Meat Availability and Shortages Overview

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As the meat-livestock sector continues to adapt to the situation presented by COVID-19 (novel coronavirus), a host of challenges regarding meat availability have developed. Many consumers who have previously taken for granted the efficiency and effectiveness of the meat supply chain, are now asking questions about the total volume available to consumers at grocery stores, the product mix available, and the asking prices that may arise in coming weeks. COVID-19 has seemingly impacted every step in the meat supply chain.

Shortage Concepts

It is useful to directly clarify there is no shortage of livestock, but rather a monumental challenge is presented by COVID-19 in converting livestock into consumable products. The temporary closure and slowdown of meat packing plants, at a time when plants were running near capacity, has caused a "bottleneck" in the U.S. livestock-meat supply chain and impacted meat packing plants ability to receive livestock and begin the process of transforming animals into a wide array of meat products. Challenges with sustaining a complete, healthy, and available workforce in these plants is creating a backlog of livestock and reduction in the amount of meat available. There is typically at least a 2-week lag between changes at the animal harvest and wholesale level to the final, consumer level.

At the same time, the distribution and transportation system that is in place to take meat from packers to retailers is suffering from labor and logistical challenges. Retail grocery sales are planned many weeks in advance, not only for advertising schedules, but to ensure logistics of product supply. Since March disruptions and stress on the wholesale to retail meat supply chain has occurred because of consumption changes associated with requirements to control COVID-19. The issues are due to the tremendous logistical challenges of shifting meat supplies from food away from home channels to retail grocery channels.

Economists would describe a "shortage" as a situation where the demand for a product exceeds the available supply in a market and a "surplus" as the opposite situation where supply exceeds available demand. In a market economy, prices reflect scarcity, and falling prices reflect surplus whereas rising prices reflect shortages. Currently there is a "shortage" building for consumer-ready meat products as reflected by rising meat prices—albeit we believe

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this will be short-lived.¹ These price changes incentivize additional effort to expand meat supply and encourage consumers to cut back depending on their particular desires for meat in their diets. Recent, large increases in wholesale beef and pork prices confirm these market adjustments are underway. On Monday April 27th the Choice boxed beef cutout was \$311.84/cwt and the pork cutout was \$83.71/cwt. This represents a record for wholesale beef and a substantial increase of over \$30/cwt for pork since April 9th.

Context on Current Availability vs. Desired Meat Volumes

Per capita meat disappearance estimates from USDA indicate that in 2019, the average U.S. resident consumed approximately 58, 52, and 96 pounds of beef, pork, and chicken, respectively. It is important to note that this reflects broad, aggregate-level category patterns and masks important differences across products. For instance, few households consume hamburger, steaks, and roasts in the exact proportions they are available from a given animal. Nonetheless, these per capita disappearance estimates give broad context on the historical volume of meat consumed.

Each month, USDA releases a Cold Storage report which can be viewed as a broad summary of wholesale meat supplies that are available at the end of each month. As of March 31st, estimates were that about 502, 622, and 921 million pounds of beef, pork, and chicken were on-hand. The significant slowdown, and in many cases closure, of the U.S. food service and hospitality sector caused a major decline in consumption of products such as steak, bacon, ham, and sausage patties. Typically, Americans are far more likely to buy these products when eating out or staying at a hotel than they are to purchase them for at-home cooking. Going into April, these products were backing up in cold storage.

When we combine information on typical consumer disappearance in a month and wholesale stock available going into April we gain additional insight on relative supplies. To summarize, the Cold Storage stocks on March 31st correspond with about 10 days of "normal" consumption. This broad rule of thumb also presumes that no product in cold storage was destined for export. While 10 days is indeed not a long duration of stocks in-hand, it is important to note meat production has not stopped but rather has slowed.

Some of the products in cold storage may have been packaged and labeled for delivery to restaurants and other food service establishments. Should shortages arise in grocery outlets, consumers may see meat in atypical packaging (e.g., vacuum packaging or large ground chubs) or sizes (e.g., whole muscle cuts) that usually go to food away from home but are now being directed to grocery. Rising prices are the incentive needed to repurpose and, in some cases, reprocess some of these items for use in grocery outlets.

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¹ The "surplus" of livestock reflects producers wanting to market a volume larger than plants are positioned and capable to handle. While not discussed here, this corresponds with adverse economic conditions for livestock producers.

Summary

This fact sheet aims to provide a timely overview to help guide "meat shortages" discussions. We have no concrete ability to project specific developments presented by COVID-19. That said, on balance we anticipate the overall volume of meat available to decline in May and certainly for the mix of products available to look different than most consumers are used to. However, we believe this will be a short-lived situation if markets are "allowed to work."

It is critical for consumers to know that there is no shortage of livestock available for meat production in the United States. Production of beef, pork and poultry are projected at record levels in 2020 and were at record levels in the first quarter of 2020. Production of all red meat and poultry is projected at 108.3 billion pounds in 2020, up 2.9% compared to 2019 according to the April USDA World Agricultural Supply and Demand Estimates. Total red meat and poultry production in the first quarter of 2020 was estimated at 27.1 billion pounds, up 7.1% year over year. While COVID-19 is changing how and where meat consumption occurs and is temporarily overwhelming certain supply chains, supplies of all meats are relatively assured on balance in 2020.

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