EVALUATING A MARKETING LOAN PROGRAM FOR WOOL AND MOHAIR

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The wool and mohair industries have been in a period of radical transition over the last few years. A number of issues have adversely impacted wool and mohair producers. These include loss of milling infrastructure, world economic events that have severely damaged export markets, increasing imports of lamb, and severe drought.

This analysis builds on an econometric model of the sheep and angora goat industries. The models estimate and project supply, demand, and price. Projections are made over the 2001-2005 period. Simulation modeling techniques are used to develop probabilities of outcomes. That allows for the development of average government costs and probabilities of costs in each year. Loan rates are developed using cotton as the model. The current cotton base loan rate of $0.519 per pound is evaluated relative to estimates of cotton variable costs of production. That relative level of support is maintained relative to costs of production for wool and mohair. Because wool and mohair have another product (meat), typical returns for meat are subtracted out of costs to develop a wool and mohair production cost.

Two potential loan rates, $1.00 and $1.20 per pound grease for wool and two loan rates for mohair of $5.25 and $4.20 per pound are evaluated. These loan rates are base loan rates from which quality premiums and discounts can be taken. The wide disparity in mohair loan rates is due to a wide difference in receipts for goats sold for meat. Working with industry participants, a potential schedule of premiums and discounts has been developed and is presented in this paper. That schedule shows that it is possible to develop premiums and discounts from market information. Some fine trimming to this example would be necessary.

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Results

The baseline results indicate that stock ewe numbers decline to about 3.6 million head by 2005. Slaughter lamb prices remain relatively stable in the $78 to $80 per cwt. range. National average wool prices rise from about $0.60 cents per pound grease to about $0.80 per pound grease by 2003 and remain there throughout the period. Government costs under the $1.20 per pound loan rate average about $19 million dollars per year. Costs under the $1.00 per pound loan rate average about $10 million dollars per year. Government costs decline through the period as wool prices recovers.

Under the baseline, angora goats shorn declined to 334,000 head then increase to 440,000 head by 2005. Loan deficiency payments under the $4.20 and $5.25 loan rates for mohair average about $1.4 and $3.7 million per year, respectively. The premium and discount schedule around the loan rate indicates that most payments are made on the coarser adult hair which supports the breeding infrastructure base of the industry. Fine quality kid hair receives fewer payments, as it is more reliant on market prices.

What is a Marketing Loan?

➤ Loan with repayment at the world market price

- Cotton, rice, grains

➤ Loan deficiency payment (LDP) when price is <u>below</u> loan

- LDP made to producer at loan minus price

➤ Revenue is maintained at the loan rate level

- Producer sells wool at market price
- LDP for difference from government

Marketing Loan Issues

- No government stocks
  - Incentive for producer to sell
- Revenue support
  - Loan rate
- Quality
  - Premiums and discounts from base grade
- Can result in lower prices
  - If production increases
  - Is that an issue in wool?

Loan Rate Development

- Cotton loan rate $0.519/pound
- Wool loan rate equal to loan rate vs. costs for cotton
    - Set support level similar to that of cotton
    - Variable costs and yield per acre
    - Wool production costs and wool per head (USDA)
- Wool loan rate equal to $1.00/pound

Method of Analysis

- Econometric model of the industry
- Simulation of possible outcomes
  - Good and bad years
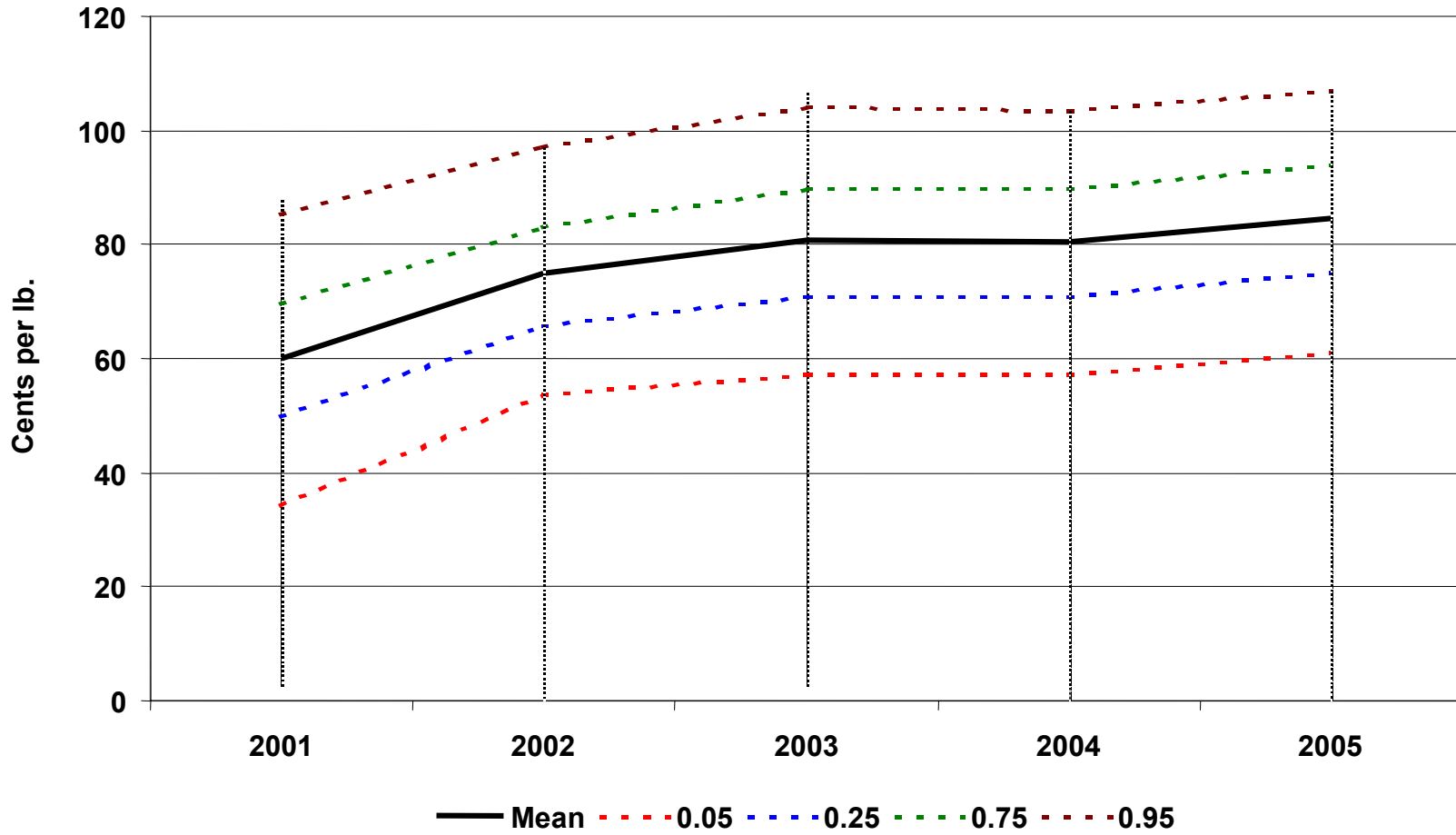- Projected industry performance
  - 2001-2005
  - Inventory, production, prices

Stock Ewe Number, 1995-2005
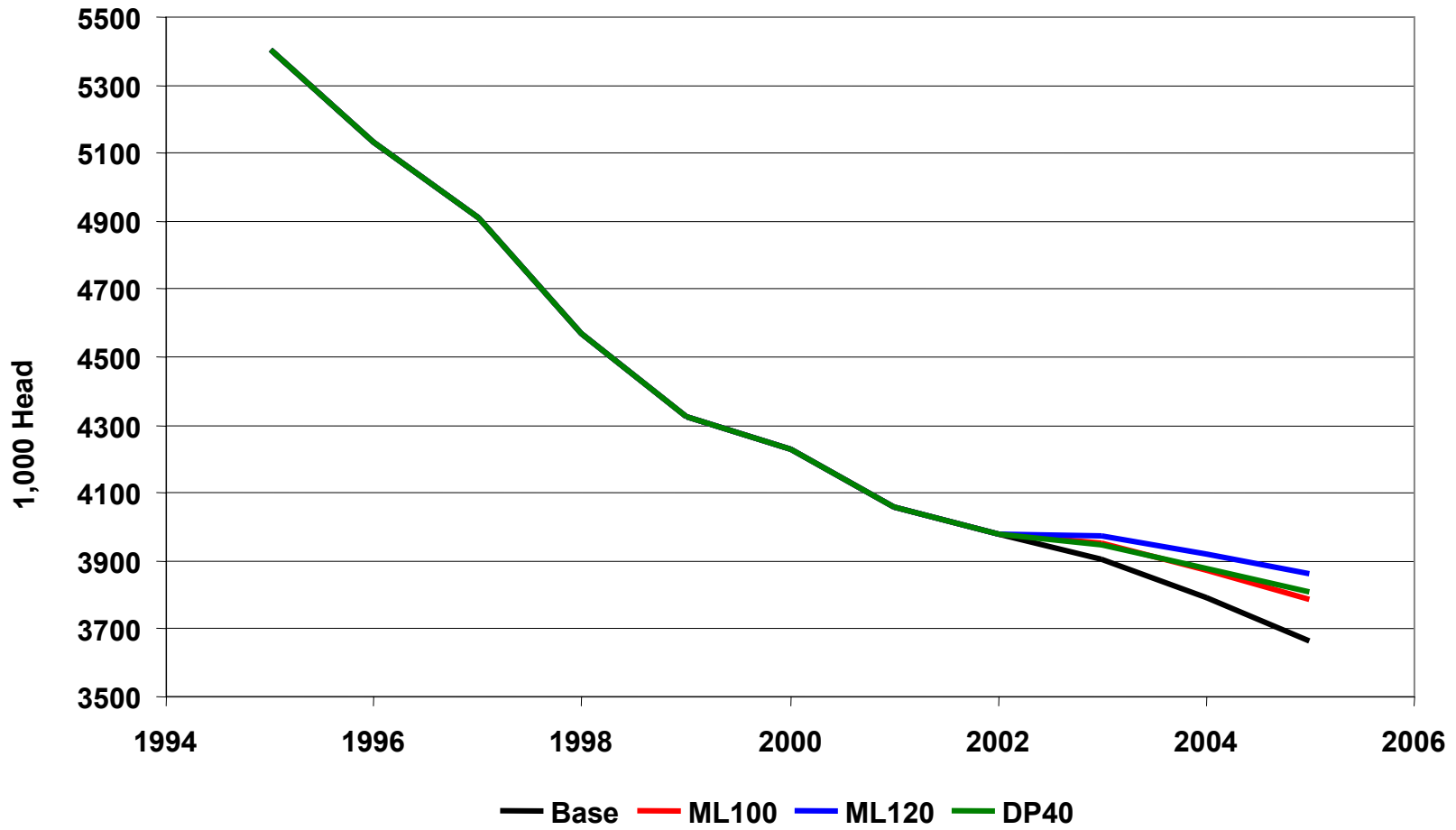
Average Annual No. Stock Ewes for Alternative Programs, 2001-2005
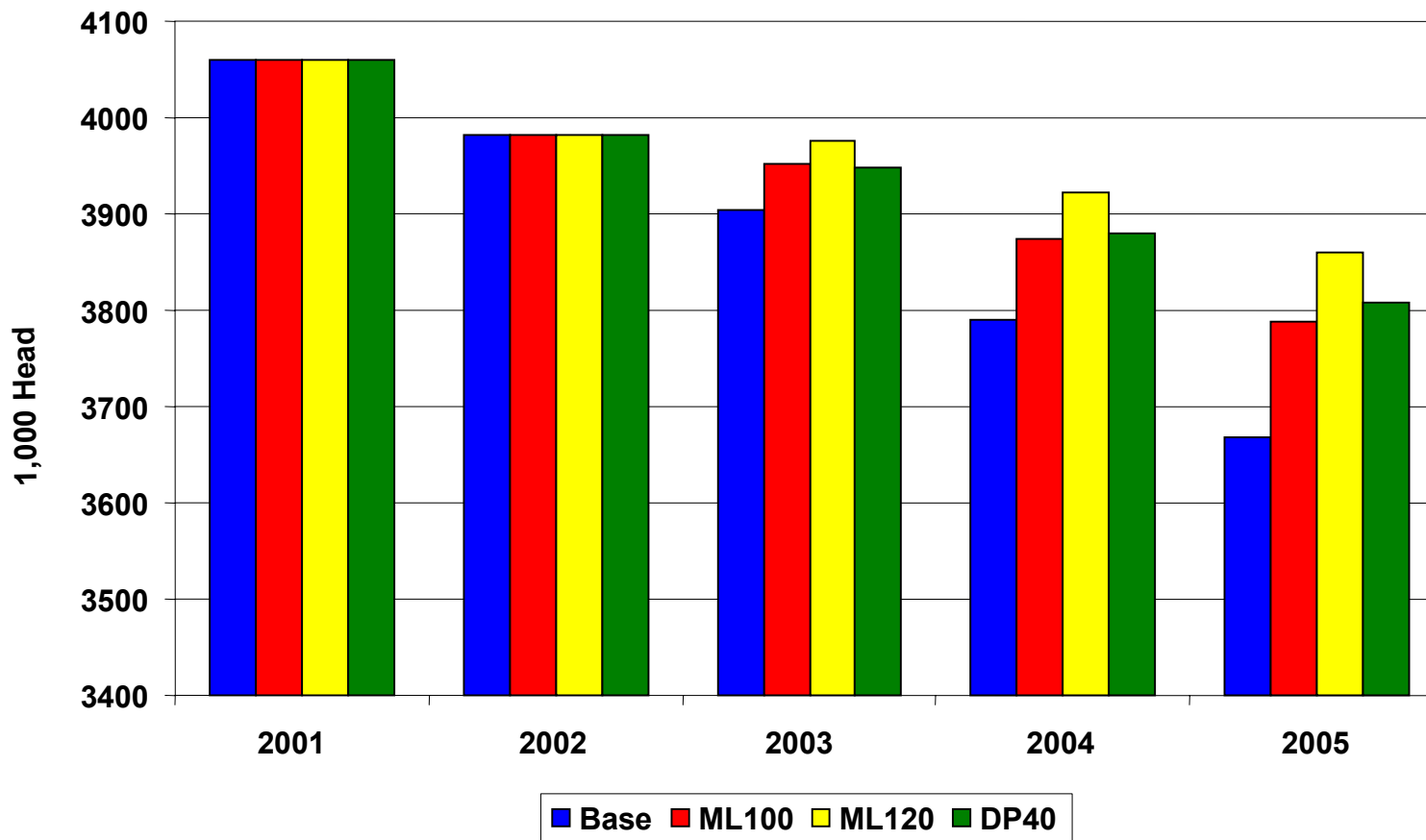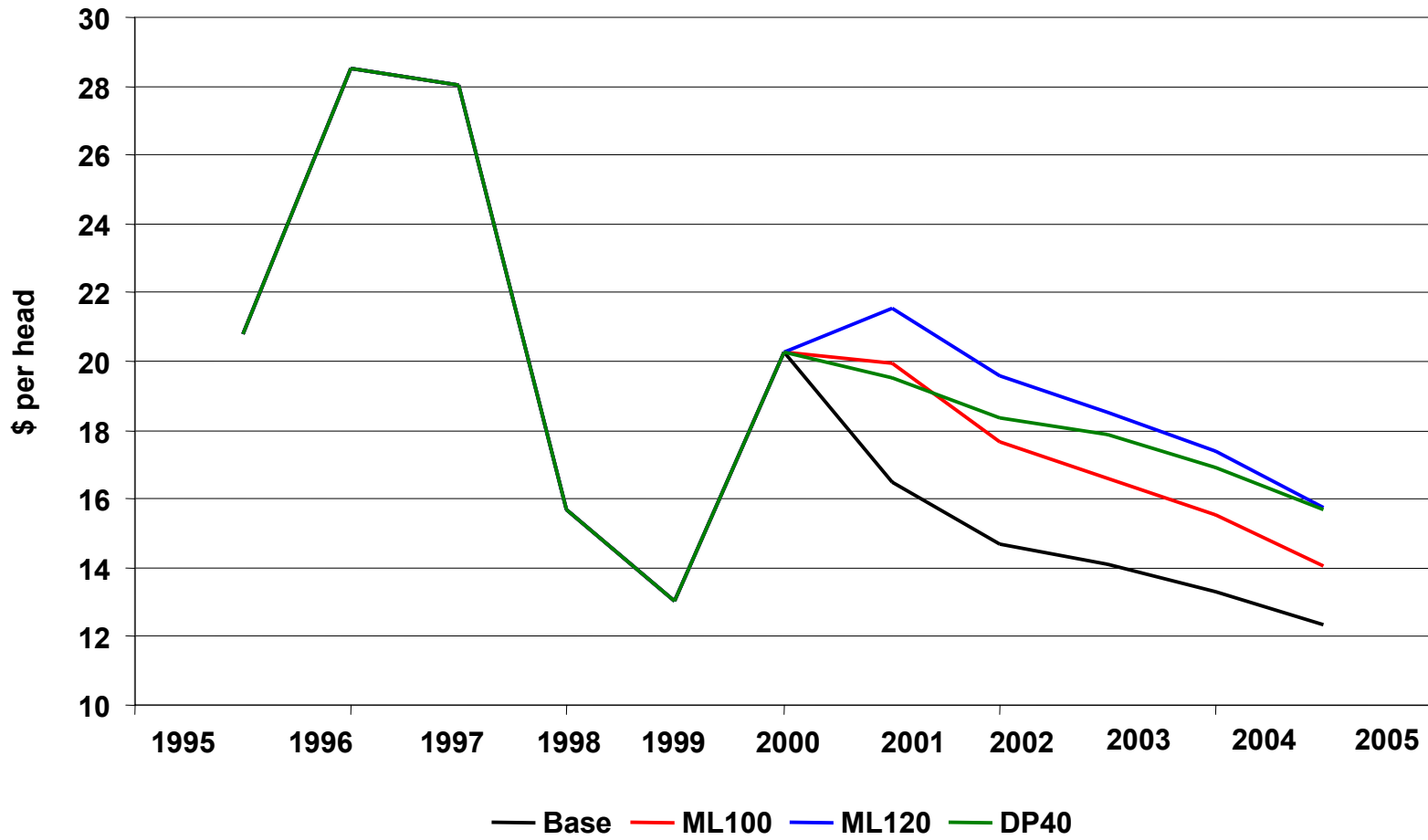
Risk Exposure for Lamb Price, 2001-2005
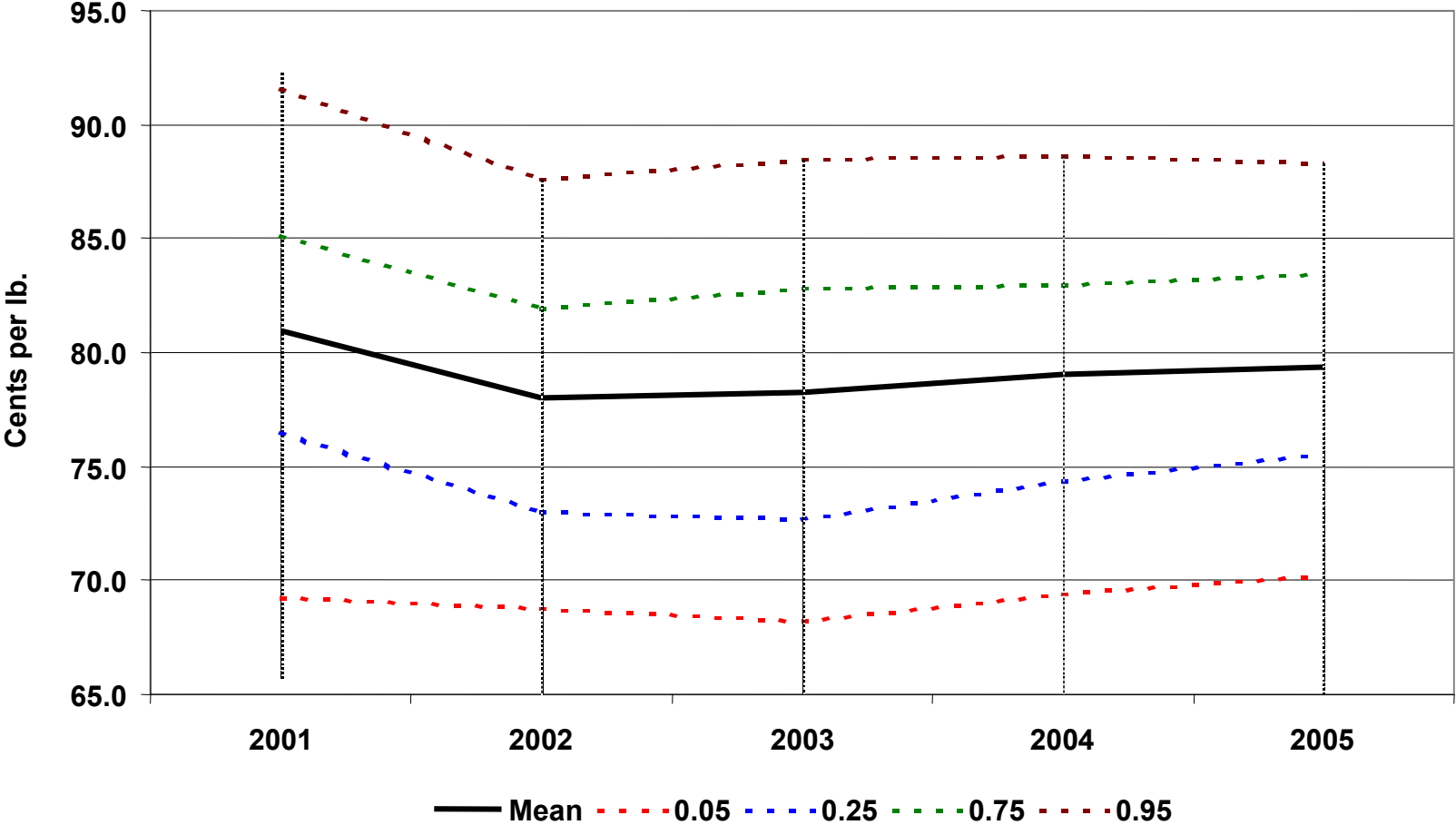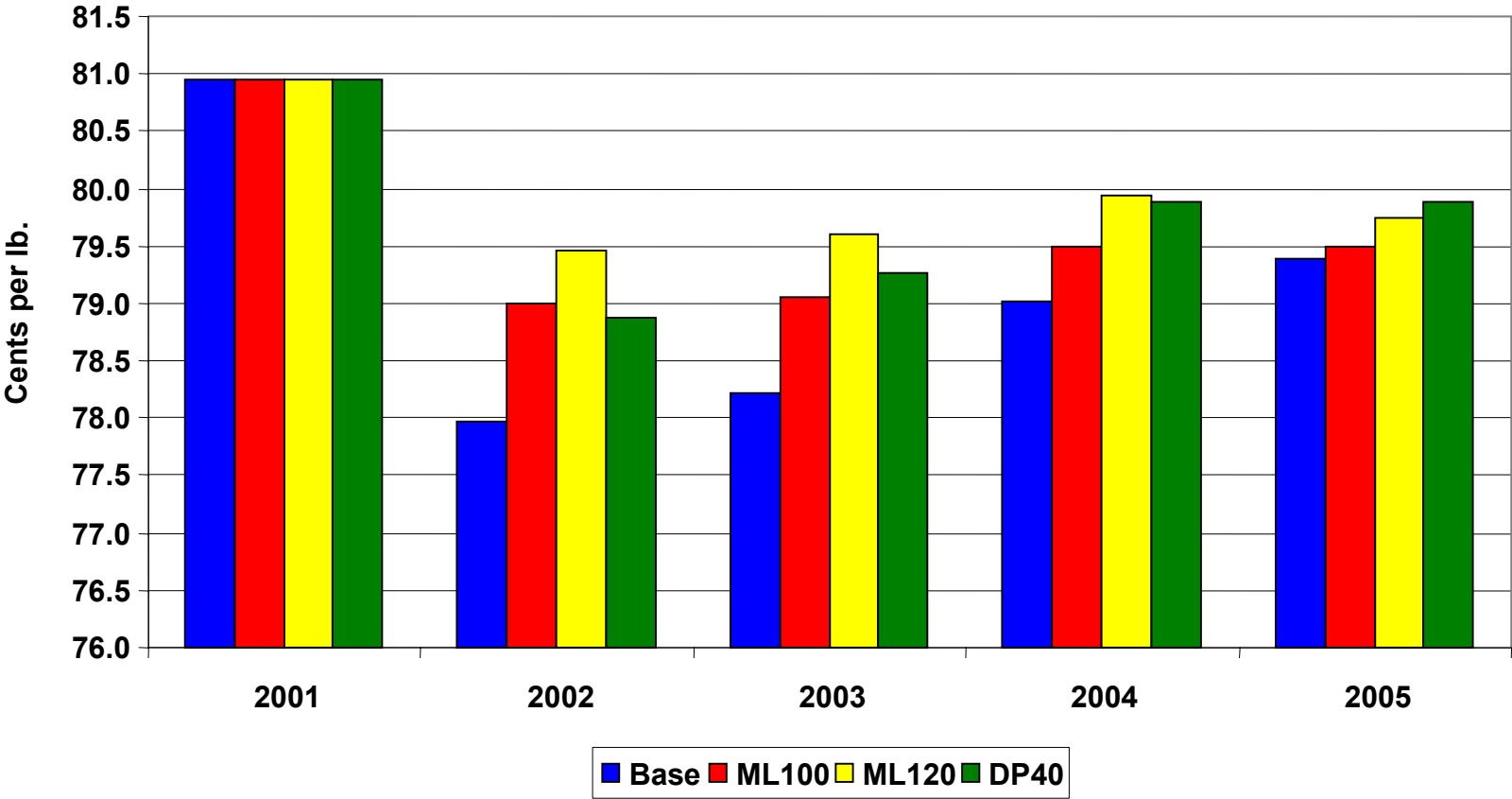
Risk Exposure for Wool Prices, 2001-2005
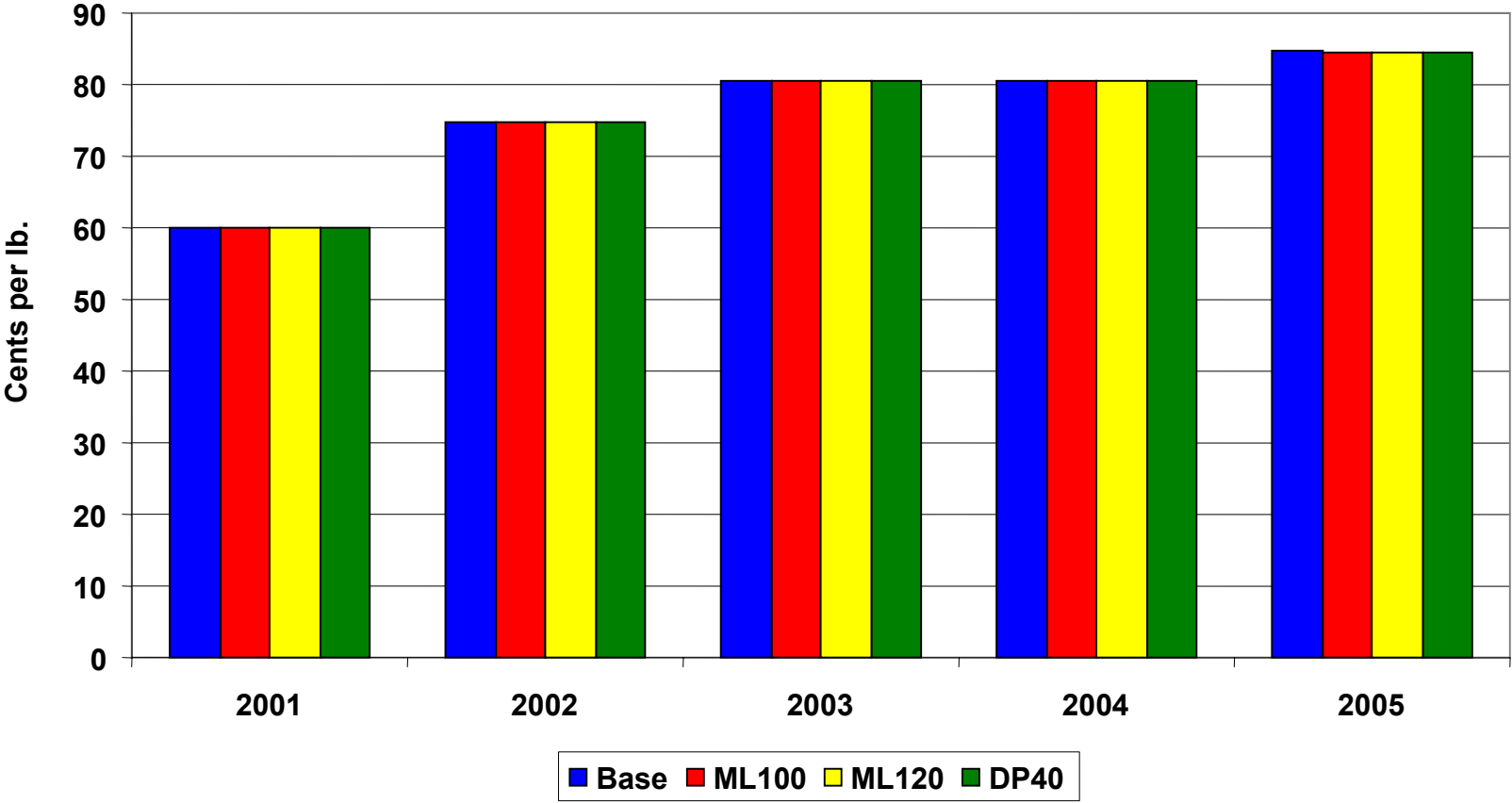
Total Returns per Ewe, 1995-2005 ($/ head)
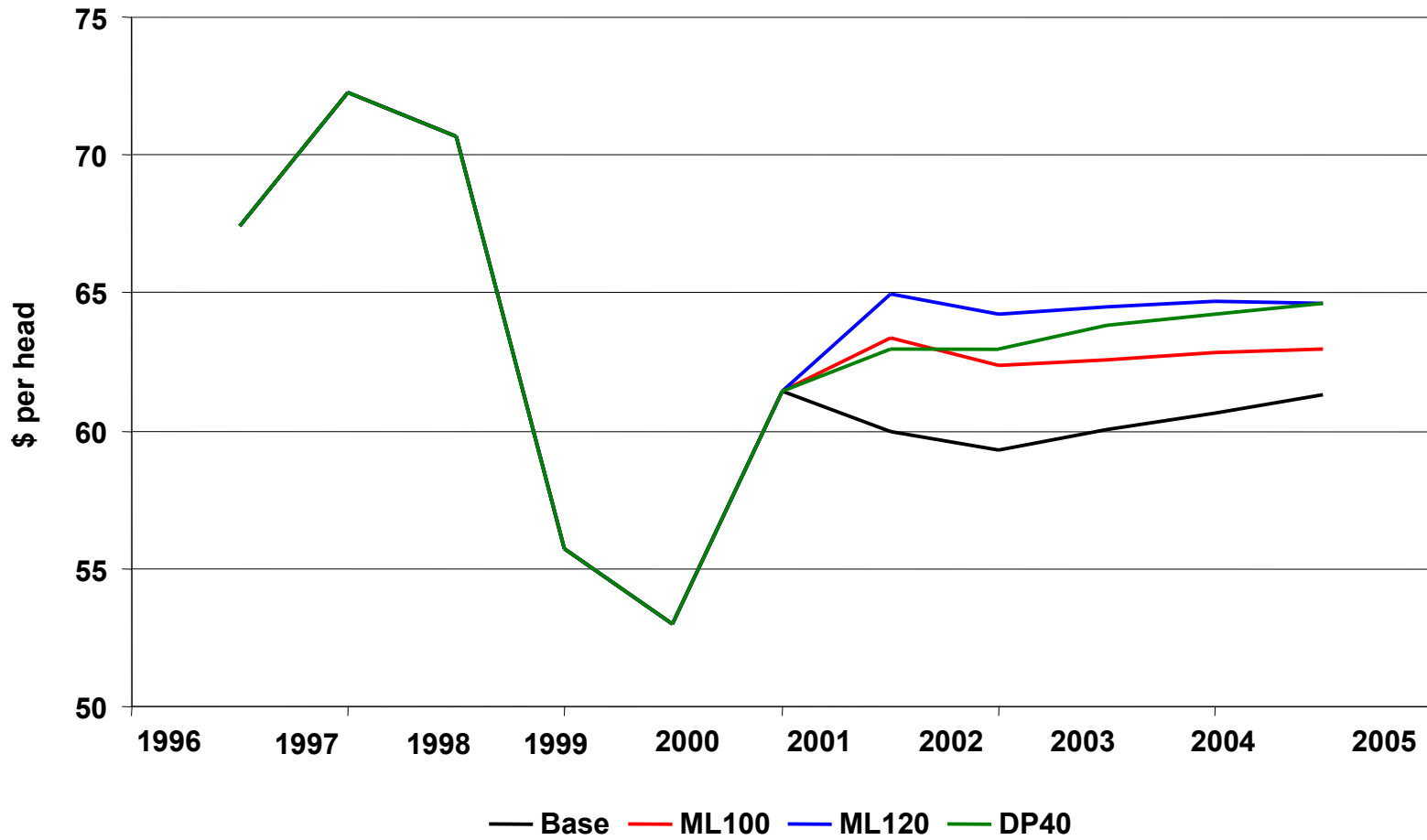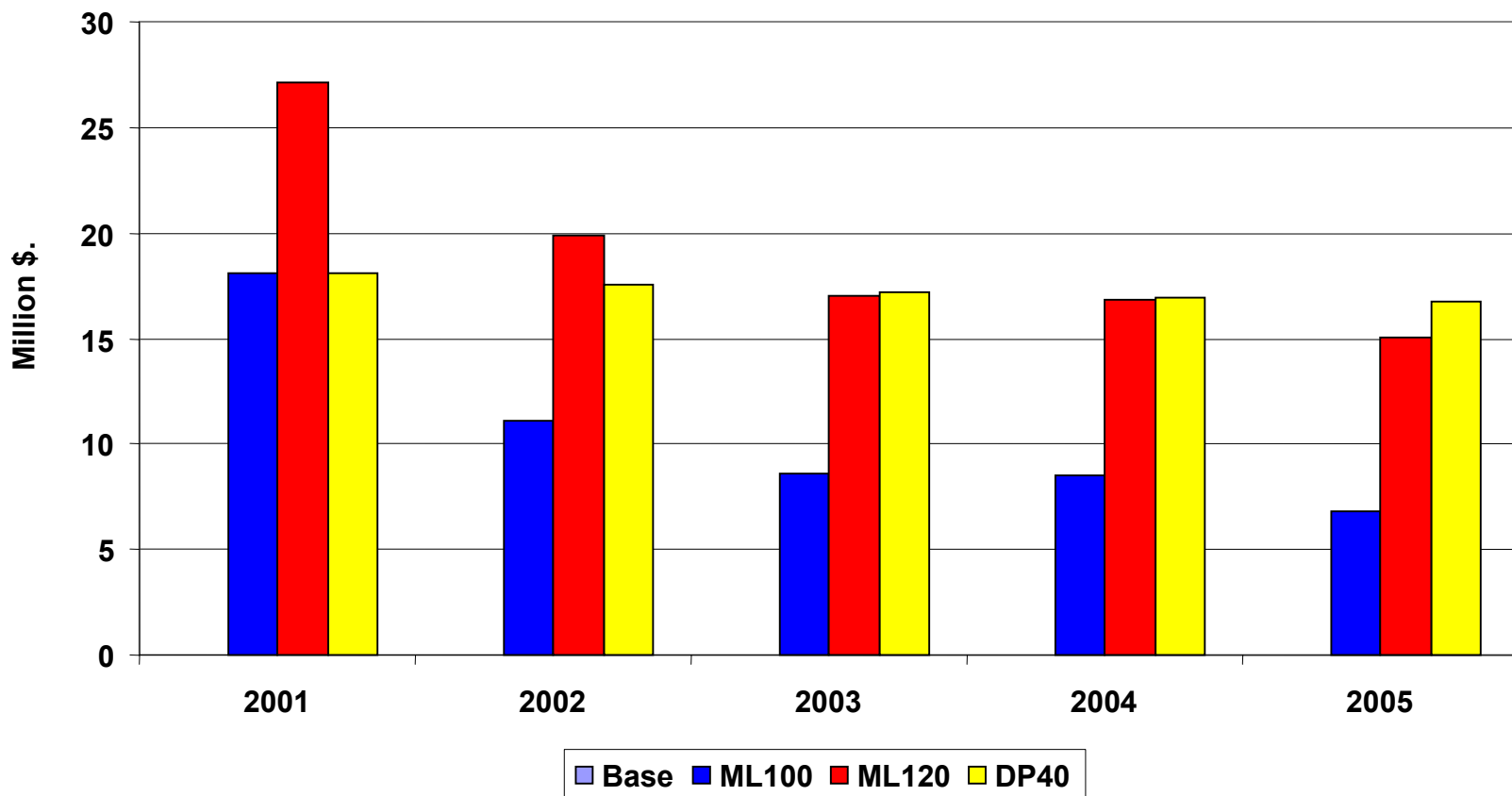
Net Returns per Ewe, 1995-2005

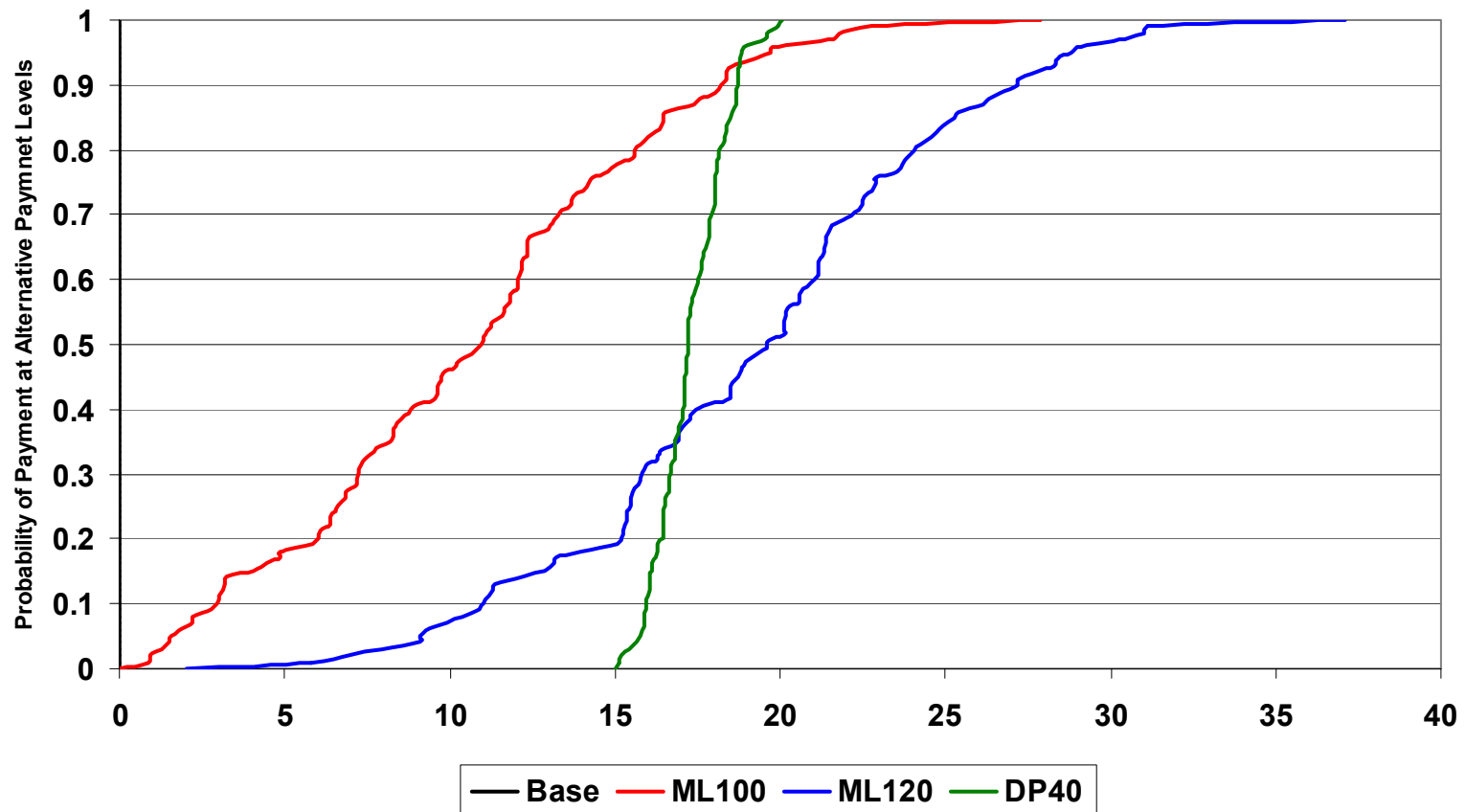**Average Annual Lamb Prices for Alternative Programs, 2001-2005**

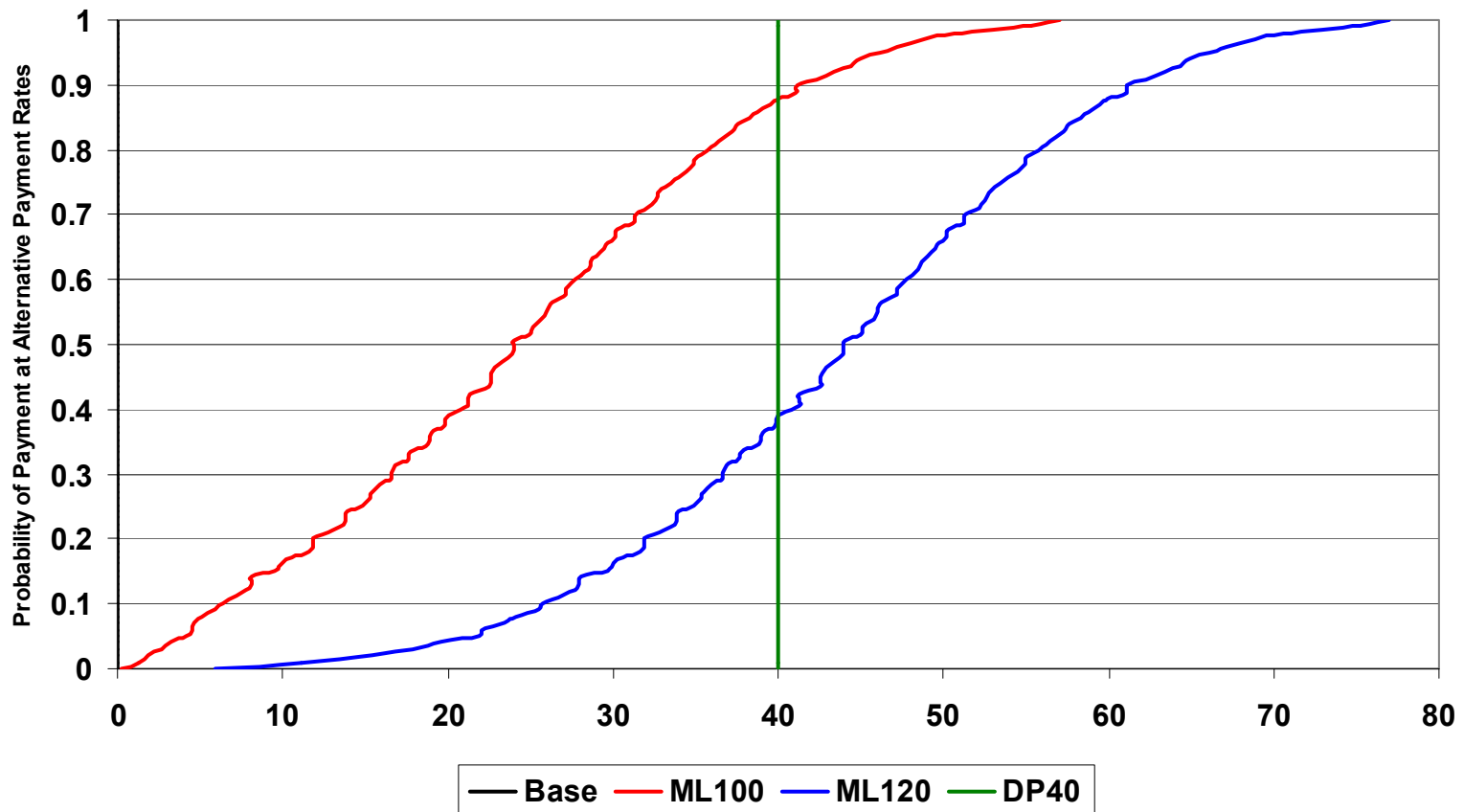# Average Annual Wool Price for Alternative Programs, 2001-2005

Average Annual Government Payments, 2001-2005

Average Annual Government Payments to
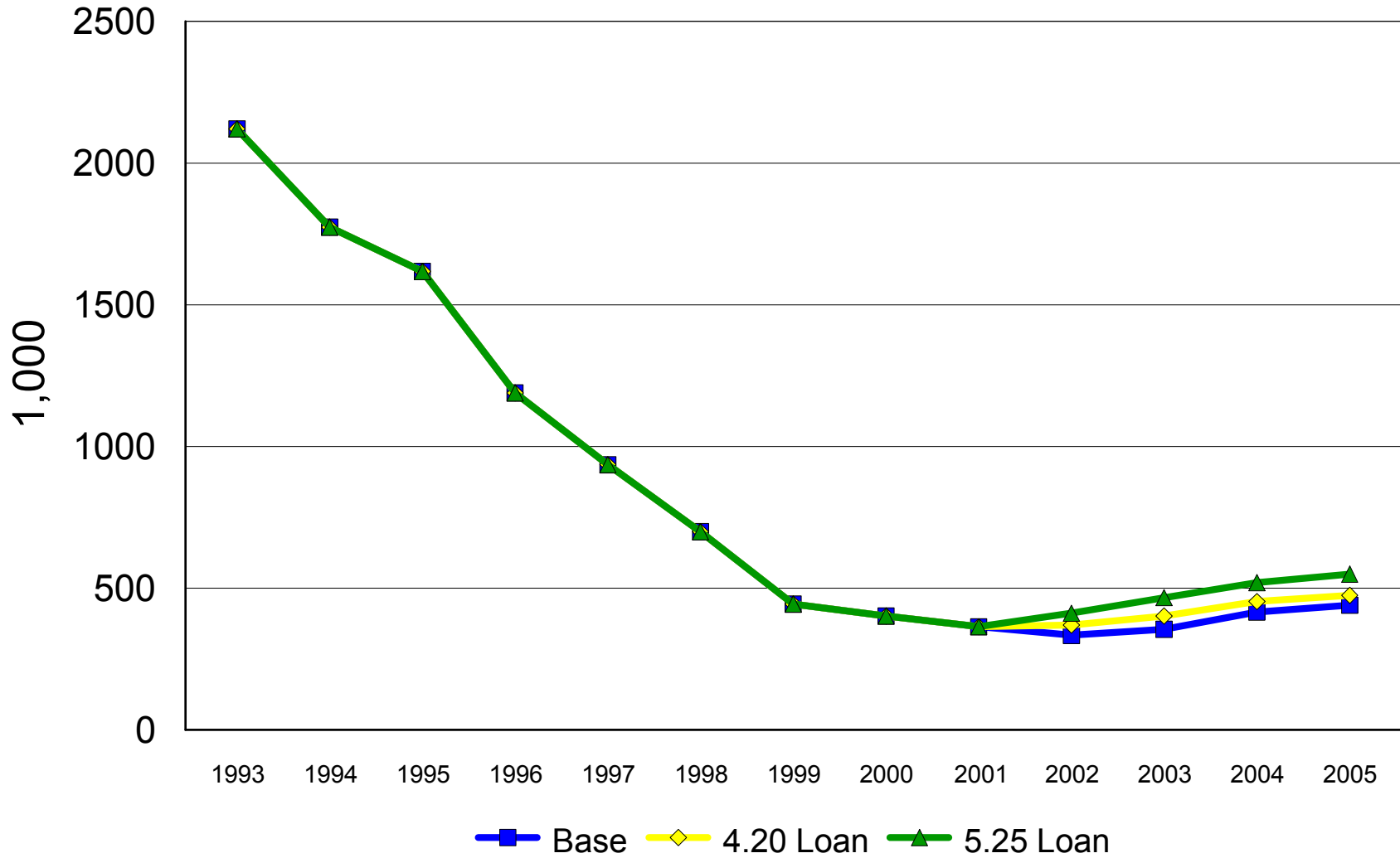Wool for Alternative Programs (Mil. $)

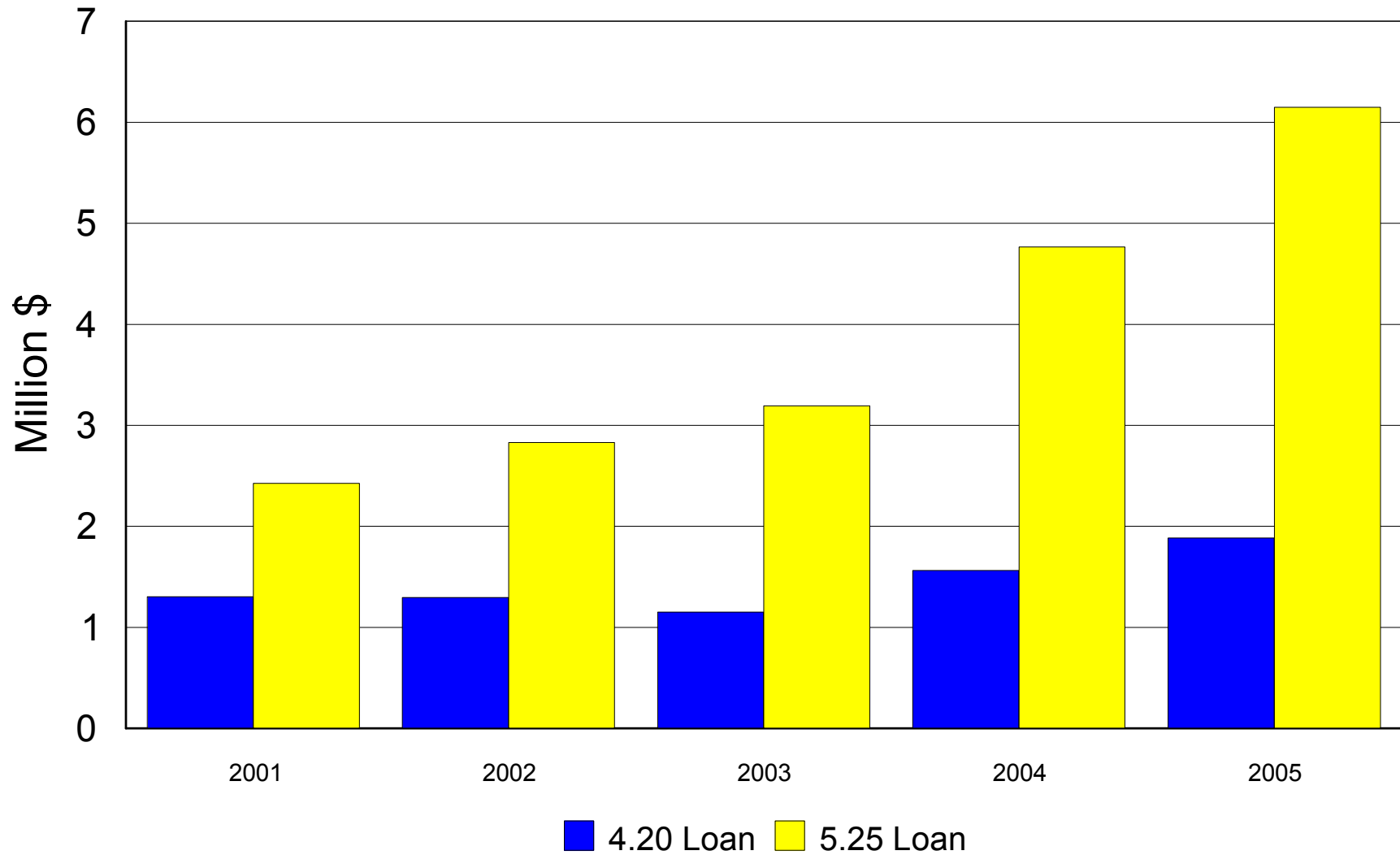Average Annual Government Payment to Wool
for Alternative Programs (Cents/Lb.)

Potential Wool Premium/Discount Schedule

Micron	Loan Rate $/lb. Clean	Loan Rate $/lb. Clean
under 19.6	3.85	4.25
19.6-21.0	2.40	2.80
21.1-22.5	2.12	2.52
22.6-24.0	2.00	2.40
24.1-26.0	1.91	2.31
26.1-29.0	1.75	2.15
over 29.0	1.60	2.00

Angora Goats Shorn, 1993-2005

Average Government Costs, 2001-2005

Potential Mohair Premium/Discount Schedule

Micron	Category	Loan Rate $/lb.
under 26	Fine Kid	8.00
26-28	Good Kid	6.00
28-30	Avg. Kid	5.00
30-32	Fine Yg. Goat	4.50
32-34	Avg. Yg. Goat	4.00
34-36	Fine Adult	3.25
over 36	Avg. Adult	2.75