

MEMORANDUM

To: Food Equity Alliance

From: Lon Hatamiya, President and CEO, The Hatamiya Group

Date: March 29, 2024

Re: Reanalysis of Economic Impact of Proposition 12 on Pork Pricing and Consumption in California after Implementation

In June 2021, we were asked to provide an initial objective and independent analysis regarding the potential economic impacts of implementation of California Proposition 12, *the Farm Animal Confinement Initiative* (“Prop 12”), specifically upon pork pricing and consumption in California. Prop 12 was initially passed by California voters on November 6, 2018. After a series of legal challenges and administrative delays, Prop 12 has been partially implemented effective July 1, 2023, and fully implemented effective January 1, 2024, for pork production. This reanalysis of the economic impact of Prop 12 on pork pricing and consumption in California examines the period from July 1, 2023, to the end of January 2024.

SUMMARY

Our June 2021 analysis concluded that Prop 12 will result in greater consumer expenditures on pork and lower demand for the various pork products. Increased pork prices would have the combined negative impact of greater financial burden on California pork consumers and lower demand for pork products on pork producers. Moreover, increased market access restrictions due to Prop 12 regulations would further limit available supply into California, thereby driving up pork prices for all consumers.

A recent study has overwhelmingly confirmed those conclusions.¹ Economists Hannah Hawkins, Shawn Arita, and Seth Meyer with the United States Department of Agriculture’s Office of the Chief Economist have been analyzing prices and quantities of hogs and covered pork products² as the industry has been adjusting to the uncertainty of Prop 12 implementation. Relying upon Circana³ Weekly Retail scanner data, they concluded that since July 1, 2023, Prop 12 covered pork products sold in California increased significantly in price compared to the rest of the United States.

¹ Hawkins, Hannah, Shawn Arita, and Seth Meyer. 2024 “Proposition 12 Pork Retail Price Impacts on California Consumers.” *ARE Update* 27(3): 5-8. University of California Giannini Foundation of Agricultural Economics.

² Proposition 12 requires that, to be sold in California, uncooked cuts of pork – such as chops, bacon, uncooked hams, loins, ribs, and roasts – must be from hogs that are the offspring of sows that are kept in pens that provide at least 24 sq. ft. per sow of space and comply with other related regulations.

³ <https://www.circana.com/>

Some of the **Key Findings** of the Hawkins-Arita-Meyer Study specific to California are:

- **On average, retail pork prices in California have increased by 20% since July 1, 2023, compared to the rest of the United States.**
- **More specifically, average increases in retail sales prices on various fresh pork cuts varied in California since July 1, 2023, through February 1, 2024 –**
 - **Bacon prices were 16% higher.**
 - **Pork rib prices were 17% higher.**
 - **Pork loin prices were 41% higher.**
 - **Pork shoulder prices were 17% higher.**
 - **Fresh ham prices were 20% higher.**

In actual dollar increases, the average price of bacon increased from \$6.46/lb. pre-July 1, 2023, to \$7.74/lb. post-July 1, 2023. The average price of pork ribs increased from \$3.12/lb. to \$3.64/lb.; the average price of pork loin increased from \$3.49/lb. to \$5.12/lb.; the average price of pork shoulder increased from \$2.04/lb. to \$2.54/lb.; and the average price of fresh ham increased from \$1.87/lb. to \$2.29/lb.

Generally, when the price of pork increases in California, the demand for pork decreases. As a result, the Hawkins-Arita-Meyer Study also concluded:

- **California's share of national fresh pork consumption has declined, falling from 10% to less than 8% as of January 31, 2024.**

The pork price increases, along with supply chain uncertainties brought on by Prop 12's implementation unpredictability, have also impacted the volume of pork purchased by California consumers. Not only has Prop 12 adversely impacted the higher price of retail pork in California, but it has also resulted in a significant decline in pork consumed by Californians.

Additionally, our June 2021 analysis relied upon the Tonsor-Lusk Report⁴ regarding how sensitive consumer pork purchasing behavior is to price changes across U.S. retail markets. For purposes of this analysis, it is important to re-emphasize the following conclusion:

- **Per capita pork consumption varies across retail markets in part due to diversity in household characteristics and composition, including age, income and ethnicity.**

⁴ "Consumer Sensitivity to Pork Prices: A Comparison of 51 U.S. Retail Markets and 6 Pork Products," Dr. Glynn T. Tonsor, Kansas State University, and Dr. Jayson L. Lusk, Purdue University, March 5, 2021

Although it may vary depending upon the product of pork (e.g. loin, shoulder, bacon, ribs, ham, etc.), pork is an important, if not primary, source of protein for African American, Asian American, and Hispanic/Latino households, markets, and ethnic restaurants across the California markets considered. Most importantly, there are notable differences in pork demand across California markets and pork products. Additionally, Millennials and Gen X generations make up a large share of California pork consumers.

For the 52 weeks ending on January 21, 2024, Numerator⁵ provided a breakdown of California’s pork shoppers, including age, income and ethnicity. California pork consumers are both younger and more diverse than all pork consumer across the country as noted below:

Table 1: Make-up of California Pork Consumers

Age (Generation)	% California Consumers	% All U.S. Consumers
Gen Z [>1996]	9.2%	6.6%
Millennials [1982-1995]	34.6%	25.2%
Gen X [1965-1981]	31.5%	30.6%
Boomers+ [<1965]	24.7%	37.5%
Income	% California Consumers	% All U.S. Consumers
Low income [under \$40k]	25.5%	24.7%
Middle Income [\$40k-\$125k]	43.1%	46.8%
High Income [Over \$125k]	31.4%	28.5%
Ethnicity	% California Consumers	% All U.S. Consumers
White	36.5%	65.8%
Black/African American	8.9%	13.0%
Hispanic/Latino	32.3%	14.0%
Asian	19.4%	5.6%
Other	2.9%	1.6%

Source: Numerator – 52 weeks ending 1/221/2024

Table 1 indicates that 43.8% of all California pork consumers are Millennials and GenZ. Also, the vast majority of California pork consumers (63.5%) are Black/African American, Hispanic/Latino, Asian, and other. Not only are California pork consumers younger and more ethnically diverse than all U.S. pork consumers, but there is also a larger percentage of low-income California pork consumers than the rest of the U.S. (25.5%). Therefore, the burden of higher retail pork prices in California falls mainly upon the younger, diverse, and lower income consumers across the state.

⁵ <https://www.numerator.com/>

- **The Tonsor-Lusk Report also included demonstrative examples on how shifts in demographics, external shocks reducing pork availability, and external shocks increasing retail prices impact pork markets.**

If a good's demand is elastic, then price and consumer expenditures move in opposite direction. Conversely if a product's demand is inelastic, then price and consumer expenditures move in the same direction. For pork in California, the demand is elastic for most products across all markets.

As a result, things that increase pork prices (e.g. increased feed costs, increased production environment requirements, losses in production efficiencies, increased government regulation, etc.) will result in greater consumer expenditures and lower seller revenues. Moreover, higher pork prices will reduce the overall demand, or more simply, a consumer will have less to spend on other items if they are required to spend more on pork, also known as "consumer welfare".

Intuitively, when facing higher retail prices, consumers will buy a lower volume of impacted products at a higher price – clearly resulting in economic harm and impacting consumer welfare (meaning that consumers will have less to spend on other items, such as food, rent, utilities, etc.) As noted above, the California consumers most negatively impacted by higher pork prices are younger, more diverse, and lower income.

CONCLUSIONS

The recently issued Hawkins-Arita-Meyer Study provides an important and quantifiable analysis of the impacts of increases of pork prices in California due to the implementation of Prop 12. Any instance that could increase the price of pork, specifically the creation of regulations to implement Proposition 12, will result in greater consumer expenditures on pork and/or lower demand for the various pork products. Increased pork prices would have the combined negative impact of greater financial burden on California pork consumers and lower demand for pork products on pork producers. Moreover, more market access restrictions due to Prop 12 regulations would further limit available supply into California, thereby driving up pork prices for all consumers.

More specifically, the negative financial burden falls largely on the younger, diverse ethnic consumers, and lower income communities that make up California, with pork being an important source of protein for these consumers.