

Overview of Wholesale Pork Demand Index

Lee Schulz (lschulz@iastate.edu) – Ever Ag Risk Management

Glynn Tonsor (gtonsor@ksu.edu) – Kansas State University Professor & Extension Livestock Economist
September 2026

Wholesale pork demand has taken on a larger role in how we interpret market fundamentals. At the wholesale level, prices respond swiftly to changes in hog slaughter and carcass weights, cold storage inventories and pork buying behavior. Fluctuations in wholesale volumes and values further reflect shifts in consumer tastes, preferences and habits, retail featuring, seasonal buying patterns, export competitiveness and much more. Wholesale pork demand may be subject to even stronger seasonal effects than retail demand as a longer list of seasonally varying factors are at play. Wholesale demand is the link in the value chain between the farm and consumer.

The term “wholesale pork” means fresh and frozen primals, sub-primals, cuts fabricated from sub-primals, pork trimmings, pork for processing and variety meats. Wholesale pork excludes portion-control cuts, cuts flavored above and beyond normal added ingredients that are used to enhance products, cured, smoked, cooked and tray packed products. This is a U.S. Department of Agriculture (USDA) definition for the purpose of wholesale pork market reporting. Mandatory reporting for wholesale pork began on January 7, 2013 and was developed by USDA through negotiated rulemaking by a committee that included members representing pork producers, pork packers, processors, retailers, buyers and other interested stakeholders.¹

The estimated carcass cutout value in the USDA National Daily Pork FOB Plant – Negotiated Sales – Afternoon (LM_PK602) report is the most commonly referenced wholesale pork market value.² It is the estimated value of a standardized pork carcass (215-pound carcass, 55-56% lean, 0.55”-0.70” last rib backfat) based upon industry-average cut yields and average market prices of sub-primal pork cuts and quoted in U.S. dollars per hundred pounds (cwt). It is calculated and published by the Livestock, Poultry, and Grain Market News Division of USDA’s Agricultural Marketing Service as a value-added service to the industry.³ The negotiated load count which can be converted to pounds (one load = 40,000 pounds) provides a directly comparable wholesale pork volume. Because the LM_PK602 report is published daily, a precise volume weighted average cutout value and quantity for a particular month, quarter or year can be calculated.

¹ A User’s Guide to USDA’s LMR Pork Reports

<https://www.ams.usda.gov/sites/default/files/media/LMRPorkPriceReportsHandout.pdf>.

² PDF’s of reports available at <https://mymarketnews.ams.usda.gov/viewReport/2498> with data available for download in CSV format at <https://mpr.datamart.ams.usda.gov/menu.do?path=Products\Pork\Daily%20Pork>.

³ User’s Guide to USDA’s Pork Carcass Cutout

<https://www.ams.usda.gov/sites/default/files/media/LMRPorkCutoutHandout.pdf>.



Negotiated sales offer current time and transparent insight into the wholesale pork market. The term “negotiated sale” means a sale by a packer selling wholesale pork to a buyer of wholesale pork under which the price is determined by seller-buyer interaction and agreement, and scheduled for delivery not later than 14 days for boxed product and 10 days for combo product after the date of agreement.⁴ The day after the seller-buyer agreement shall be considered day one for reporting delivery periods. Negotiated sales include transactions for North American destinations. Mexico accounted for 42% of total pork export volume and 34% of export value in 2025; while Canada accounted for 6% and 9% of export volume and value, respectively.⁵

A scatter plot of historical pairings of the negotiated wholesale volume and cutout value can be shown to depict year to year changes and identify definitive years of increasing (both volume and inflation-adjusted value increase) or decreasing (both volume and inflation-adjusted value decrease) wholesale pork demand. Price inflation should not be interpreted as an increase in wholesale demand. Therefore, the cutout value should be adjusted for inflation using the Consumer Price Index for All Urban Consumers (CPI-U), all items in U.S. city average, not seasonally adjusted series published by the U.S. Bureau of Labor Statistics.⁶

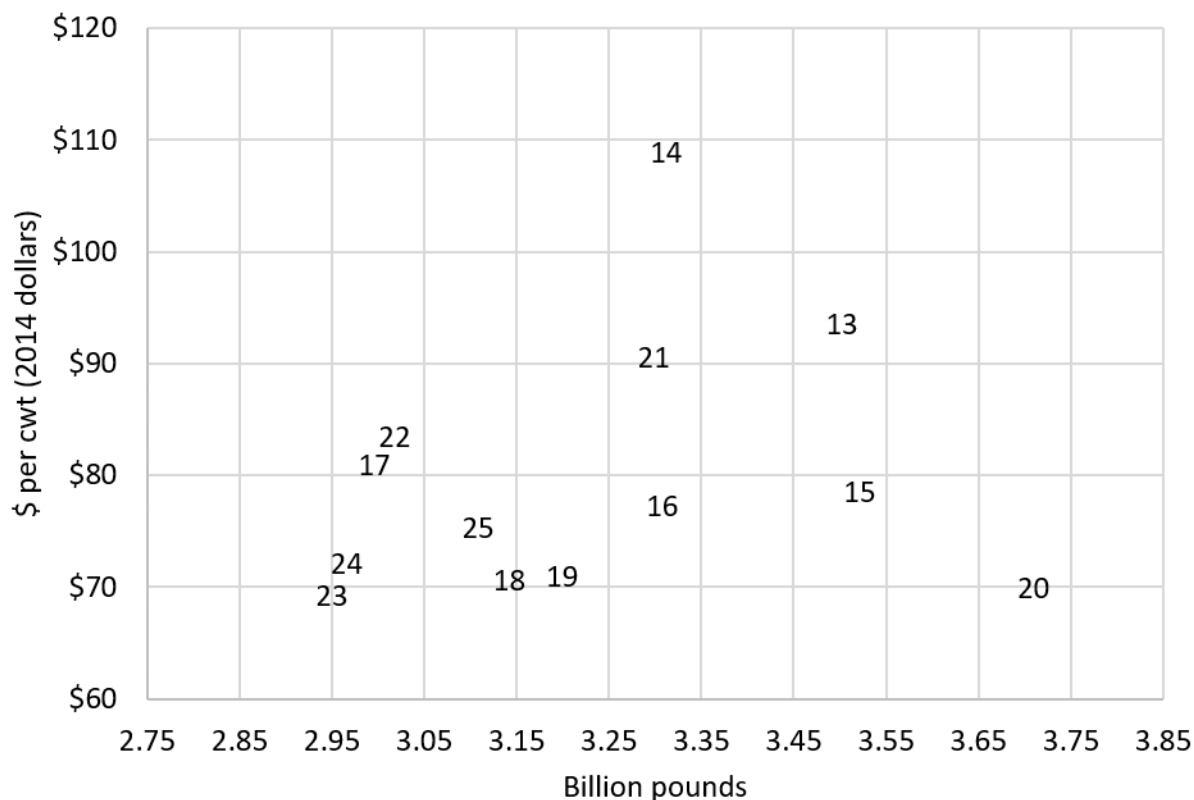
Figure 1 shows that in 2019, 2024 and 2025 both negotiated wholesale volume and inflation-adjusted cutout value increased compared to the previous year equating to clear evidence of an annual increase in wholesale pork demand. Conversely, in 2016, 2022 and 2023 both negotiated wholesale volume and inflation-adjusted cutout value decreased compared to the previous year equating to a decrease in wholesale pork demand.

The market only provides one price-quantity pair at any one point in time. That complicates attempting to figure out whether a change in quantity is simply a shift up or down an existing demand curve due to a change in value (which would be deemed a change in quantity demanded), or a move to a new demand curve (which would be a change in demand). For example, with lower cutout value, a large movement of wholesale pork volume could indicate that sellers are lowering prices to move products to get their supplies under control. This may have been the case in 2015, 2018 and 2020 as shown in Figure 1. With higher cutout value, a large movement of pork could indicate that buyers are eager to fill their needs while price increases are still workable. With higher cutout value, a smaller movement of pork could indicate resistance in the marketplace to higher asking prices. It could also be an indication of an inability to move product at the retail level, possibly due to higher consumer prices. Either one of these, or a combination, could have been the factors in play during 2014, 2017 and 2021.

⁴ Pork Reports https://mpr.datamart.ams.usda.gov/dataDictionary.do?idx=8&sellItem=pork_reports.

⁵ Leading Markets for U.S. Pork Plus Pork Variety Meat Exports <https://usmef.org/export-data/export-statistics>. Statistics Provided by USDA and Compiled by the U.S. Meat Export Federation.

⁶ Data available for download from Consumer Price Index (CPI) Databases <https://www.bls.gov/cpi/data.htm>.

Figure 1. Annual Negotiated Wholesale Pork Pounds and Cutout Value

Data source: USDA-AMS-LPGMN National Daily Pork FOB Plant – Negotiated Sales – Afternoon (LM_PK602); U.S. BLS Consumer Price Index for All Urban Consumers, all items in U.S. city average, not seasonally adjusted.

A wholesale demand index is needed to know if the higher inflation-adjusted cutout value and lower volume pair or lower inflation-adjusted cutout value and higher volume pair is an increase or decrease in wholesale demand. A quantity-based demand index can be constructed as:⁷

$$\text{Index} = \frac{Q_t^{\text{Observed}}}{Q_t^{\text{Expected}}} * 100 = \left[\frac{Q_t^{\text{Observed}}}{Q_0^{\text{Observed}} * \left[1 + \left(\frac{P_t^{\text{Observed}} - P_0^{\text{Observed}}}{P_0^{\text{Observed}}} \right) \left(\frac{\% \Delta Q}{\% \Delta P} \right) \right]} \right] * 100.$$

⁷ This is analogous to the derivation of the KSU Domestic Meat Demand (<https://www.agmanager.info/livestock-meat/meat-demand/monthly-domestic-meat-demand-indices-usdabls-data/updated-overview-ksu>) and Export Meat Demand (<https://www.agmanager.info/livestock-meat/meat-demand/monthly-export-meat-demand-indices-usdabls-data/updated-overview-ksu>) Indices.

The index is calculated by dividing the observed wholesale volume in period t ($Q_t^{Observed}$) by the expected wholesale volume that would have occurred in period t had demand remained unchanged. The expected (no demand change) quantity $Q_t^{Expected}$ is calculated by first taking the percentage change in inflation-adjusted cutout value between the base period 0 and period t to the exponent of the own-price elasticity of demand ($\frac{\% \Delta Q}{\% \Delta P}$). This results in a percentage change in quantity that is multiplied by the base period quantity. This value is then added to the base period quantity to obtain the expected quantity in period t that would have occurred if the demand curve had not changed between the base period and period t . An own-price elasticity of demand of -0.471 is used which means that a 1% increase (decrease) in the value of wholesale pork is expected to decrease (increase) quantity demanded of wholesale pork by 0.471%, all else equal.⁸ The index's base period does not impact month-over-month, quarter-over-quarter and year-over-year demand change conclusions.

Wholesale pork demand is the relationship between alternative inflation-adjusted cutout values and the quantity of wholesale pork which buyers will purchase at those alternative values. If a large quantity of pork is clearing the market that doesn't necessarily mean demand is strong. If the value is lower, then demand may be unchanged. If more is being bought at the prevailing value, then demand could in fact be stronger. But if less pork is clearing the market than the price elasticity of demand would indicate demand may actually be lower.

In 2014 wholesale pork demand increased from the level in 2013 (Figure 2). Negotiated wholesale volume of pork dropped by 4.3% compared to 2013. Absent a change in demand, an 4.3% decrease in volume would have increased inflation-adjusted cutout value by 9.1% ($\% \Delta P = \% \Delta Q / Ed = -4.3\% / -0.471$), but inflation-adjusted cutout value actually increased 16.4%. The larger than expected value increase says wholesale demand improved.

In 2015 negotiated wholesale pork volume was 6.3% higher than during 2014 and inflation-adjusted wholesale pork value declined 27.8%. Price elasticity of demand indicates the volume change, absent a shift in demand, would have led value to fall 13.4%. Since value fell by 27.8%, we conclude wholesale pork demand fell in 2015 versus 2014. Overall wholesale pork demand has decreased since 2013 as evidenced by the downward sloping trend line overlayed on the annual demand index in Figure 2.

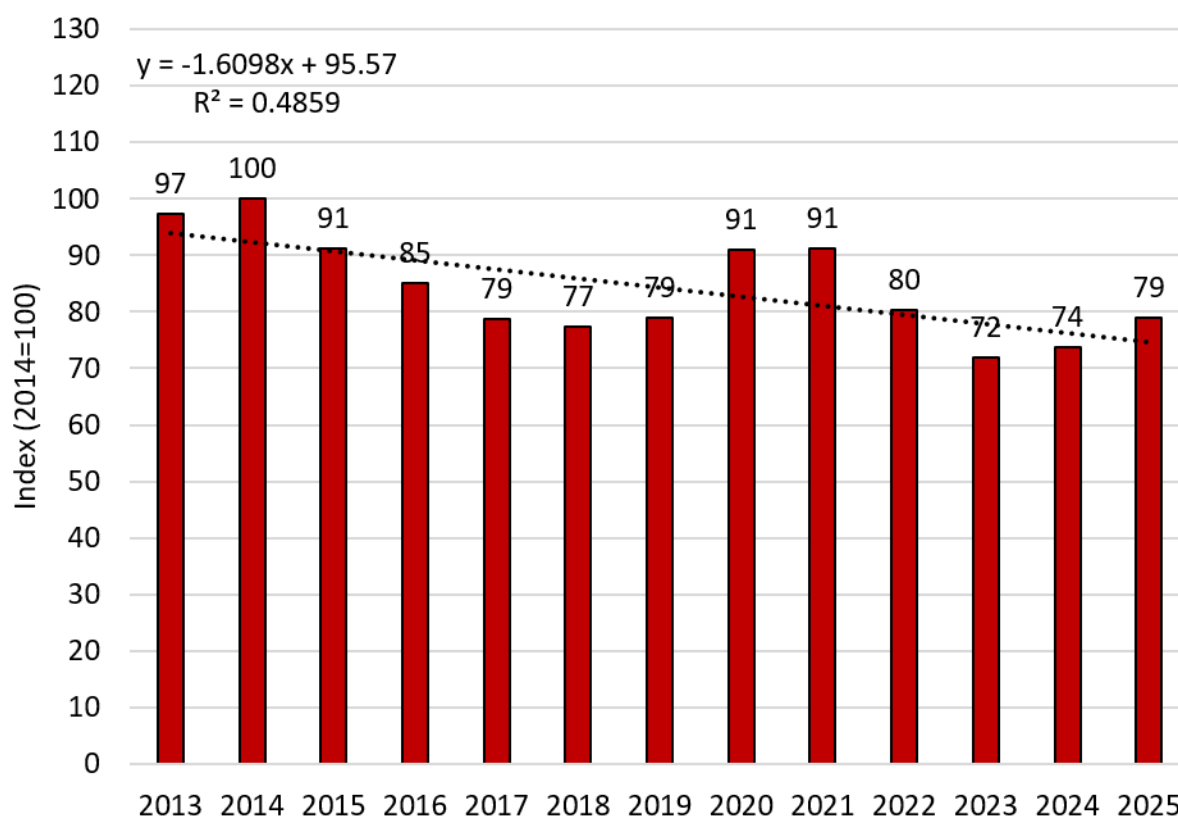
Annual wholesale demand measures have their place. They help frame long-run trends and are helpful for educating on the intricacies of measuring and monitoring demand. However, annual averages can smooth, or entirely mask, signals and are only available after the fact when many times it may be too late to act upon changes in demand. On the other hand, a weekly wholesale demand metric, while giving a fast read on the market, also comes with a lot of noise. Pork markets are inherently volatile week-to-week. Demand doesn't necessarily

⁸ Lusk, J.L., T.L. Marsh, T.C. Schroeder, and J.A. Fox. 2001. Wholesale Demand for USDA Quality Graded Boxed Beef and Effects of Seasonality. *Journal of Agricultural and Resource Economics* 26(1): 91-106. Available online at <https://jareonline.org/articles/wholesale-demand-for-usda-quality-graded-boxed-beef-and-effects-of-seasonality/>.

meaningfully strengthen or weaken every seven days. Supply doesn't rebalance every seven days. But weekly data can make it look like it does. That's the noise. If you try to interpret fundamentals from weekly swings, you risk mistaking short-term operational changes for true demand shifts.

Monthly wholesale demand assessment may best smooth out volatility while still capturing the patterns and changes that matter. A monthly wholesale demand index frequency also best aligns with the monthly release of the CPI-U data that is used to adjust cutout values for inflation.

Figure 2. Annual Wholesale Pork Demand Index

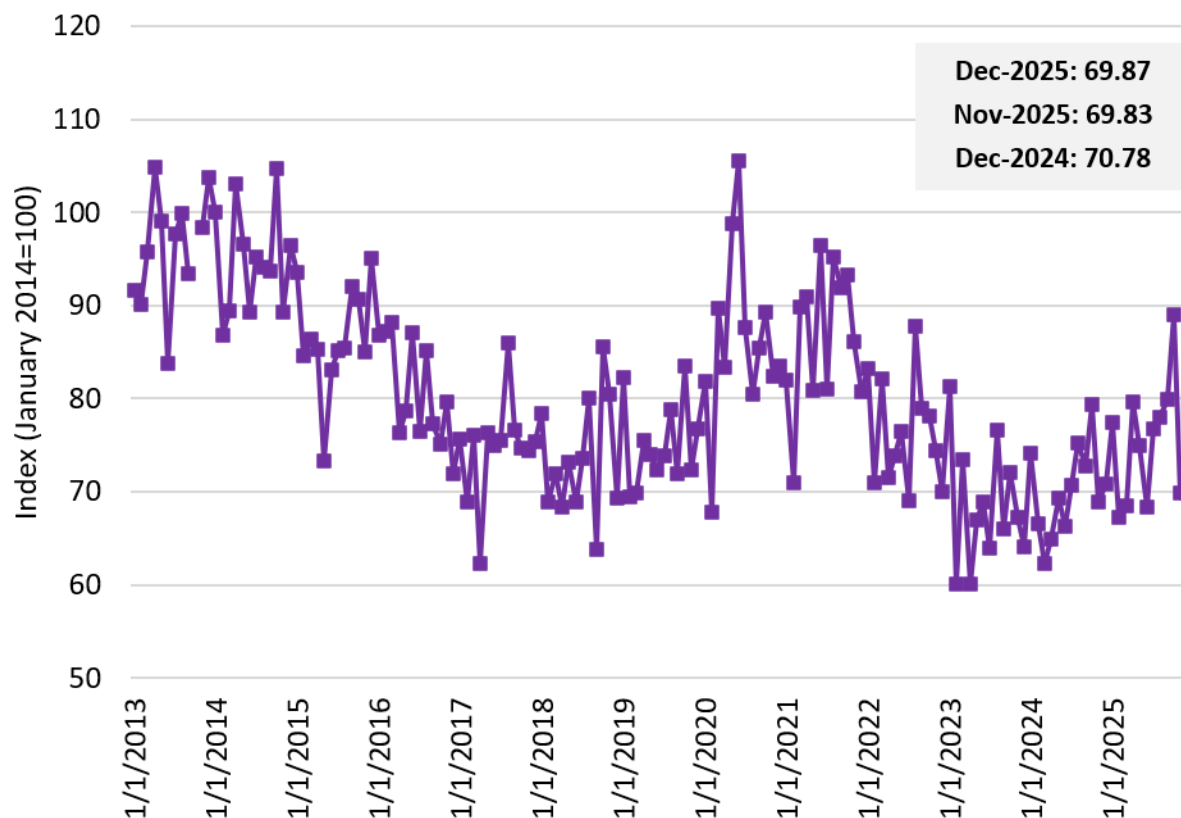


Data source: USDA-AMS-LPGMN National Daily Pork FOB Plant – Negotiated Sales – Afternoon (LM_PK602); U.S. BLS Consumer Price Index for All Urban Consumers, all items in U.S. city average, not seasonally adjusted.

Figure 3 provides a line-graph of a monthly wholesale pork demand index. This is accompanied by Table 1, which provides the monthly numerical index values as well as the month-over-month and year-over-year changes in the index. Figure 3 and Table 1 represent how the wholesale pork demand index information will be made available each month. If individual data series used to calculate the demand index are revised by data providers, index values may be updated over time.

Wholesale pork demand increased in both 2024 and 2025. That is, given the volume on the negotiated wholesale market we would have expected a lower inflation-adjusted pork value in both years if wholesale demand was flat or declining. On average, index values increased by 3.1% in 2024 versus 2023 and wholesale demand was stronger in 8 of 12 months. In 2025 compared to 2024, wholesale demand was stronger in 11 of 12 months and increased by an average of 6.9%.

Figure 3. Monthly Wholesale Pork Demand Index



Data source: USDA-AMS-LPGMN National Daily Pork FOB Plant – Negotiated Sales – Afternoon (LM_PK602); U.S. BLS Consumer Price Index for All Urban Consumers, all items in U.S. city average, not seasonally adjusted.

While a demand index for measuring and monitoring demand strength is useful, it has limitations. This is the case for any demand index. A demand index indicates how a demand curve moves from one period to the next period and measures shifts in demand over time relative to a base period (e.g., January 2014=100). A demand index functions much like a barometer. Evaluation should focus on direction and relative size of change and not absolute values.

Importantly, a demand index provides no explanation for why demand may be changing. It only indicates that changes are occurring. As such any demand monitoring with an index that shows “what” and the “how much,” must be complemented with surveys and economic analysis to help explain the “why.” Furthermore, wholesale level demand assessment using an index does not say which market channel’s demand (i.e., domestic retail, domestic food service, domestic E-commerce or export) has grown or shrunk, only if demand has changed or not.

Table 1. Monthly Wholesale Pork Demand Index Table, January 2014=100 (2024-2025)

Year	Month	Index Value	% Change from previous month	% Change from previous year
2024	1	74.14	15.70	-8.74
2024	2	66.54	-10.25	10.63
2024	3	62.33	-6.33	-15.13
2024	4	64.97	4.24	8.07
2024	5	69.31	6.68	3.48
2024	6	66.31	-4.33	-3.67
2024	7	70.74	6.68	10.70
2024	8	75.26	6.40	-1.78
2024	9	72.73	-3.37	10.17
2024	10	79.39	9.16	10.17
2024	11	68.89	-13.22	2.36
2024	12	70.78	2.74	10.45
2025	1	77.37	9.31	4.35
2025	2	67.21	-13.13	1.01
2025	3	68.54	1.98	9.97
2025	4	79.59	16.11	22.51
2025	5	74.93	-5.86	8.10
2025	6	68.38	-8.74	3.12
2025	7	76.74	12.23	8.48
2025	8	77.97	1.60	3.59
2025	9	79.95	2.54	9.93
2025	10	89.05	11.38	12.17
2025	11	69.83	-21.58	1.36
2025	12	69.87	0.05	-1.28

Data source: USDA-AMS-LPGMN National Daily Pork FOB Plant – Negotiated Sales – Afternoon (LM_PK602); U.S. BLS Consumer Price Index for All Urban Consumers, all items in U.S. city average, not seasonally adjusted.

For more information about this publication and others, visit AgManager.info.

K-State Agricultural Economics | 342 Waters Hall, Manhattan, KS 66506-4011 | www.ageconomics.k-state.edu

Copyright 2026: AgManager.info and K-State Department of Agricultural Economics



K-State Department Of Agricultural Economics