Understanding National Food Supply Chains: Sausage Products

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Understanding National Food Supply Chains: Sausage Products

Abstract
In today’s global food systems, the prices of food reflect not only the cost of the initial product and marketing costs but also the process of moving products from producers to consumers. It is useful for local producers and processors to understand how the national marketplace operates. A few questions they need to consider are: How is final value distributed among U.S. consumers of sausage products? What are the functions that command the greatest value? Where are the market opportunities and challenges for local producers?

Disciplines
Agribusiness | Agriculture | Operations and Supply Chain Management

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In today’s global food systems, the prices of food reflect not only the cost of the initial product and marketing costs but also the process of moving products from producers to consumers. It is useful for local producers and processors to understand how the national marketplace operates. A few questions they need to consider are: How is final value distributed among U.S. consumers of sausage products? What are the functions that command the greatest value? Where are the market opportunities and challenges for local producers?

Who buys sausage?
The total value of sausage products, which includes fresh sausages (fresh pork sausage, fresh bratwurst, etc.), cooked sausages (hot dogs, smoked sausages, cotto salami, spiced luncheon meat, etc.), and dry and semi-dry sausages (summer sausage, pepperoni, hard salami, etc.) purchased by consumers nationally is estimated at $19.1 billion.* Grocery venues purchase approximately $5 billion and deliver it to consumers for about $7.5 billion. Food service venues purchase approximately $3.1 billion and serve it to customers for $11.6 billion.

Approximately 33 percent of consumer dollars spent on sausage products delivered as groceries is retained by the grocery venue, 8 percent is kept by the wholesale/distributor venue, and 58 percent is returned to the processor.

Nearly 73 percent of prepared food value is retained by the food service venue, 3 percent is retained by the wholesale/distributor, and 24 percent is passed on to the processor.

How fast does it move?
Manufacturing operations depend on rapid, relatively steady turnover. On average, sausage products spend 11 days being processed and held as a finished product by the processor. The products spend roughly two more weeks under the ownership of wholesale/distributors.

How is value generated across the supply chain?
Domestic processors and imports provide $8.6 billion in initial value, which generates $9.8 billion in total purchases by grocery, food service, and other downstream venues: $5 billion (51 percent) by grocery venues, $3.1 billion (32 percent) by food service venues, and $1.7 billion (17 percent) by other entities (food manufacturers, etc.). Of total downstream purchases, $3.3 billion (34 percent) are sold directly from the processor and two-thirds are distributed through wholesale/distributors. Overall, wholesale/distributors add approximately $0.6 billion in value to total purchases by grocery venues and $0.4 billion to purchases by food service venues.

Figure 1. Movement of Sausage Products

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*$7.5 Billion (sales as groceries) added to $11.6 billion (sales as prepared foods, $7.5 billion/$438 billion in total grocery sales ~ 2%: $11.6 billion/$311 billion ~ 4% of total prepared food sales, from 2002 USDA Census of Agriculture.
Table 1: Comparison between Grocery and Prepared Foods

<table>
<thead>
<tr>
<th></th>
<th>Grocery (foods sold for human consumption outside the venue)</th>
<th>Prepared Food (prepared for immediate consumption at the venue)</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Consumer Purchases</td>
<td>$7.5 billion (39% of value)</td>
<td>$11.6 billion (61% of value)</td>
<td>$19.1 billion (100%)</td>
</tr>
<tr>
<td>Manufactured Value *</td>
<td>$4.4 billion (62%)</td>
<td>$2.7 billion (38%)</td>
<td>$7.1 billion (100%)</td>
</tr>
<tr>
<td>Value Increase</td>
<td>1.7 x</td>
<td>4.2 x</td>
<td>2.7 x</td>
</tr>
<tr>
<td>Post-Production Margin Added</td>
<td>$3.1 billion</td>
<td>$8.9 billion</td>
<td>$12.0 billion</td>
</tr>
<tr>
<td>Post-Production Transaction Costs</td>
<td>$2.6 billion</td>
<td>$7.9 billion</td>
<td>$10.6 billion</td>
</tr>
<tr>
<td>Transaction Costs/Margin Added</td>
<td>84%</td>
<td>89%</td>
<td>88%</td>
</tr>
<tr>
<td>Share of Food Sales</td>
<td>2% (of $438 billion)</td>
<td>4% (of $311 billion)</td>
<td>3% (of $749 billion)</td>
</tr>
</tbody>
</table>

**How do sausage products compare as a prepared food vs. grocery item?**

Table 1 provides a side-by-side comparison of sausage products sold as a grocery product with those sold as prepared food.

The manufactured value of sausage products sold as groceries is $4.4 billion, or 1.6 times the amount sold as prepared foods. This indicates that a greater volume is sold as groceries than as prepared foods. However, only 39 percent of the value of consumer purchases occurs as groceries, compared to 61 percent as prepared foods. A similar percentage ratio for all food products is 59:41 (for groceries to prepared foods, respectively). This indicates that sausage products generally are more accepted (i.e., easier to market) as a prepared food relative to other food products.

Food service markets increase manufactured value by 4.2 times, compared to only 1.7 times for grocery venues. However, even though food service adds more value to the product, the cumulative cost to deliver through food service absorbs 89 percent of the added value; the cost to deliver through grocery venues absorbs only 84 percent. This indicates that marketing sausage products as grocery items is relatively, but only slightly, more profitable than selling them as prepared foods.

**Conclusions and Recommendations**

A key tradeoff for farmers who wish to market sausage products directly centers on profitability versus the ease and reliability of marketing. Even though volumes are lower overall, sausage products generate significantly more value as a prepared food than as a grocery item – particularly compared to other food products. However, marketing sausage products as groceries is probably going to be more profitable when the costs to get them to consumers are compared to the relative amount of value added. The difference in profitability, however, is relatively modest compared to the higher consumer acceptance for sausages delivered as prepared foods. It would appear that farmer-distributors who focus on building a marketing position through food service venues (as a supplier to a local deli or restaurant) could probably build capacity more reliably, but slightly less profitably than those that target grocery venues. Overall, however, it appears that the tradeoff might be worth it.

Another marketing opportunity for niche sausage producers is via Internet or catalog sales. It is possible for producers to sell their products online and have them shipped to consumers around the globe. Some large companies (i.e., Wisconsin Cheeseman) that use catalogs to reach customers also sell niche products.