



RAISING U.S. WAGYU FOR THE JAPANESE BEEF MARKET: A FINANCIAL ANALYSIS

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INTRODUCTION

Feeding Wagyu for the Japanese market has proven to be financially demanding due to the traditional extended feeding regimen required for Wagyu to reach maximum condition. Wagyu are superior in marbling ability to Continental and British breeds of cattle and therefore develop higher quality, superior grading carcasses. This paper will try to assess whether the extra operating costs required to raise Wagyu crossbred cattle to the optimum quality level can be absorbed by carcass premiums when sold either in the U.S. or Japan.

WSU WAGYU PROJECT

Washington State University purchased one hundred twenty crossbred Wagyu steers and heifers in November 1995. Sires of these cattle included Alvin, Konishiki, Fame, Rueshaw, Mazda, Judo, Haruki, and Michifuku, with only the latter two bulls being new Fullblood Wagyu genetics. On average, the cattle weighed 551 pounds at time of purchase and cost \$0.66/lb.

The feeding trial, 454 days in duration, was categorized into three phases: backgrounding, 141 days; pasture, 79 days; and finishing, 234 days. Under normal situations, there would be no pasture phase, i.e., the cattle would be on grain or drylot the entire feeding period. Average feed costs totaled \$1.10 per head per day and yardage cost \$0.26 per head per day. The herd experienced a 4% death loss.

One hundred seventeen head were slaughtered and sold on February 28, 1997. Market price for choice slaughter cattle at that time was \$1.11/lb (hot carcass weight). Sixty three percent of the carcasses graded prime and the remainder graded choice. One steak was taken from each carcass prior to shipment for evaluation of tenderness and fatty acid composition. No greater premiums were granted to prime carcasses over choice carcasses due to the collection of carcass data, the

removal of one steak from each carcass, and our demand that all cattle were to be slaughtered on the same day.

The traditional feeding regimen for Wagyu cattle is extremely lengthy. The Japanese prefer mature carcasses over the youthful sort which are prized in the U.S. Thus, under the Japanese Grading System, Wagyu cattle can be afforded time to mature and marble without the carcasses being penalized for over maturity, as they would be if graded in the U.S. Carcasses in the WSU project were sold to a U.S. packing plant who had the necessary connections to sell the carcasses in Japan; therefore, these carcasses were not penalized on the basis of maturity. It is thought, however, that if WSU had been able to sell the carcasses directly to Japan, it is likely that the selling prices would have been higher. For this and other reasons, it would be beneficial for a producer to export directly to Japan without employing a U.S. intermediary.

PROPOSED WAGYU PROJECT BASED ON WSU TRIAL

Since Washington State University did not have to pay interest costs on bank loans, processing fees for new cattle, and veterinarian expenses, the aforementioned Wagyu feeding trial was not necessarily representative of the true operating expenses a typical producer would encounter. The following is a projection of a more realistic proposal based on the WSU trial. Similar values for feed costs, livestock investment costs, and shipment expenses were used, however, yardage, processing fees, interest, and death loss were adjusted to create a more practical set of figures. An itemized list of the operating costs for this proposal is shown in Figure 1.

Figure 1: Itemized list of Operating Expenses for Proposed Wagyu Project

OPERATING COSTS	RATE (Where applicable)	\$ PER TOTAL	\$ PER HEAD
Livestock Investment	\$0.66	\$ 41,650.34	\$ 344.22
Feed Costs (including grazing)		\$ 58,219.56	\$ 497.60
Processing/vaccine/vet		\$ 600.00	\$ 5.00
Yardage Costs		\$ 16,097.40	\$ 137.58
Trucking	4 trucks @ \$750.00 each	\$ 3,000.00	\$ 25.64
Accrued Interest (APR)	10%	\$ 8,506.37	\$ 72.70
Death Loss	3%	\$ 3,634.04	\$ 31.06
TOTAL OPERATING COSTS		\$ 131,707.70	\$ 1,125.71

*Estimated from industry averages

The same choice slaughter cattle price (\$1.11/lb) paid for WSU Wagyu carcasses in February 1997 was assumed in this proposal. However, prime grade carcasses were divided (using the actual data) into high prime (prime+), average prime (prime°), and prime minus (prime-). Additional premiums were awarded to these categories, from highest to lowest, respectively. Figure 2 depicts what premium would be required for each degree of prime to break even (revenue = total operating expenses).

Figure 2: Expected Breakeven Premiums for the Proposed Wagyu Project.

GRADE	NO.	PERCENT	MKT PRICE	PREMIUM	PRICE/LB.	LBS.	TOTAL	PER HEAD
Prime	63	53.85%						
Prime +	11	9.40%	\$ 1.1133	\$ 0.190	\$ 1.303	10228	\$ 13,329.50	\$ 1,211.77
Prime °	18	15.38%	\$ 1.1133	\$ 0.182	\$ 1.295	16734	\$ 21,675.46	\$ 1,204.19
Prime -	34	29.06%	\$ 1.1133	\$ 0.177	\$ 1.290	31618	\$ 40,788.88	\$ 1,199.67
Choice	54	46.15%						
Choice +	27	23.08%	\$ 1.1133	\$ -	\$ 1.11	25112	\$ 27,956.94	\$ 1,035.44
Choice °	17	14.53%	\$ 1.1133	\$ -	\$ 1.11	15809	\$ 17,600.27	\$ 1,035.31
Choice -	10	8.55%	\$ 1.1133	\$ -	\$ 1.11	9303	\$ 10,356.66	\$ 1,035.67
TOTAL RETURNS							\$ 131,707.72	\$ 1,125.71
LESS: Total Operating Costs							\$ 131,707.70	\$ 1,125.71
RETURNS OVER OPERATING COSTS (with Premiums)							\$ 0.02	\$ 0.00

These breakeven premiums seem high, but there are many options and areas where a producer might be able to avoid such high costs and enjoy higher returns. For example, Washington State University paid more for feed than the average feedlot would pay, simply due to cattle numbers, i.e., WSU was unable to purchase feed at a discounted bulk rate. Further, the cattle in this feeding trial were one half crosses with either Angus or Simmental. Suppose all cattle in this group had been sired by Michifuku or Haruki. Both of these sires are new Fullblood Wagyu bulls imported from Japan. Together, their progeny from this group graded 80% prime: 32% high prime, 20% average prime, and 28% low prime. A “prime” premium for 80% of the carcasses would translate into higher returns. Figure 3 illustrates a series of breakeven premiums for this situation.

Figure 3: Expected Breakeven Premiums from progeny of purebred Wagyu sires.

GRADE	NO.	PERCENT	LBS.	MKT PRICE	PRICE/LB.	PREMIUM	TOTAL	PER HEAD
Prime	20	80.00%						
Prime +	8	32.00%	34,817.02	\$ 1.1133	\$ 1.23	\$ 0.12	\$ 42,992.32	\$ 5,374.04
Prime °	5	20.00%	21,760.64	\$ 1.1133	\$ 1.23	\$ 0.12	\$ 26,870.20	\$ 5,374.04
Prime -	7	28.00%	30,464.90	\$ 1.1133	\$ 1.23	\$ 0.12	\$ 37,618.28	\$ 5,374.04
Choice	5	20.00%						
Choice +	5	20.00%	21,760.64	\$ 1.1133	\$ 1.1133	\$ -	\$ 24,226.91	\$ 4,845.38
Choice °	0	0.00%	-	\$ 1.1133	\$ 1.1133	\$ -	\$ -	#DIV/0!
Choice -	0	0.00%	-	\$ 1.1133	\$ 1.1133	\$ -	\$ -	#DIV/0!
TOTAL RETURNS							\$ 131,707.70	\$ 1,125.71
LESS: Total Operating Costs							\$ 131,707.70	\$ 1,125.71
RETURNS OVER OPERATING COSTS (with Premiums)							\$ -	\$ -

Another consideration to be made is that of marketing time in relation to demand. It is essential to determine consumer demand cycles and cater to those demands. In Japan, chilled, high class cuts of beef, such as the tenderloin, boneless strip loin, and ribeye roll (lip on) receive the highest prices during the mid-winter, holiday season, prior to Christmas. The secondary peak for these cuts occurs in April and May during the Cherry Blossom Season.

Wagyu cattle take more financial resources to raise than other common breeds, but the quality of meat is indeed superior. When American's realize what quality beef tastes like and the reason for the exceptional tenderness, juiciness, and flavor, maybe Wagyu beef will find a niche in the American marketplace. Until then, the Wagyu export market will continue to progress toward a brighter future overseas. In summary, if a producer can establish export connections to Japan's beef market and offer the right product at the right time, a successful cattle export enterprise can be accomplished.

REFERENCES

Longworth, John. C. *Beef In Japan: Politics, Production, Marketing and Trade*. St. Lucia, Queensland: University of Queensland Press, 1983.

Mattson, Christopher D. "An Economic Analysis of Integrating the Cow-calf Producer, the Feeder, and the Packer Through a Strategic Alliance." Washington State University, 1995.

Meat Export Research Center. U.S. Meat Export Analysis and Trade News. Ames, Iowa: Vol.5:6, June 1997.

"U.S. Beef Cut Prices at Japanese Ports." USDA-Market News 22 July 1997.