

Elasticity may be elusive, but CAB demand soars by any measure.

ore beef on the market meant lower prices in 2016, fueling greater demand from consumers largely recovered from the 2008 recession. That buying response was strongest for premium beef, which also saw the most supply increase.

Demand studies from Kansas State University (K-State) and the University of Missouri (MU) during the last several years have quantified the premium beef advantage. In 2014, Jillian Steiner and Scott Brown at MU projected less and less Select beef demanded each year to 2020, while more Prime, *Certified Angus Beef*[®] (CAB[®]) brand and Choice would find steady to growing demand.

CattleFax analyst Lance Zimmerman, for his master's thesis at K-State in 2010, worked with ag economist Ted Schroeder to create a wholesale beef demand model for Choice, CAB and premium beef, using 2002 as a base.

Zimmerman updated that model recently and considered the range of estimated elasticity, a key to quantifying demand. The project originally used the average of estimates from 15 economists, but now includes an example based on the MU dataderived elasticity.

by **Steve Suther,** Certified Angus Beef LLC

"Good luck explaining that one," Brown comments, admitting academics still don't agree on all points. Indeed. Zimmerman says elasticity estimates for CAB in 2010 ranged all the way from near zero (inelastic necessity) to -15 (extravagant luxury) on the way to the model's -0.87 average. That's not a typical number for luxury items, but premium beef demand is no textbook case.

As price goes up, quantity demanded typically declines. If it doesn't, the goods or services in question are often considered necessities.

Few would classify premium beef as such. In fact, the MU research used monthly price and volume data to show Prime and CAB add up to luxury elasticities at about -2.3 (see Figs. 1 and 2 for reference), compared to commodity Select beef at -1.24. Yet, as prices for all beef went up in recent years, it was Select demand that faltered, while Prime and CAB sales soared. As all prices fell back last year, demand for premium beef surged still higher.

What's going on?

"In some ways, beef stands alone," Zimmerman says. "We often look at the boxed-beef cutout value as a percentage of the pork or broiler cutout, but that's probably selling beef short."

Lower grades, cuts and grinds may compete with alternative proteins, but that's not universal.

"A CAB strip steak darn well better command a premium to a chicken breast or pork chop," he notes. "Beef has evolved to differentiation by brands, cuts, cooking methods — and segmented consumer markets by income and ethnic group."

Studying these changes requires data, but USDA's mandatory price reporting on loads sold by grade has been erratic, especially on Prime beef. However, CAB sales come from a system that tracks every pound sold.

"We can talk about supply and demand and argue elasticities," says longtime CAB Packing Director Clint Walenciak, "but I don't think CAB makes a good fit for those models. There's so much undertone and other things driving how much even enters the market from within our packers' supply channels."

Some have called the 38-year-old brand "mature," but Walenciak doesn't see that, either. "Choice beef has been out there for decades and decades, with comparatively maximum production and consumption, while CAB is still a fledgling," he says. "We haven't had time to reach maturity on supply or demand. While commodity beef goes through cycles of feast or famine, CAB has seen almost nothing but feast on both sides.

"We try to balance growth, though it seems like we do that by pouring gasoline on both fires."

The 128-million-pound (lb.) increase in CAB sales last year rightly shows up as a big spike on demand charts, he adds, and 2017 is shaping up for a 13th year of demand growth. Still, quantifying that can be tricky.

"On the scatter gram (Fig. 3), we keep moving our spot up and to the right, but what if one of the top retail chains wants to license 400 or 500 stores," Walenciak wonders, "or even 200 or 300, what would that do to a demand index?"

Missouri's Scott Brown explains why the 380 index (Fig. 1) for CAB compared to Choice still at the 2002 base of 100 makes sense on the K-State model.

"CAB is no small program, but even at 15% of fed beef it is much smaller than all Choice beef," he says.

"So an increase in sales affects a smaller universe, and while the 380 index represents a 280% increase in demand since 2002, it does not mean consumption more than doubled. It just means demand keeps shifting to the right more than other beef."

As for whether the index should use the original -0.87 or Missouri's monthly average of -2.26, Brown says, "the true level is probably somewhere in between those, and the truth is, we cannot know exactly what the number is."

The K-State model uses beef consumption based on world population because that fits wholesale pricing and accounts for export sales, but Brown says that may dilute CAB demand.

"If you consider that the population of those who have an opportunity to buy CAB is much more limited," he says, "that means the demand figure is understated."

K-State's Schroeder says, "Regardless of magnitude, the upward-trending demand curve reflects real and continuing growth."

That licensed partners sell more regardless of higher prices says one thing clearly.

"Price is not the key driver here," Schroeder says. "It is consistency and quality. You can play with the elasticities and get different percentages, but the end is still strong demand growth."

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Editor's Note: Steve Suther is director of industry information for Certified Angus Beef LLC.

Fig. 1: Sensitivity analysis on changing elasticity on CAB® demand index results

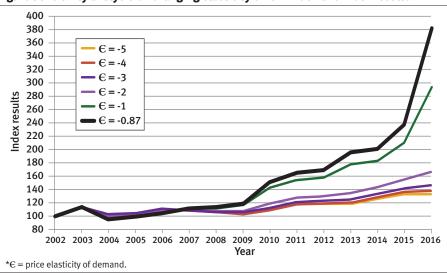


Fig. 2: Wholesale beef demand index values, base year = 2002

