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California Pork Market Responds to Proposition 12 with Higher Prices and Lower Consumption

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In July 2023, California began enforcing Proposition 12, a voter-approved law that sets minimum space requirements for breeding sows and prohibits the sale of non-compliant pork within the state. The policy created new regulatory barriers for pork entering the California market, resulting in constrained supply and added compliance costs for producers. Drawing on high-frequency scanner-level data from July 2022 to June 2025, this analysis finds that Proposition 12 has led to lasting changes in California's pork market. Retail prices for key pork cuts have increased sharply relative to national trends, while the state's share of national pork consumption has declined. The results point to a structural shift in consumer behavior and pricing dynamics, with effects that have persisted over a two-year period.

Proposition 12 was approved by California voters in 2018 but faced several delays and legal challenges before full enforcement began in January 2024. The law sets minimum confinement standards for breeding sows, and extends those standards to any pork sold in the state, regardless of its origin. This retail-level enforcement mechanism effectively restricts California's pork supply to producers that meet the state's animal welfare standards. Given California's size as a consumption market, these restrictions carry implications for both in-state prices and national supply chains. The enforcement of Proposition 12 thus provides a unique opportunity to study how retail regulations influence food markets through price and

volume channels.

Scanner data show that California retail pork prices increased significantly following the implementation of Proposition 12. The most pronounced changes were observed for loins and ribs, which shifted from below-average prices to substantial premiums relative to national benchmarks. For example, the average retail price for loins in California rose from a 4 percent discount before implementation to a 26 percent premium afterward; a 30 percentage point swing. Similar changes occurred for ribs, bacon, and shoulders. These price effects persisted across the full two-year post-policy period, with no evidence of attenuation.

Table 1: Average Changes in California Retail Pork Price Premiums Due to Proposition 12.

Cut	Pre-Policy Premium	Post-Policy Premium	Pre vs Post Policy Change (percentage points)
Loins	-4 percent	+26 percent	+30
Bacon	+6 percent	+20 percent	+14
Ribs	-7 percent	+14 percent	+21
Shoulders	+1 percent	+15 percent	+14

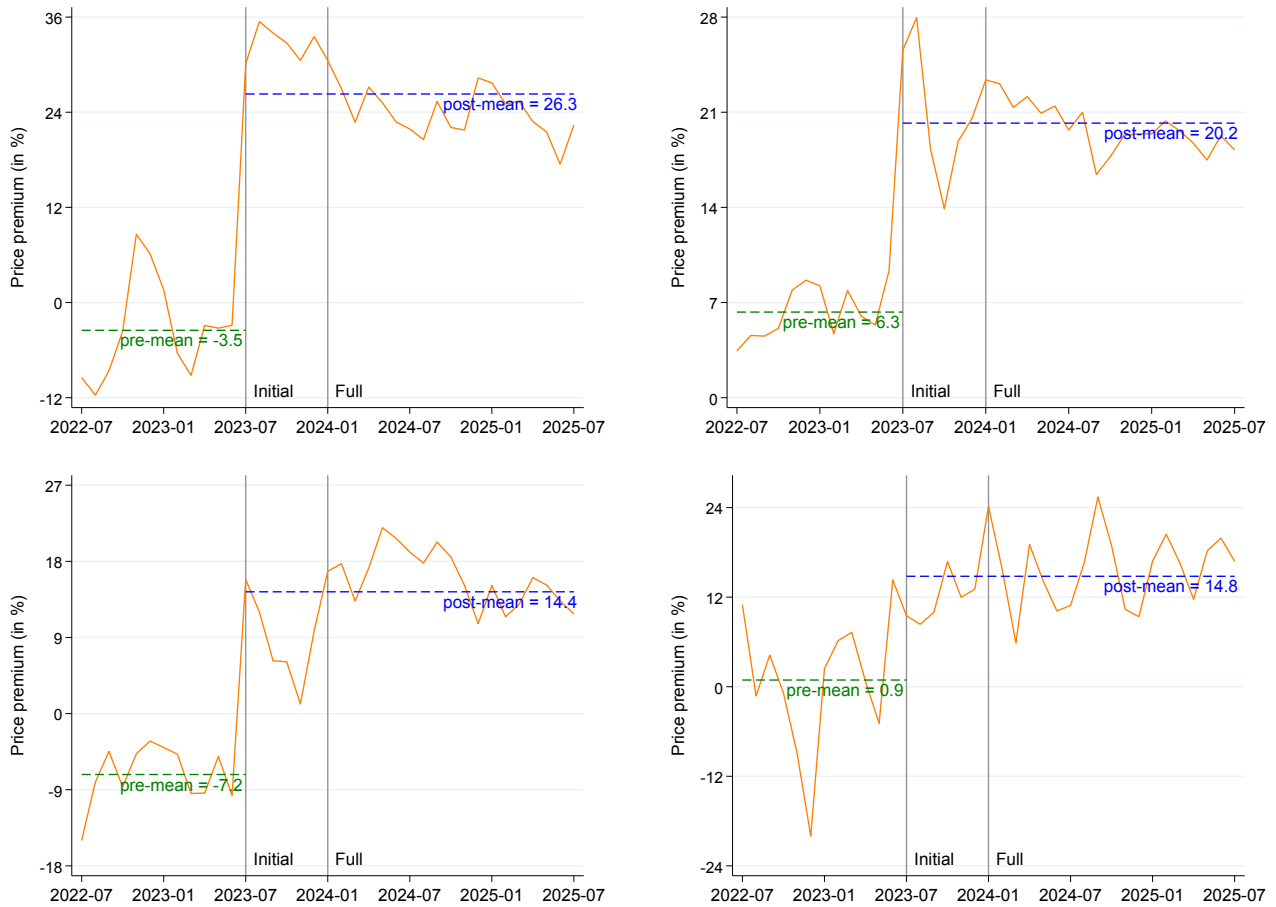
Source: NDSU-ARPC & USDA-OCE using data from Circana.

Weekly price premium data also show sustained increases beginning in mid-2023. Loins and ribs, in particular, display sharp upward shifts in relative pricing immediately following policy enforcement. The lack of price convergence over time suggests that supply adjustments have not been sufficient to reverse the initial impact of Proposition 12.

Higher prices and constrained supply led to a measurable reduction in California’s pork consumption. The state’s share of national fresh pork volume declined from 8.8 percent before Proposition 12 to 7.5 percent afterward. The largest declines occurred in ribs and loins—the same products that experienced the steepest price increases. These shifts were not temporary. Consumption volumes remained lower throughout the entire two-year post-enforcement period, even during seasonal spikes such as holidays. The evidence suggests a durable shift in purchasing behavior rather than a transitory market response.

Detailed product-level data confirm these trends. California’s share of national rib consumption fell by 2.6 percentage points, while loin volume declined by 1.8 percentage points. Although the percentage declines for bacon and shoulders were smaller, they followed the same general pattern.

Figure 1: California Retail Price Premiums Before and After Proposition 12.



Source: NDSU-ARPC & USDA-OCE using data from Circana.

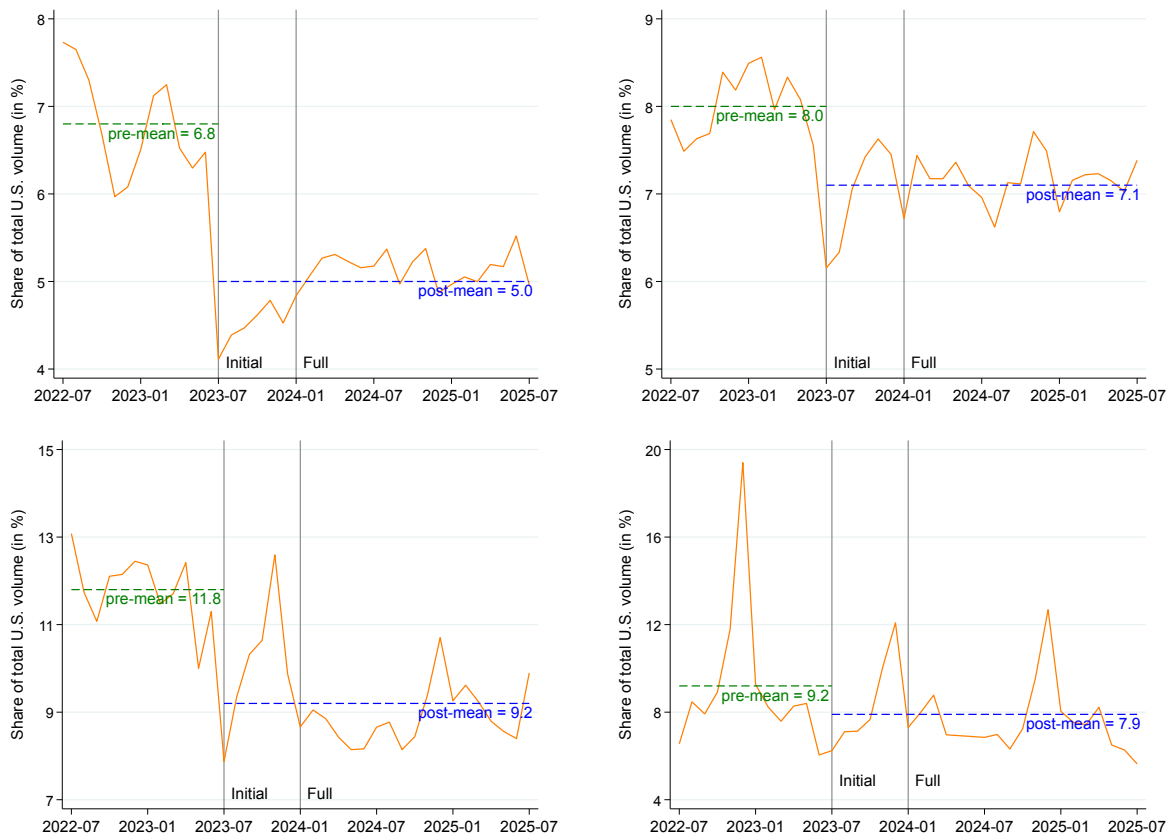
Table 2: Changes in California Market Shares Due to Proposition 12

Product	Pre-Policy Market Share	Post-Policy Market Share	Pre vs Post Policy Change (percentage points)
Aggregate	8.8 percent	7.5 percent	-1.3
Loins	6.8 percent	5.0 percent	-1.8
Bacon	8.0 percent	7.1 percent	-0.9
Ribs	11.8 percent	9.2 percent	-2.6
Shoulders	9.2 percent	7.9 percent	-1.3

Source: NDSU-ARPC & USDA-OCE using data from Circana.

To isolate the effects of Proposition 12 from broader market dynamics, the analysis also examines pork sausage, which is exempt from the policy. Sausage prices and consumption in California remained stable

Figure 2: California's Share of U.S. Pork Consumption for the Top 4 Pork Products



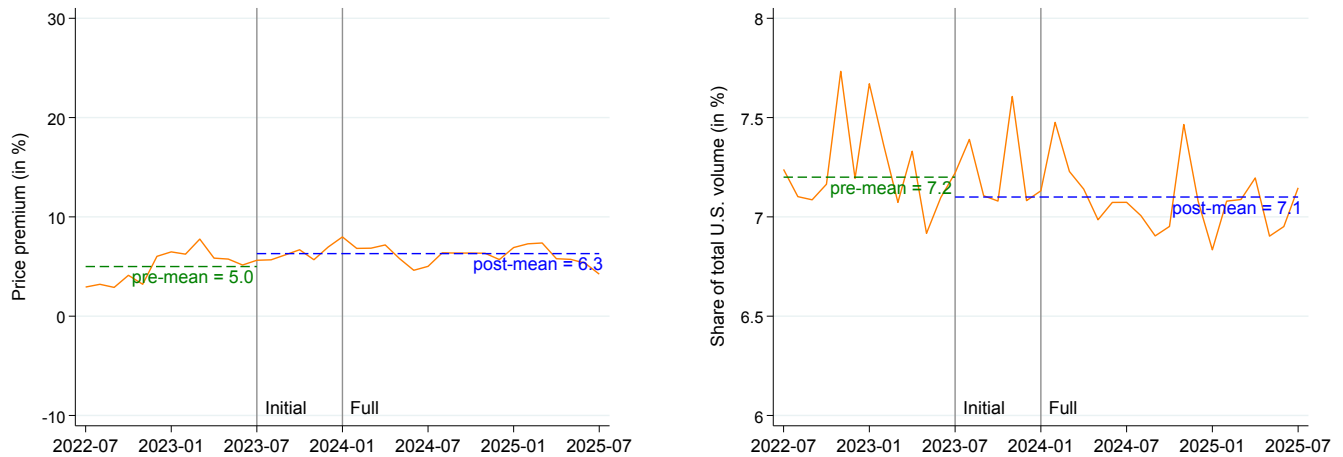
Source: NDSU-ARPC & USDA-OCE using data from Circana.

over the study period. The price premium rose only slightly, and volume shares remained nearly flat. This finding provides further evidence that the observed changes for regulated cuts were indeed driven by Proposition 12 and not by unrelated market forces.

A difference-in-differences econometric model confirms the descriptive results. Controlling for national trends, retail pork prices in California rose by an average of 16.5 percent across all pork products following policy implementation. For the four regulated cuts, the average increase was even higher, at approximately 23.7 percent. At the same time, purchase volumes declined by 20.9 percent for these products, with the largest drop observed in loin consumption. These estimates remain consistent across the full post-enforcement period and support the conclusion that Proposition 12 produced statistically significant and policy-specific effects on both prices and volumes.

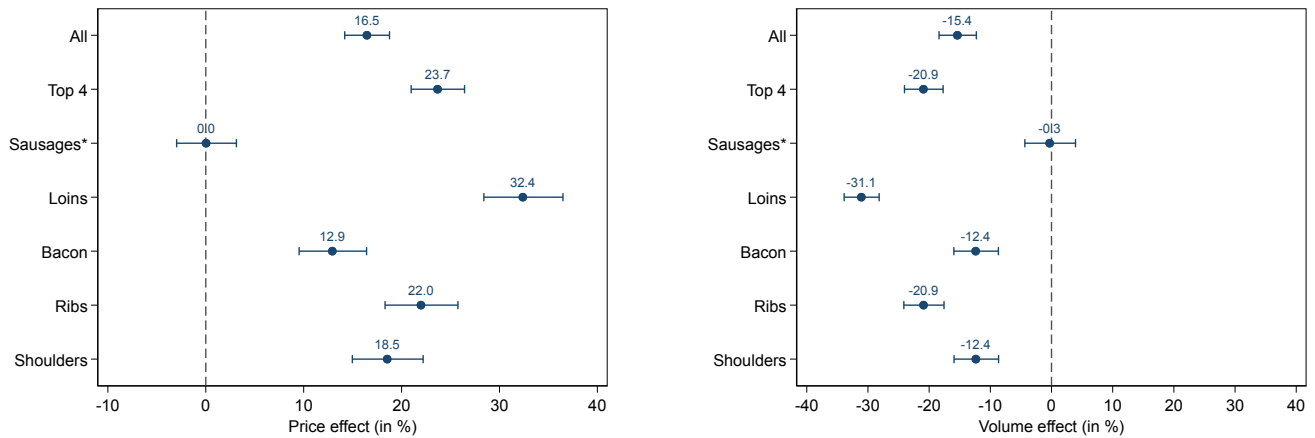
Two years after Proposition 12 enforcement began, the California pork market has undergone a clear structural transformation. Retail prices for regulated pork products remain well above national levels, and

Figure 3: Price Premiums and Consumption Volumes for Pork Sausages in California



Source: NDSU-ARPC & USDA-OCE using data from Circana.

Figure 4: Econometric Effects of Proposition 12 on Retail Pork Prices and Purchase Volumes in California



Source: NDSU-ARPC & USDA-OCE using data from Circana.

the state's share of national pork consumption has contracted across all major product categories. These effects are persistent, suggesting that consumers and supply chains have adjusted to a new market equilibrium shaped by regulatory constraints. While California's goals focused on animal welfare standards, the economic impacts underscore the broader trade-offs that can arise when retail-level supply restrictions are imposed in large markets.

About the Agricultural Risk Policy Center

The Agricultural Risk Policy Center at North Dakota State University conducts independent, evidence-based economic research to inform agricultural policy and strengthen the U.S. farm safety net. The Center's work focuses on evaluating risk management tools such as crop insurance and disaster assistance, analyzing market disruptions, and providing timely insights that support producers, policymakers, and industry leaders.

ARPC Briefs communicate the outcomes of this research by presenting data, methods, and findings in a structured format. Designed to make rigorous analysis accessible, these briefs translate complex economic issues into clear insights that enhance understanding and support evidence-based decisions, contributing to the resilience and long-term prosperity of U.S. agriculture.

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