

INSIGHTS ON MEAT-LIVESTOCK INFLATION TRENDS, EXTRAPOLATION FROM THE US

CAES-SCAE CANADIAN AGRI-FOOD POLICY CONFERENCE

OTTAWA, ONTARIO

JANUARY 26, 2023

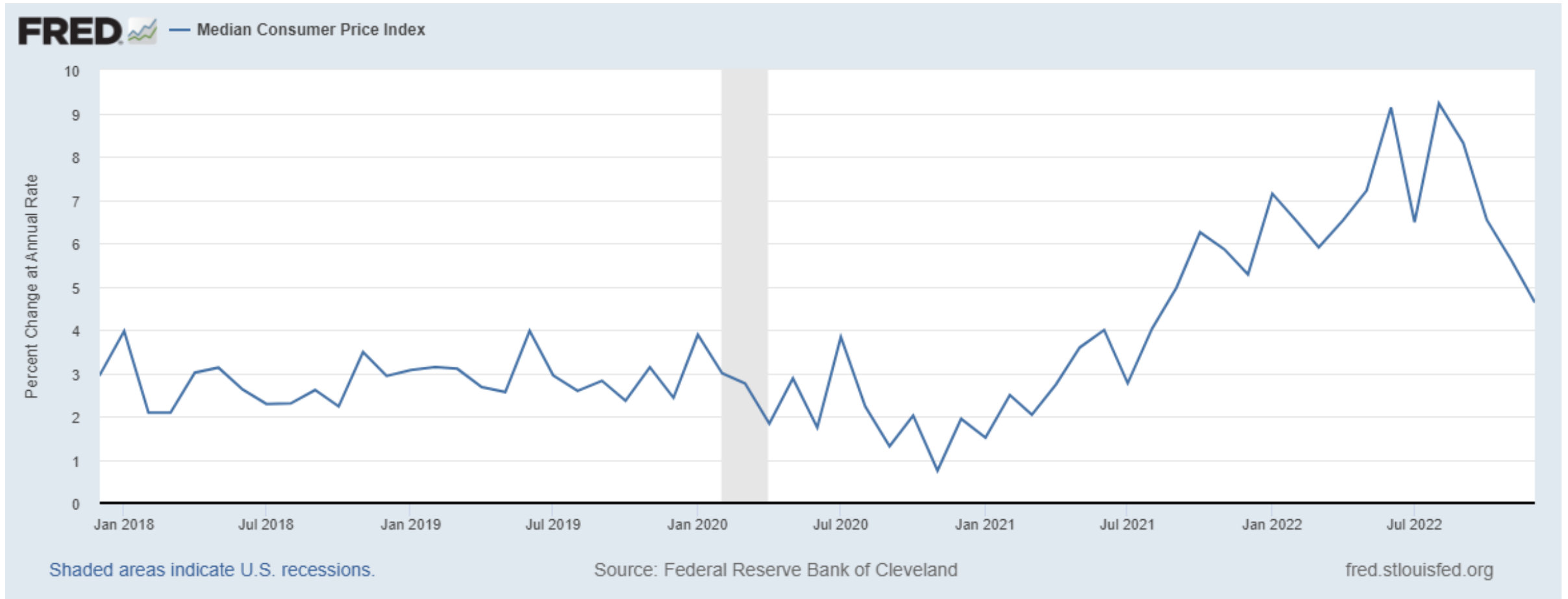
DR. GLYNN T. TONSOR

EMAIL: GTONSOR@KSU.EDU

TWITTER: [@TONSORGLYNN](https://twitter.com/TONSORGLYNN)



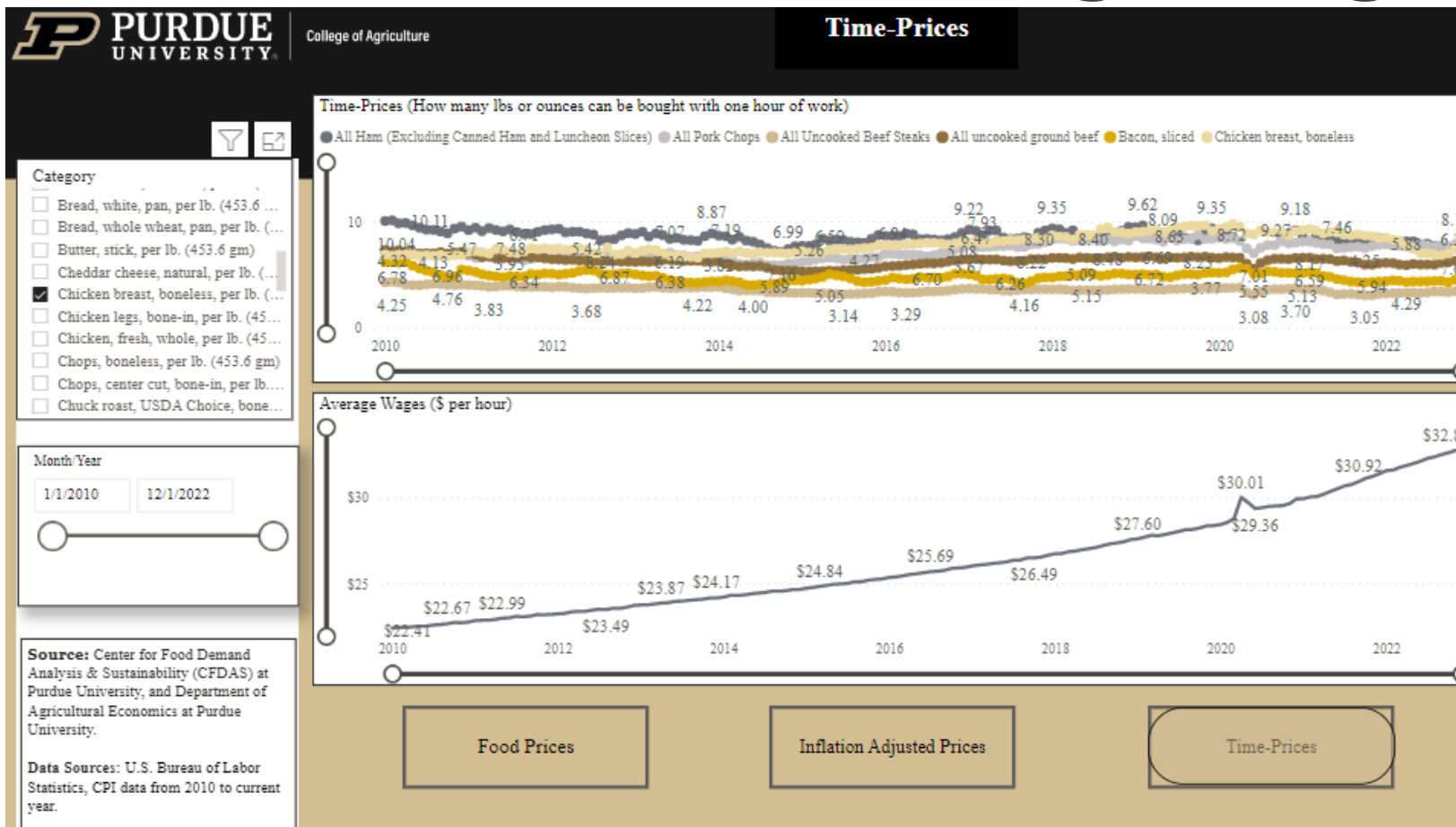
Summer 2022, Inflation in U.S. Was Highest in 4 Decades



Real Wages Are Key



Purdue's Dashboard: Retail Meat 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

6.6 lbs ground beef

3.7 lbs beef steaks

9.5 lbs chicken breast

Dec. 2022, 1 hr work =

8.1 lbs ham (-11%)

7.6 lbs pork chop (-10%)

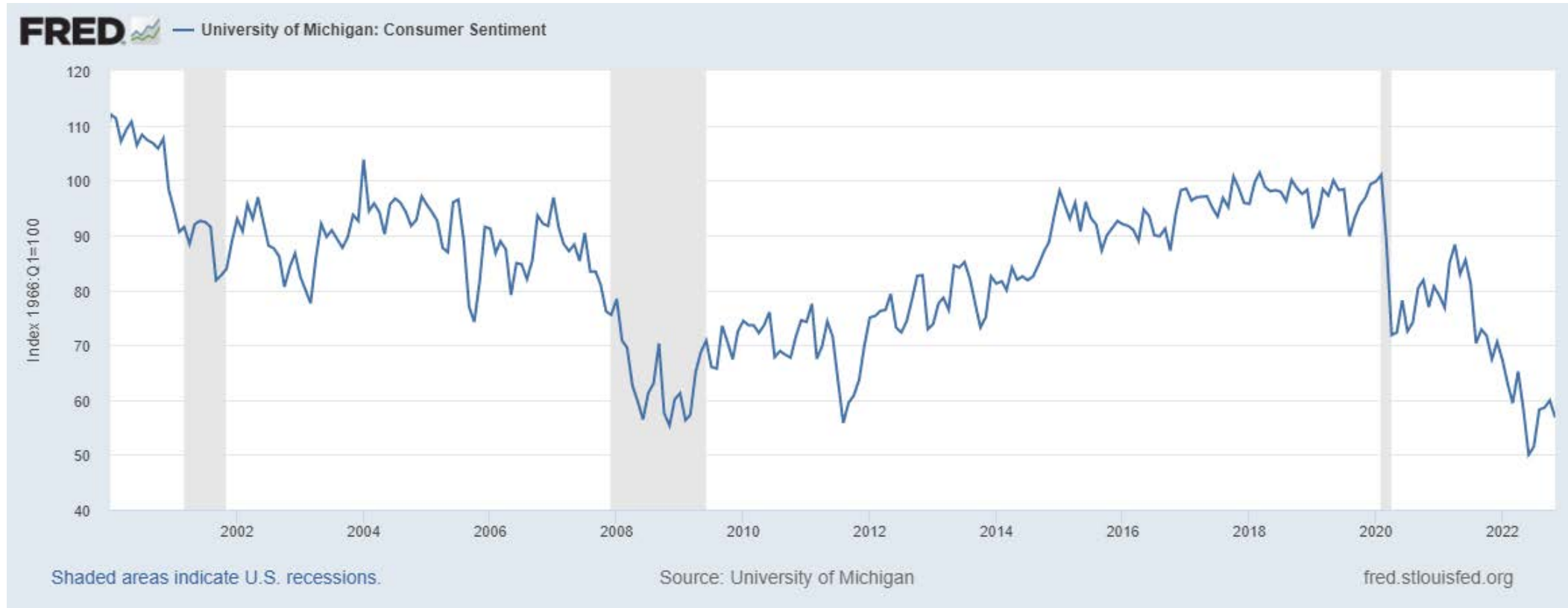
4.7 lbs bacon (-8%)

6.3 lbs ground beef (-5%)

3.5 lbs beef steaks (-5%)

7.6 lbs chicken breast (-20%)

Consumer Sentiment Evolves & Matters for Meat Demand

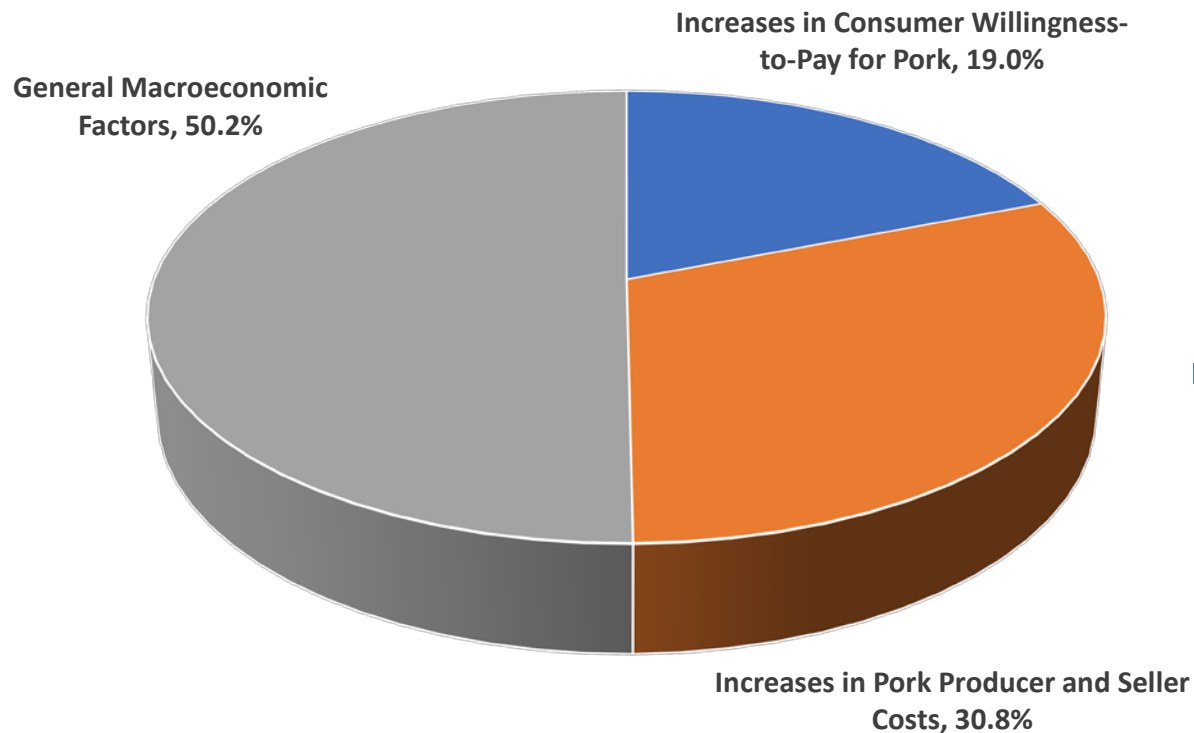


What Underlies Higher Retail Pork Prices?

- 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**



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



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
CPI Regime 4 (Over 4.0%)	-1.003	-1.467	-1.961	-4.299	-1.088	-1.789	-1.246



How is Elevated Inflation Impacting Pork Price Sensitivity?

Now (updated to Q4) 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

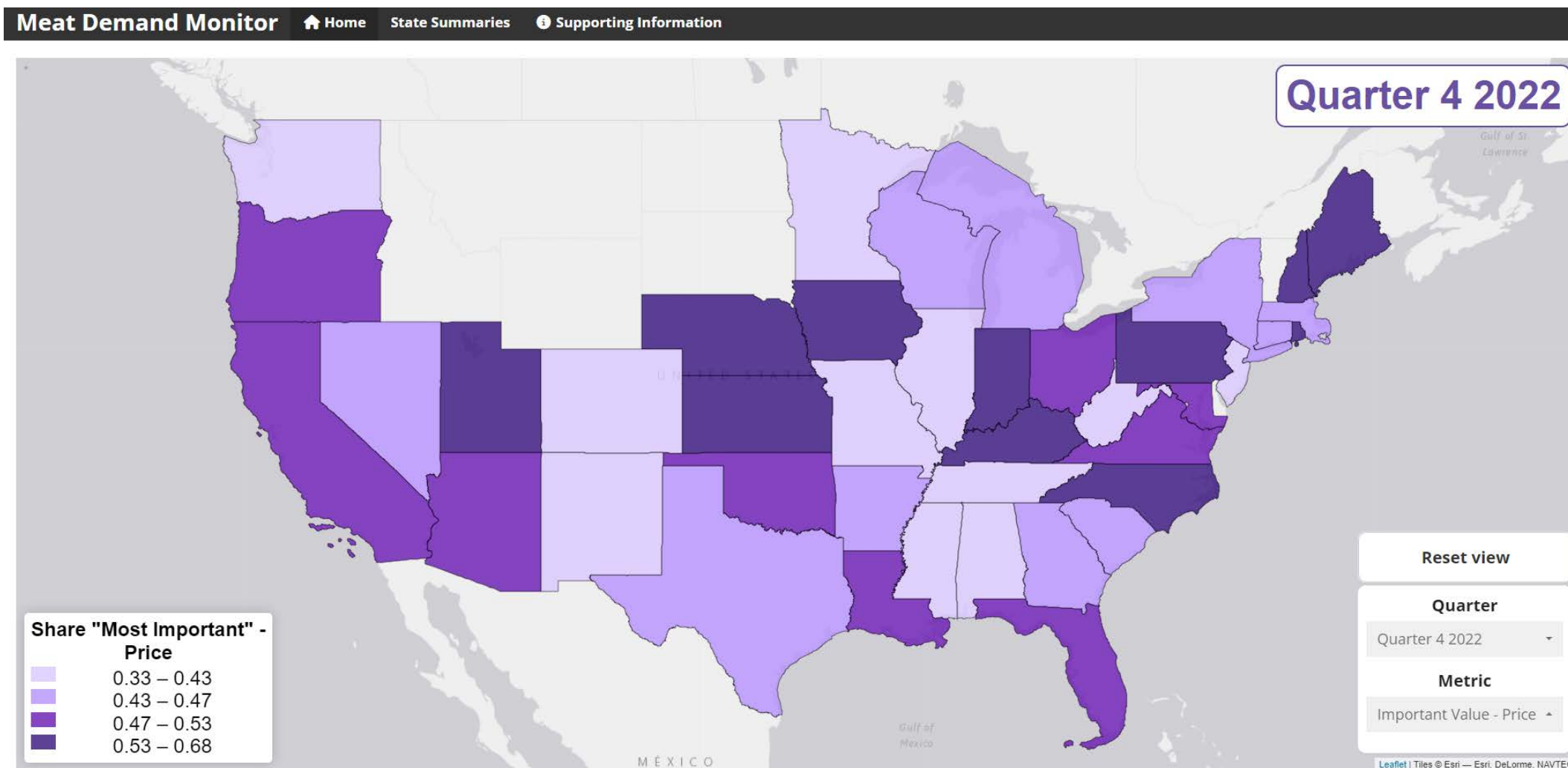
Title	Author	Date	Downloads
Meat Demand Monitor - August 2022	Tonsor	September 1, 2022	Downloads
Meat Demand Monitor - July 2022	Tonsor	August 5, 2022	Downloads
Meat Demand Monitor - June 2022	Tonsor	July 1, 2022	Downloads

How is Elevated Inflation Impacting Pork Price Sensitivity?

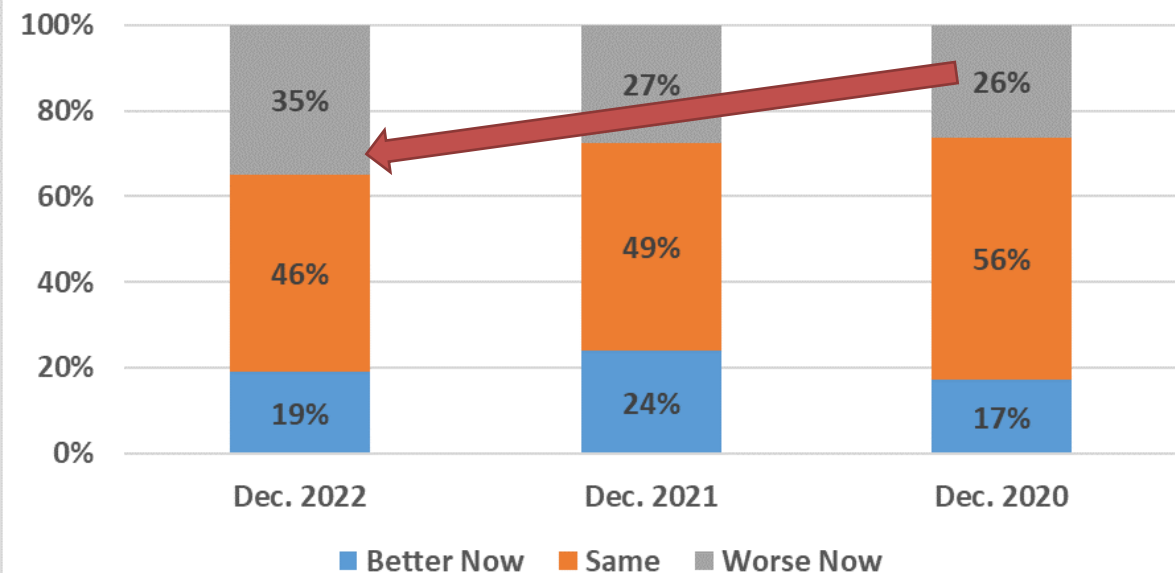
Trends in Meat Demand Monitor (MDM)

- Protein Values & Relative Role of Price
 - Q4.2021 45.9% indicated Price was a top 4 consideration
 - Q4.2022 48.2% indicated Price was a top 4 consideration

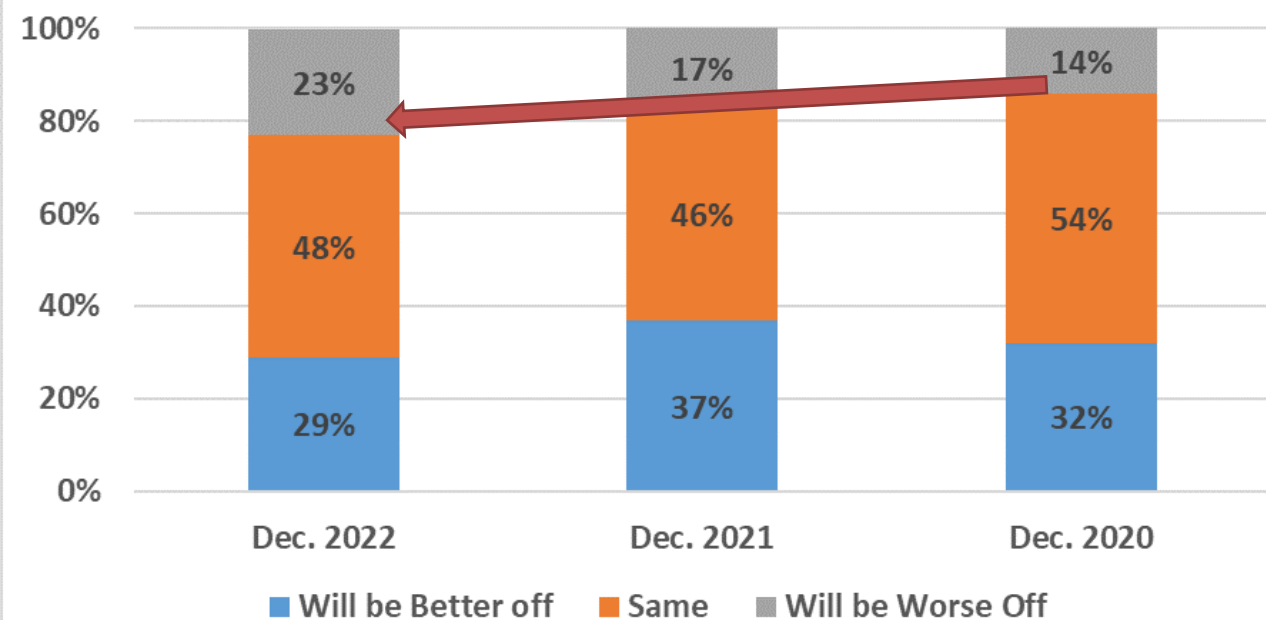
Share Indicating Price is Top Protein Purchasing Factor, Q4.2022 (Source: Meat Demand Monitor Dashboard)



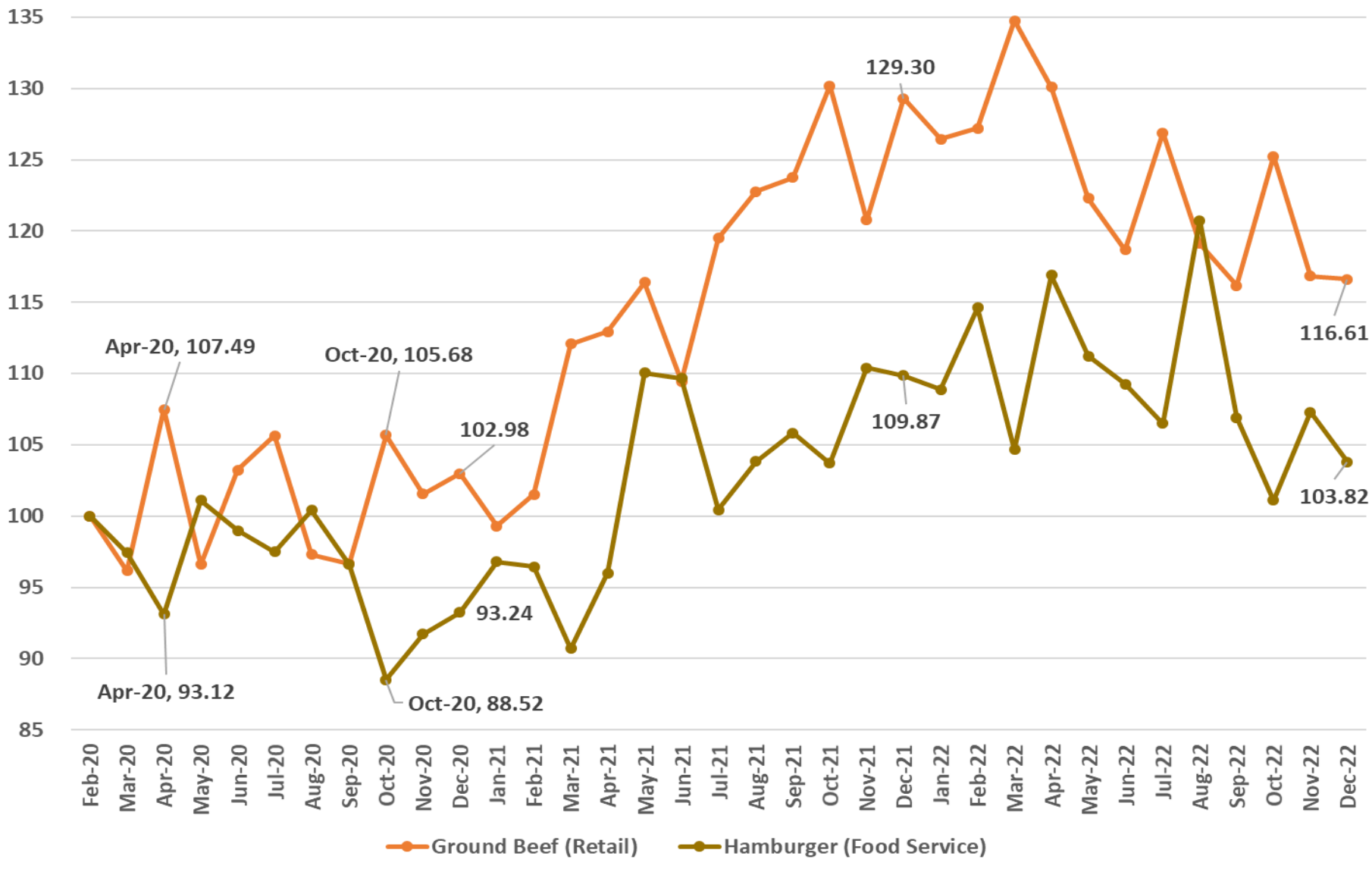
Financial Sentiment: Now vs One Year Ago



Financial Sentiment: One Year from Now vs Now



Master WTP Indices (Feb 20' = 100), Ground Beef/Hamburger Offerings



All is Not Lost!

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



U.S. perspective: Meat demand outdoes meat avoidance

Glynn T. Tonsor^a, Jayson L. Lusk^{b,*}

^a Department of Agricultural Economics, Kansas State University, United States of America

^b Department of Agricultural Economics, Purdue University, United States of America

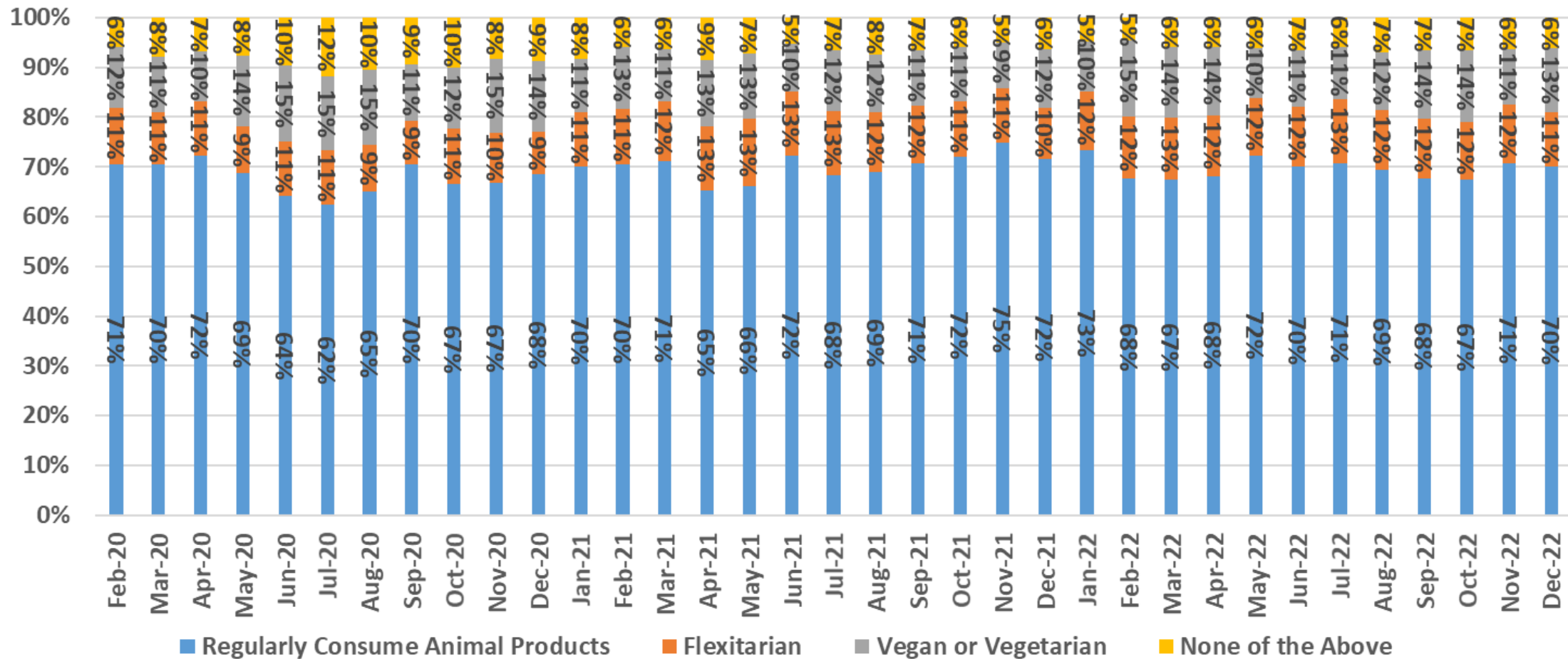


<https://www.sciencedirect.com/science/article/pii/S0309174022001115>

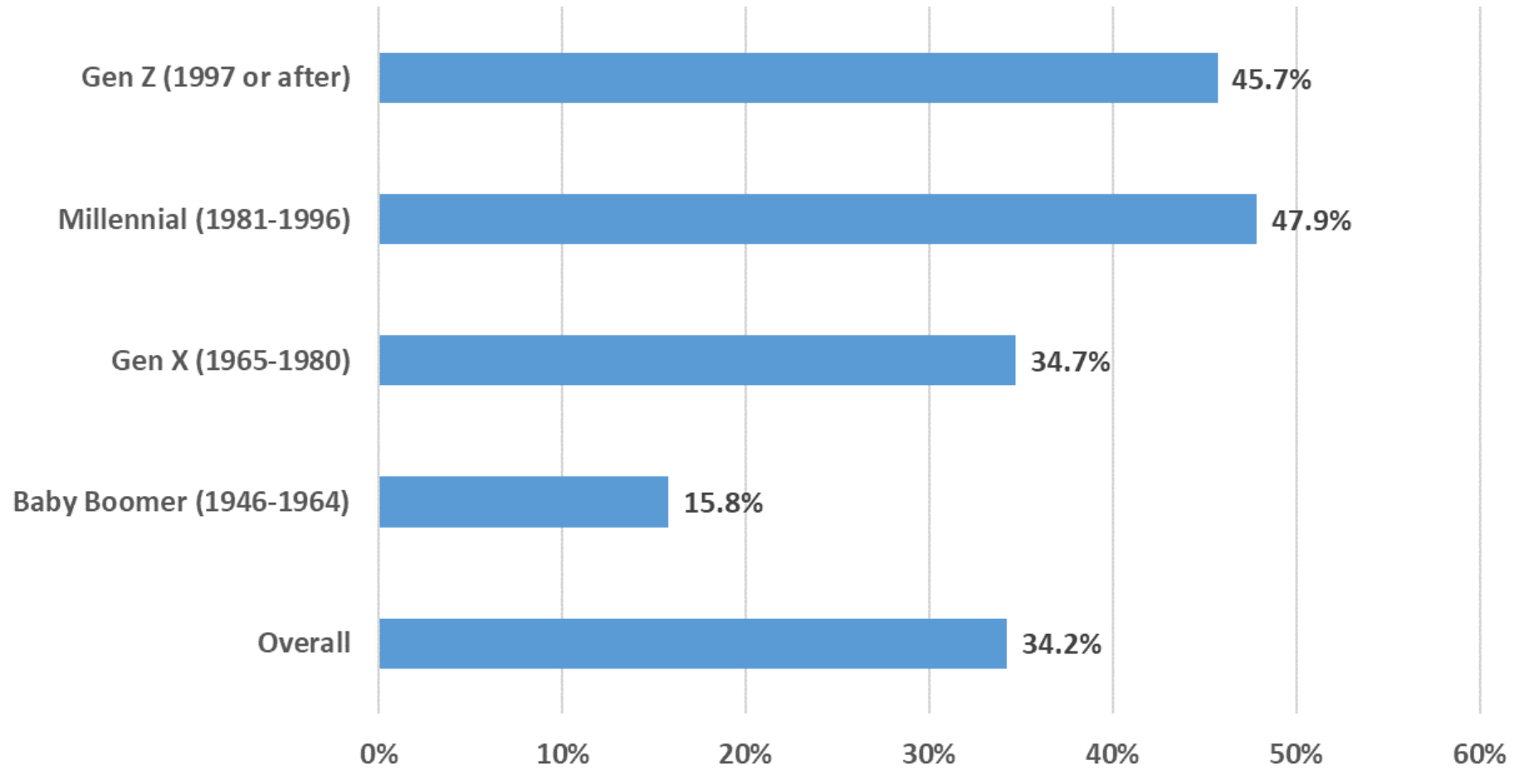
KANSAS STATE
UNIVERSITY | Agricultural Economics

Self-Declared Diet Tracking

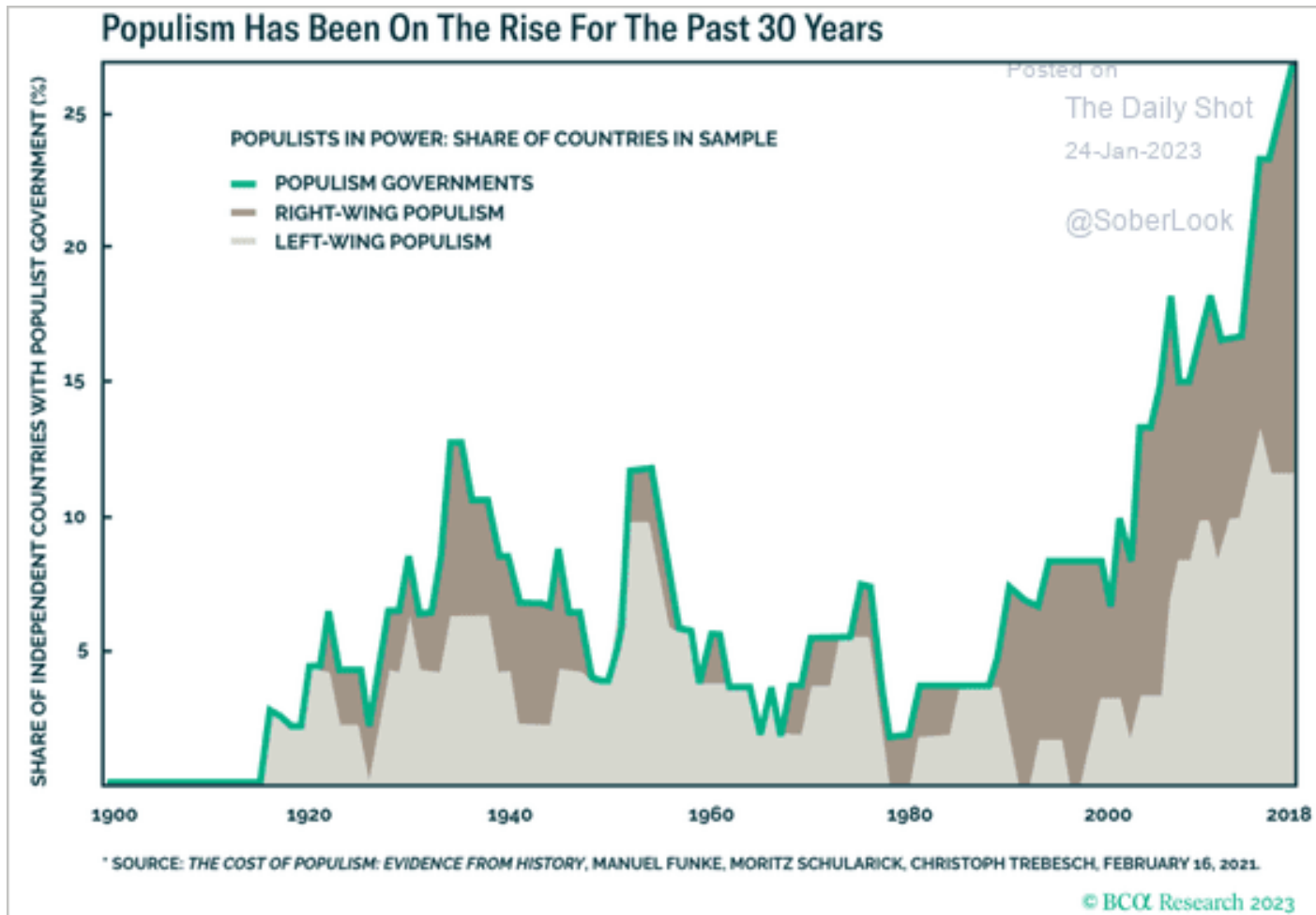
Self-Declared Diet, Feb. 2020 - Dec. 2022 (Source: MDM Project)

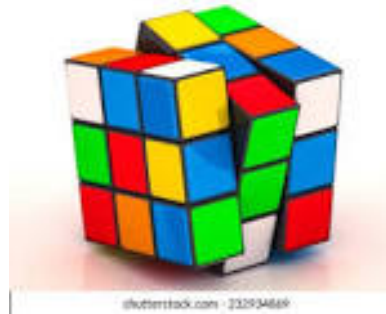


Share Intentionally Eating Protein for Strength-Training or Other Fitness-Related Goals, by Generation (Nov. 2022, MDM)



But GT is Concerned





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

Twitter: @TonsorGlynn

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>