

# Certified Pork Demand

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# Motivation

- **USDA** asked for compliance b/c of "considerable congressional and public interest about the humane treatment of animals"
  - **McDonald's** Calls for Phase-Out of Growth Promoting Antibiotics in Meat Supply, Establishes Global Policy on Antibiotic Use
  - **Nat'l Pork Board Website-Hot Topics:** Animal Welfare, Environment, and Antimicrobials lead the list of 5
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# Motivation of the Marketplace

- Consumers: The Right and a Desire to Know or at Least Feel Good/Safe
  - Producers: Access to Markets and Alternative Opportunities
  - Wholesalers and Retailers: Respond to Consumers and Reduce Liabilities
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# Consumer Survey

- Elicit Consumer Purchase Choices for Pork Certified for Environment, Welfare, and Antibiotic Use
  - 10,000 Households drawn randomly from throughout the USA to represent the basic demographics of society (age, income, household size)
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# Heterogeneous Consumers?

- 3 Classes:

- 1. Socially Conscious: 16% with very high willingness to pay for E and A, but not (in general) for W.
  - 2. Price Conscious: 41% who are unwilling to pay for any of the certification programs.
  - 3. Mainstream: 43% with relatively high willingness to pay but also somewhat price conscious.
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# Willingness to Pay (\$/lb)

Program	Class 1	Class 2	Class 3
ENV	1.46	0.14	0.82
WEL	0.14	0.15	1.03
ANT	1.51	0.11	1.42
ENV&WEL	3.24	0.30	1.81
ENV&ANT	3.18	0.23	2.04
WEL&ANT	2.63	0.24	2.34
EWA	5.93	0.38	2.91

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# Market Shares (2/1)

## LATENT CLASS

	Class 1	Class 2	Class 3	Aggregate
ENV	0.60	0.02	0.32	0.24
WEL	0.23	0.02	0.44	0.23
ANT	0.61	0.01	0.66	0.39
E&W	0.93	0.03	0.83	0.52
E&A	0.92	0.02	0.90	0.54
W&A	0.86	0.02	0.95	0.55
EWA	1.00	0.04	0.99	0.60

# Market Shares (3/2)

## LATENT CLASS

Program	Class 1	Class 2	Class 3	Aggregate
E	0.75	0.14	0.65	0.46
W	0.37	0.15	0.75	0.44
A	0.76	0.13	0.88	0.55
EW	0.96	0.25	0.95	0.66
EA	0.96	0.20	0.97	0.65
WA	0.92	0.21	0.99	0.65
EWA	1.00	0.32	1.00	0.72

# Market Shares (Marg. Cost Based)

## LATENT CLASS

	Class 1	Class 2	Class 3	Aggregate
E	0.65	0.03	0.42	0.29
W	0.27	0.03	0.54	0.29
A	0.66	0.03	0.75	0.44
EW	0.94	0.06	0.88	0.55
EA	0.94	0.05	0.93	0.56
WA	0.88	0.05	0.96	0.57
EWA	1.00	0.08	0.99	0.62

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# What are the "LONG RUN" Costs?

- Retail Level With Entire Cost born by Primal Cuts
  - ENV      .80 \$/lb      (2.58, 0.24, 1.45)
  - WEL      1.60 \$/lb      (0.24, 0.26, 1.81)
  - ANT      .55 to .75 \$/lb      (2.60, 0.19, 2.50)
  - EWA      2.12 to 2.32 \$/lb      (10.46, .67, 5.14)

(Numbers in parentheses are the willingness to pay estimates)

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# Cost Breakdown (LONG RUN!)

Program	Live Wt (\$/lb)	Retail (\$/lb)	Retail w/Traceability and Labeling	Retail-Primal Cuts only (25%)
E	\$0.05	\$0.10	\$0.20	\$0.80
W	\$0.15	\$0.30	\$0.40	\$1.60
A	\$0.02 to 0.07	\$0.04 to 0.14	\$0.14 to 0.24	\$0.56 to 0.96
EWA	\$0.22 to 0.29	\$0.44 to 0.49	\$0.54 to 59	\$2.12 to 2.32

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## Some Messages to Take Away

- There appears to be substantial Willingness to Pay for Certification of Environmental Stewardship, Animal Welfare, and Controlled Antibiotic Use
  - The Willingness to Pay for a sizeable fraction of consumers probably exceeds the long run cost of meeting the certification specs.
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## More...

- How long does it take to attain the long run cost structure? Supply short-falls, inability to capitalize on economies of scale, retailer acceptance, market power...
  - Proprietorship, Exclusive Endorsement, and/or Brand Loyalty are essential to prevent commoditization of the process.
  - It's happening and will continue. Market access?
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## Recent Trends

- Swift and BC Natural Foods
  - Cargill and Prairie Grove Farms
  - Dean Foods and Horizon Organic
  - General Mills and Small Planet Foods
  - Groupe Danone and Stonyfield Farm
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