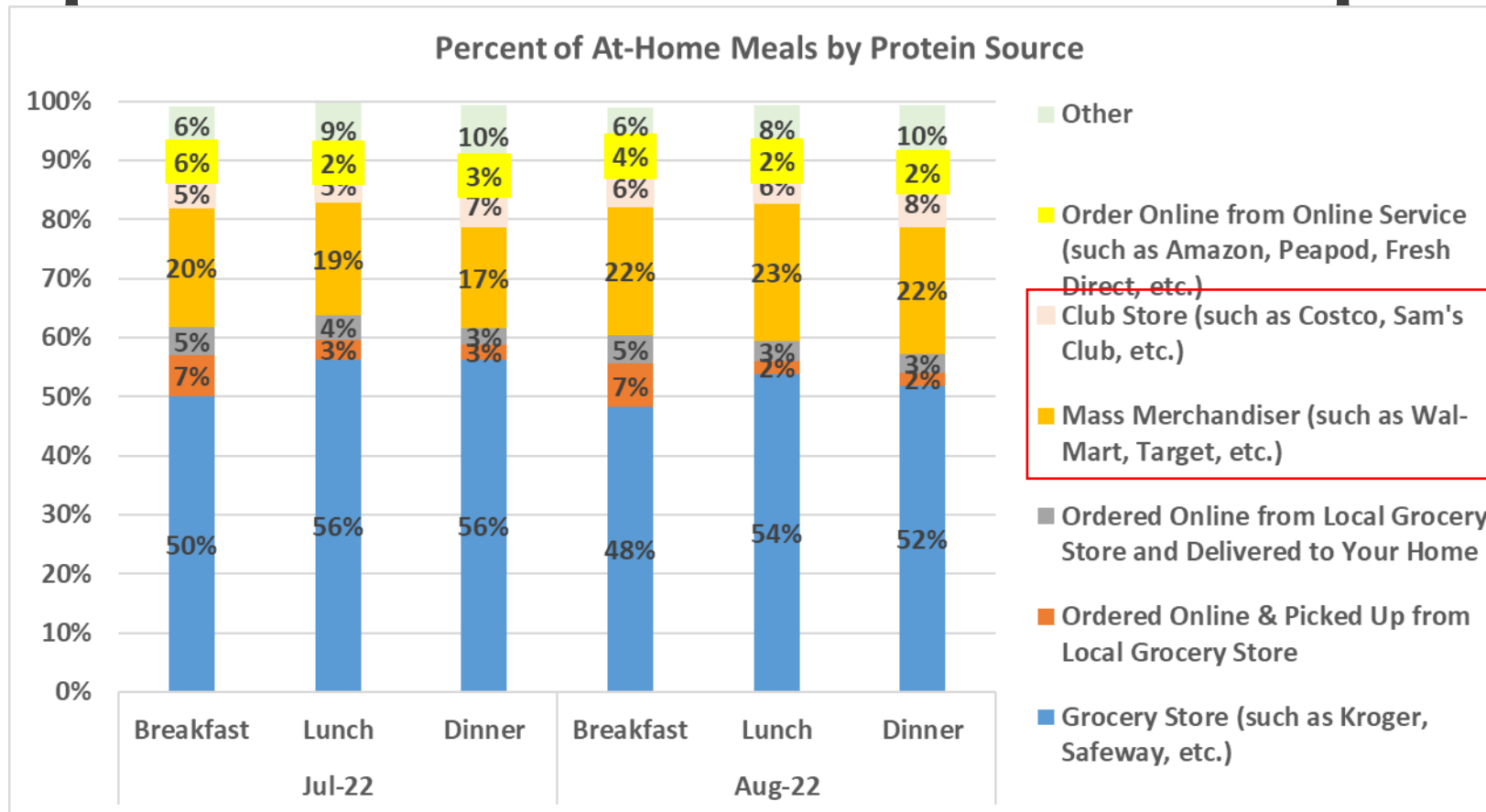
WTP Indices (Feb 20' = 100), Pork Chop Offerings



# Which of the following best describes changes you have made in response to higher retail meat prices in 2022 (please check all that apply)?

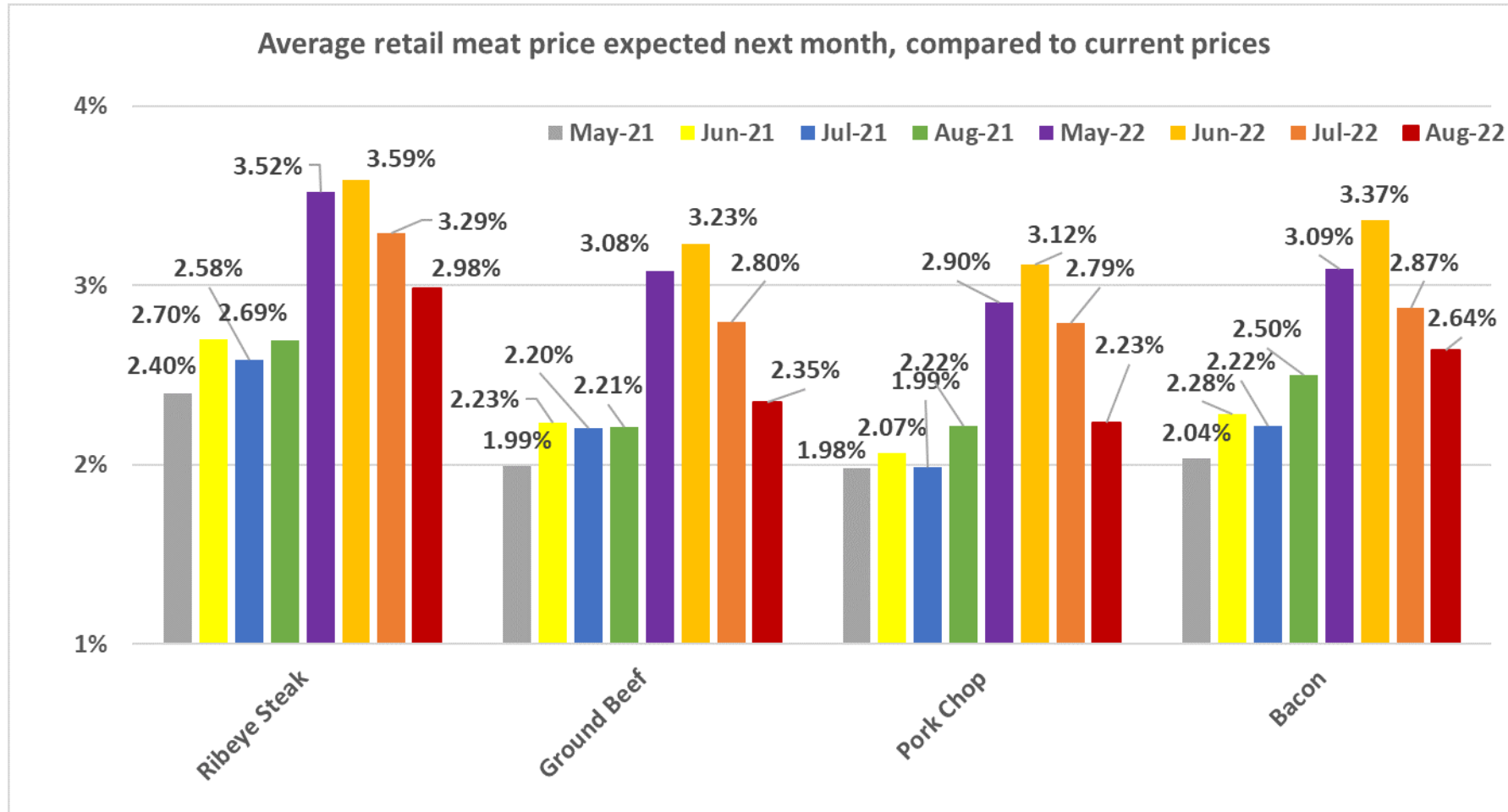


# Are consumers adjusting *where* they buy their protein for at-home consumption?



# All is Not Lost!

# Have Price Expectations Peaked?



# USDA & MDM Info:

## *Meat Demand Outdoes Meat Avoidance*

Meat Science 190 (2022) 108843



Contents lists available at [ScienceDirect](#)

### Meat Science

journal homepage: [www.elsevier.com/locate/meatsci](http://www.elsevier.com/locate/meatsci)



## U.S. perspective: Meat demand outdoes meat avoidance

Glynn T. Tonsor<sup>a</sup>, Jayson L. Lusk<sup>b,\*</sup>

<sup>a</sup> Department of Agricultural Economics, Kansas State University, United States of America

<sup>b</sup> Department of Agricultural Economics, Purdue University, United States of America



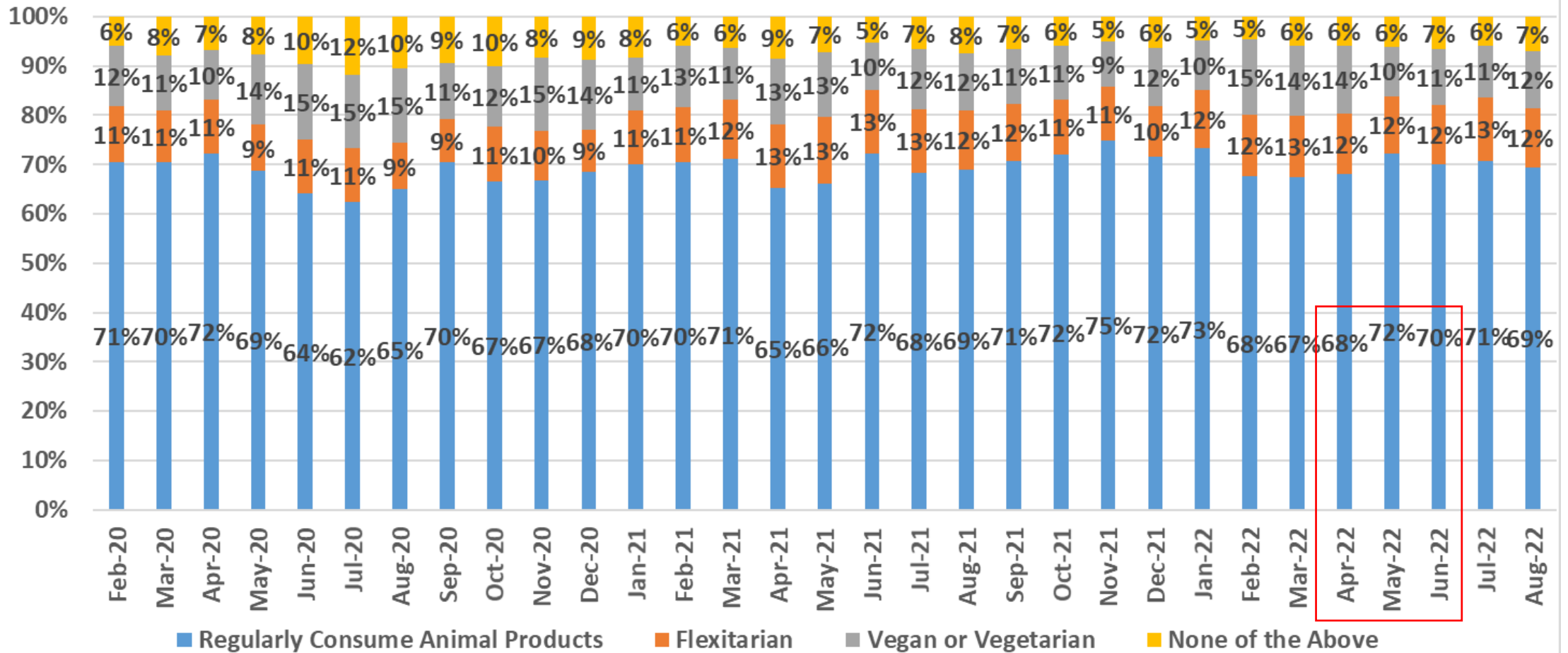
<https://www.sciencedirect.com/science/article/pii/S0309174022001115>

**KANSAS STATE**  
UNIVERSITY

Agricultural Economics

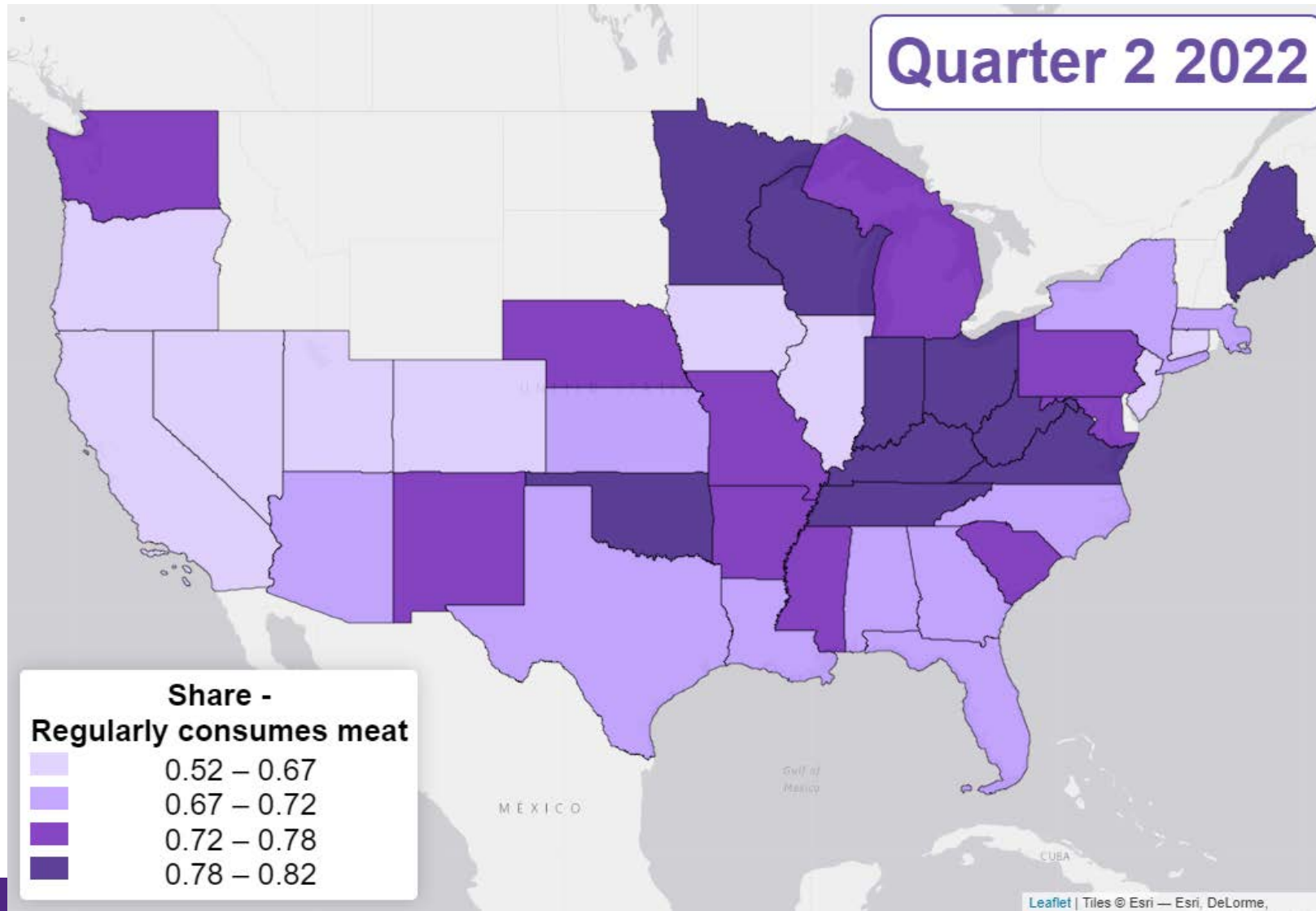
# Self-Declared Diet Tracking

Self-Declared Diet, Feb. 2020 - Aug 2022 (Source: MDM Project)





# Self-Declared Diet Tracking



Q2-2022

Nationally: 70%

KY & WV: 82%  
IN & OK: 81%

UT: 52%  
CA: 59%

# GT's Thought Framing Suggestions







<http://library.meetingplace.com/publication/frame.php?i=727245&p=72&pn=&ver=html5>

“Any good business plan or policy needs a clearly stated goal...”

➤ Think global

➤ Manage local & focus on things you can influence



---

*“MY DEAR BROTHERS AND SISTERS, TAKE NOTE OF THIS: EVERYONE SHOULD BE **QUICK TO LISTEN**, **SLOW TO SPEAK** ...” JAMES 1:19*

# See full research reports & MDM webpage for much more information:

➤ <https://www.agmanager.info/livestock-meat/meat-demand/monthly-meat-demand-monitor-survey-data>

➤ <https://ksmeatdemandmonitor.shinyapps.io/MDMapp/>

➤ <https://www.agmanager.info/livestock-meat/meat-demand/meat-demand-research-studies/what-has-caused-increase-retail-pork-prices>

More information available at:



This presentation will be available in PDF format at:

<http://www.agmanager.info/about/contributors/individual/tonsor.asp>

Glynn T. Tonsor

Professor

Dept. of Agricultural Economics

Kansas State University

Email: [gtonsor@ksu.edu](mailto:gtonsor@ksu.edu)

Twitter: @TonsorGlynn