

# Margin Protection Program for Dairy: Implementation, Participation, Consequences

Dr. Marin Bozic

with Chris Wolf, Fanda Yang, John Newton and Cam Thraen

AAEA 2014 Crop Insurance Symposium

October 8, 2014

UNIVERSITY OF MINNESOTA

**Driven to Discover**<sup>SM</sup>

# Major Dairy Provisions of the Agricultural Act of 2014

## REPEALED

- Milk Income Loss Contract
- Dairy Product Price Support Program
- Dairy Export Incentive Program

## EXTENDED

- Dairy Forward Pricing Program
- Dairy Price Support Program (“dairy cliff”)
- Livestock Gross Margin for Dairy Cattle

## NEW

- Margin Protection Program for Dairy Producers
- Dairy Product Donation Program
- Potential California Federal Order

# Margin Protection Program for Dairy Producers

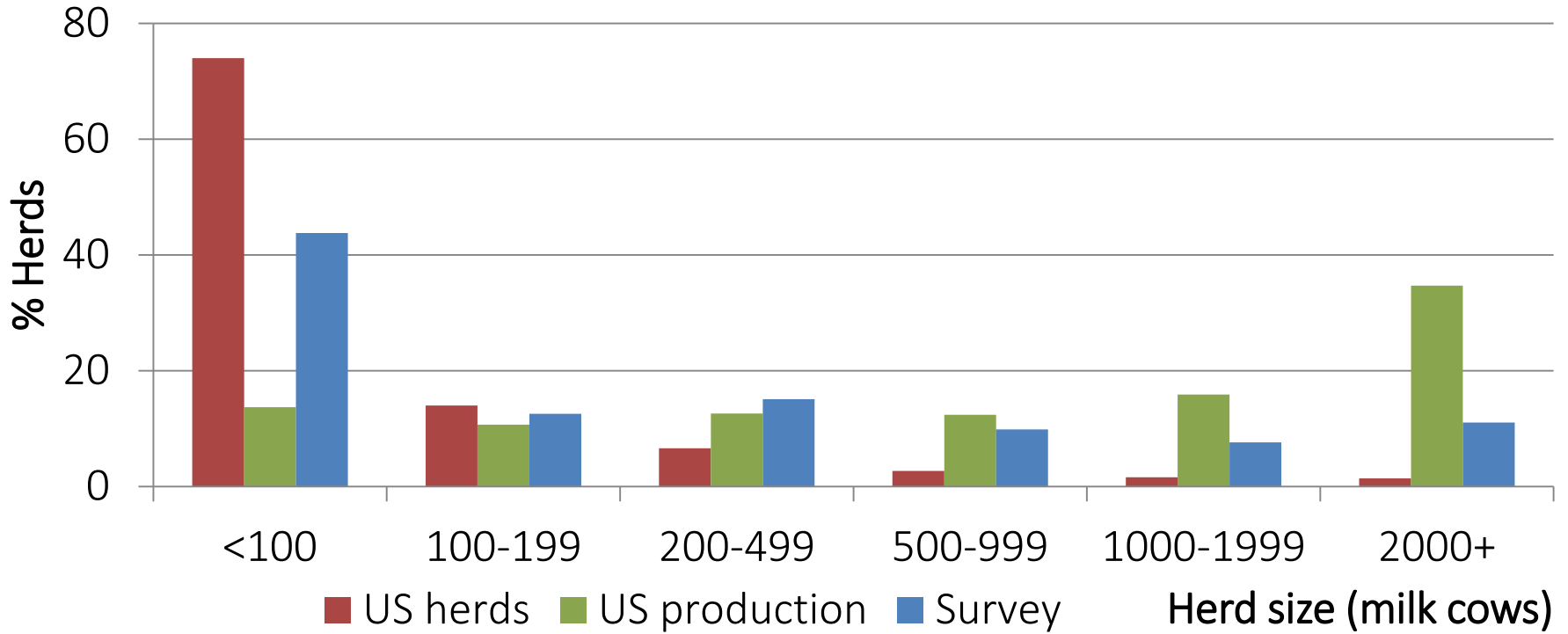
- USDA risk management program that replaces MILC program.
- Voluntary program, with no supply management of any kind.
- Offers protection against low margins that may come from low milk prices, high feed prices, or a combination of both.
- Provides a payment when “the margin” falls below a specified level.
- Very simple and hassle-free



# Key Questions

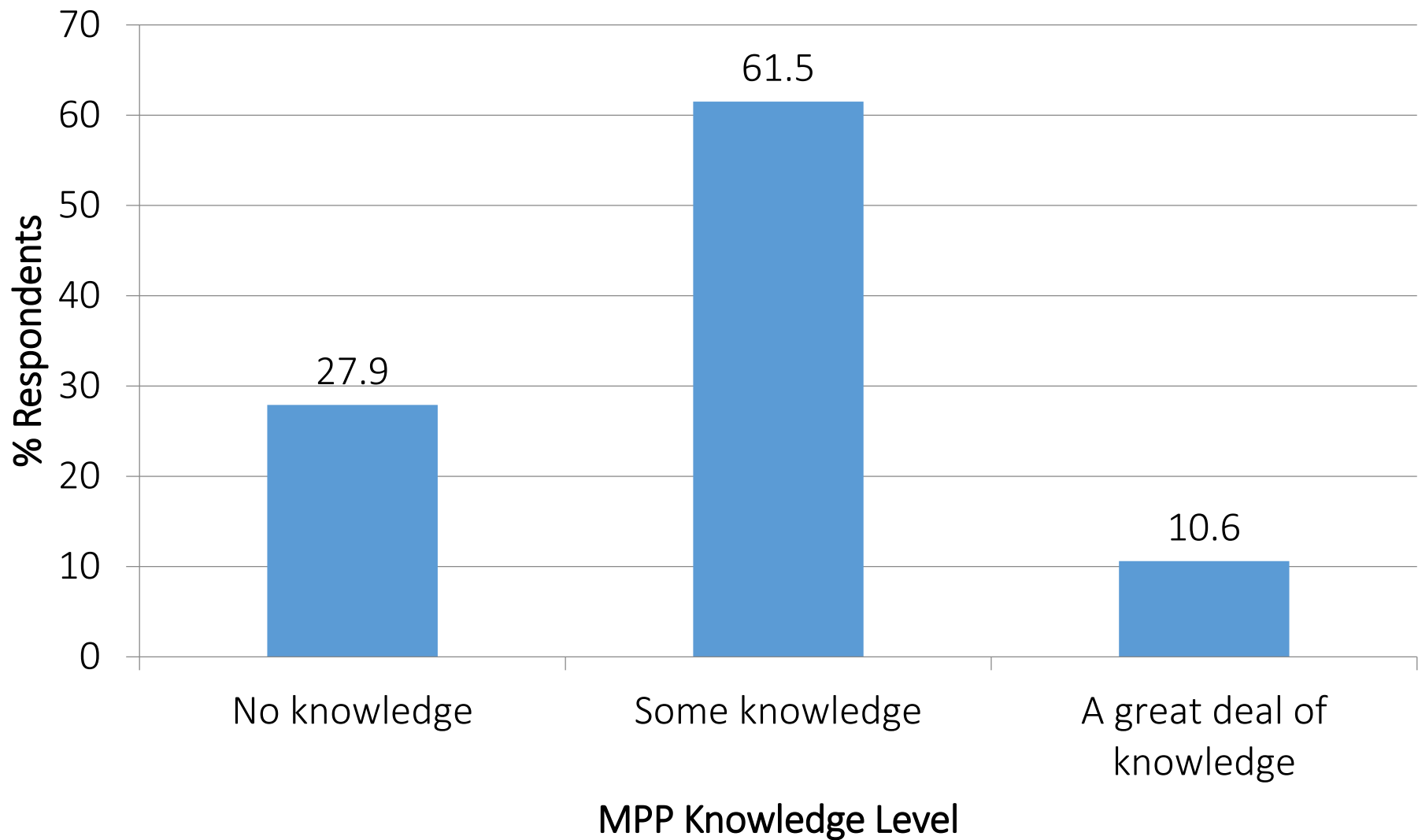
- Do dairy producers understand the MPP-Dairy?
- Will they register to participate in the MPP-Dairy?
- Will the program suffer from adverse selection issue?
- Will producers still use private risk management programs?
- Will MPP-Dairy distort dairy markets?

# MPP-Dairy Survey

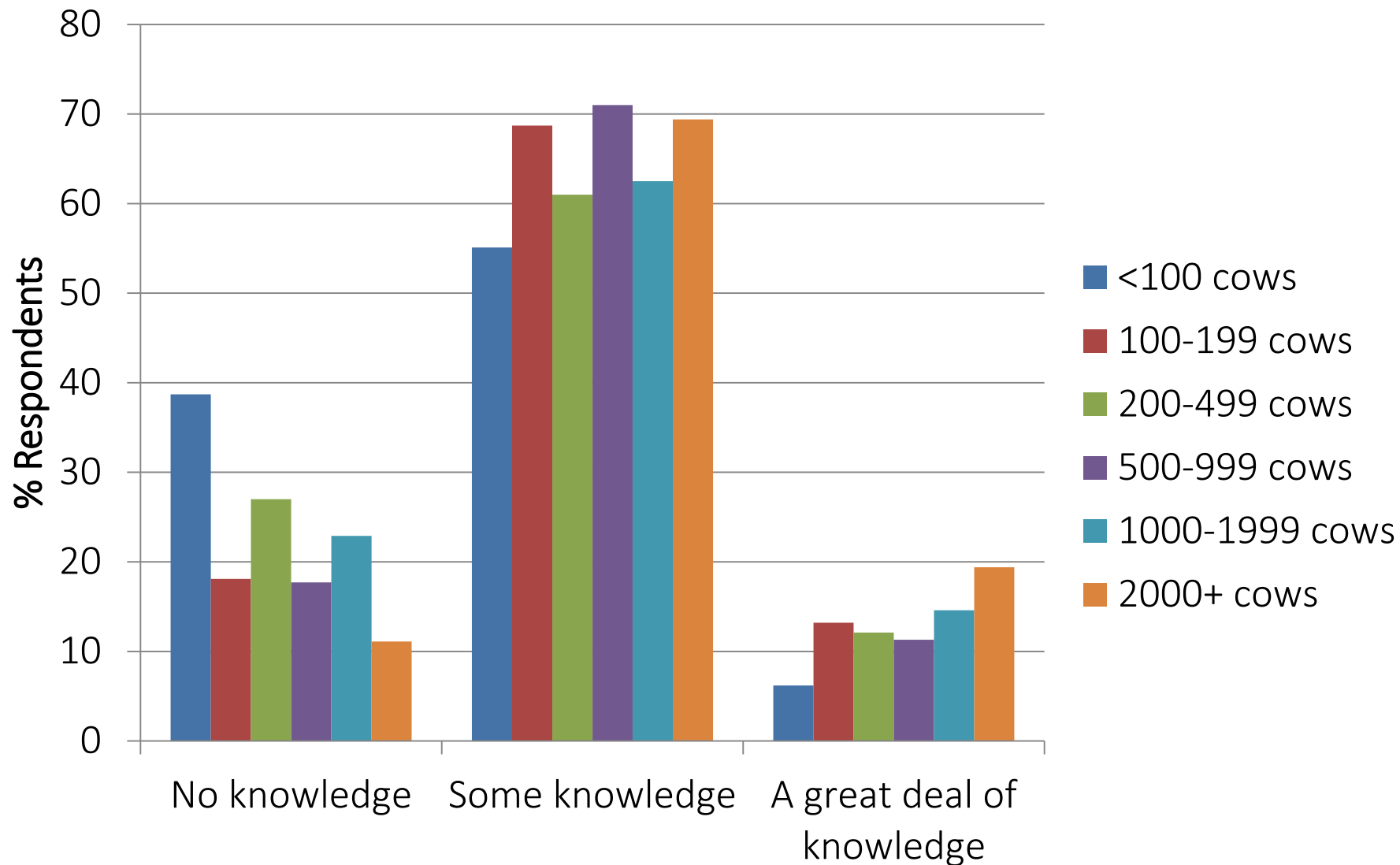


- Supported by Cooperative Agreement with USDA Office of the Chief Economist
- 669 usable responses
  - 327 internet respondents, 342 mail respondents

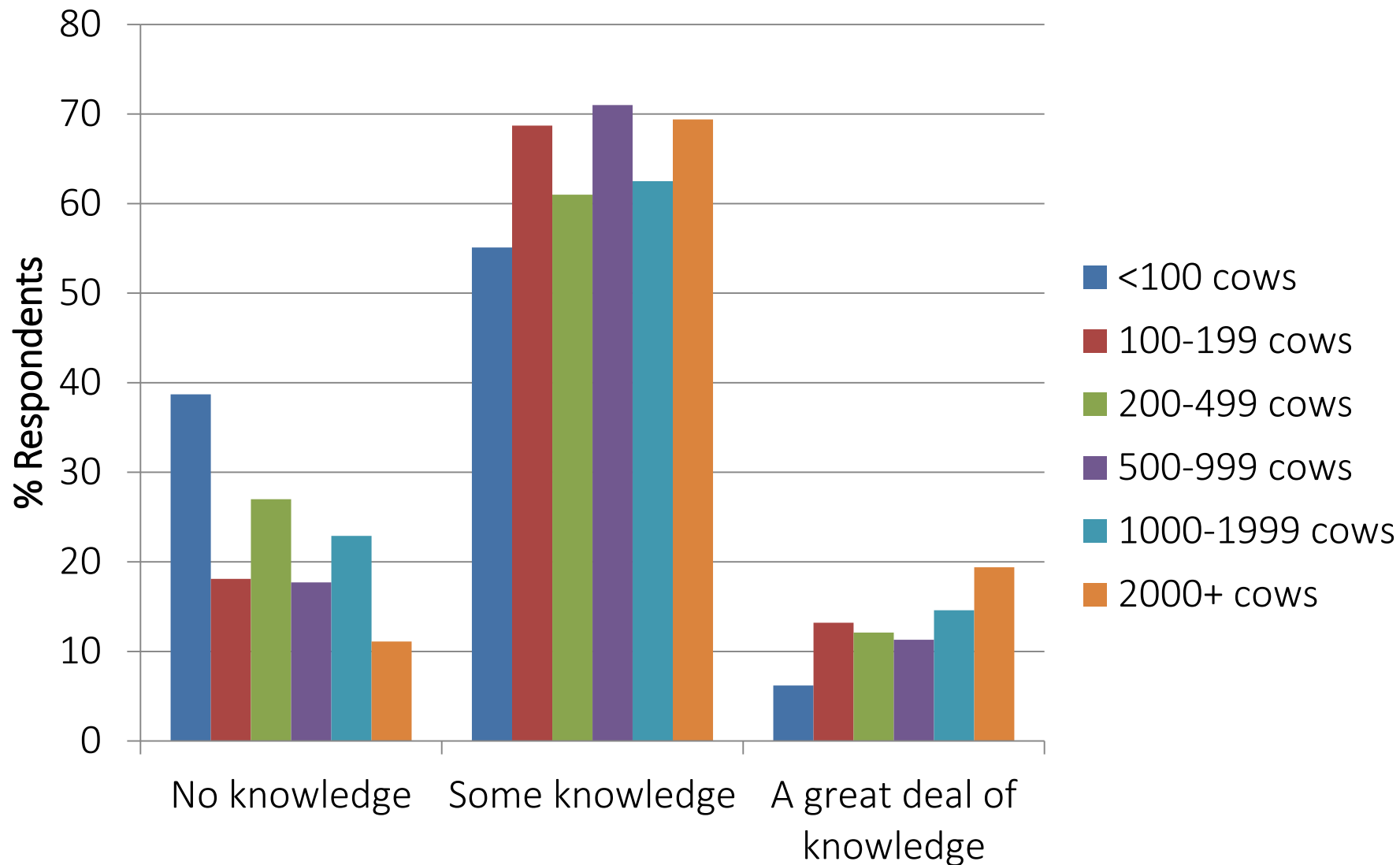
# Self-Evaluated Current Knowledge about MPP-Dairy



# Self-Evaluated Current Knowledge about MPP-Dairy

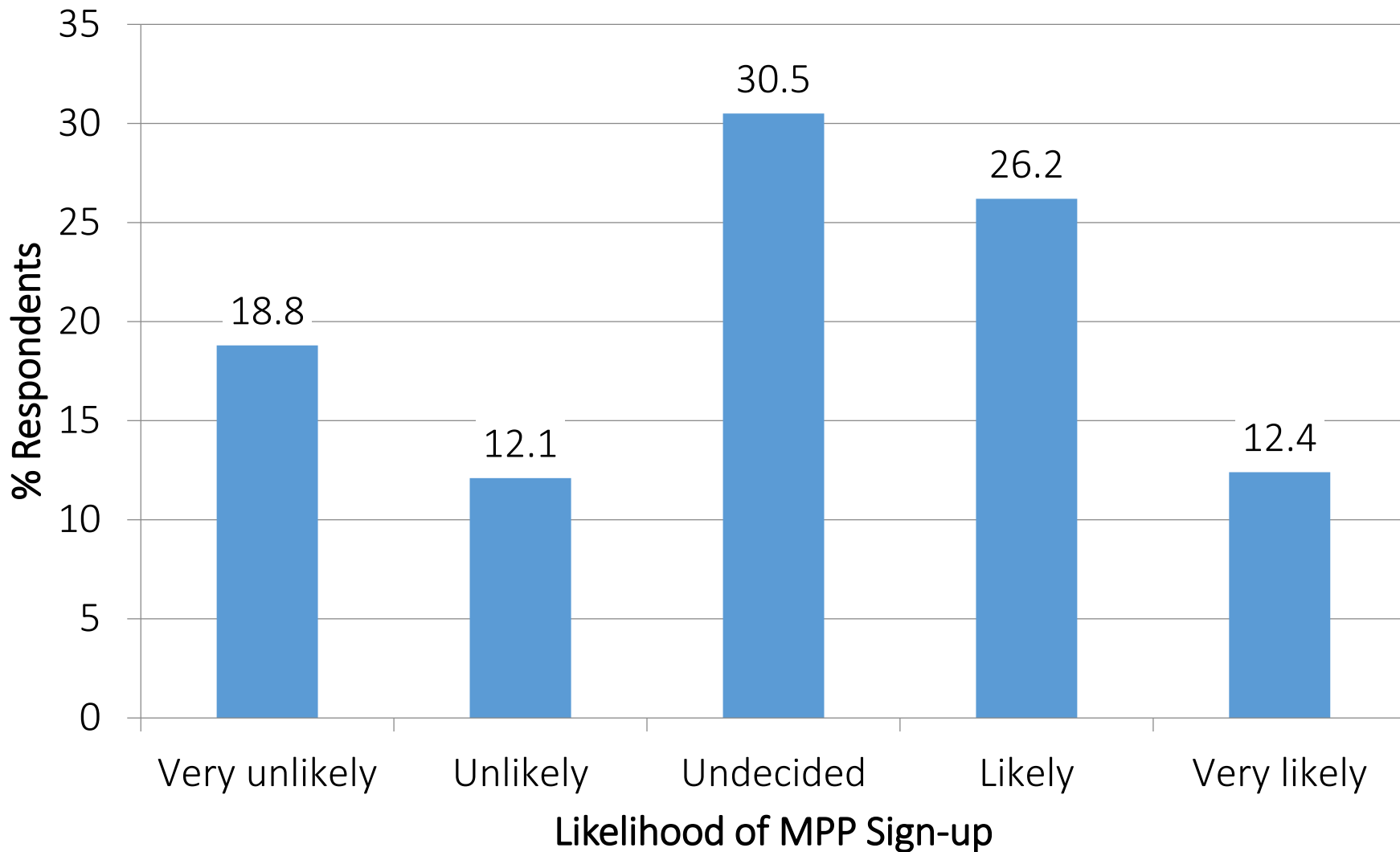


# Self-Evaluated Current Knowledge about MPP-Dairy

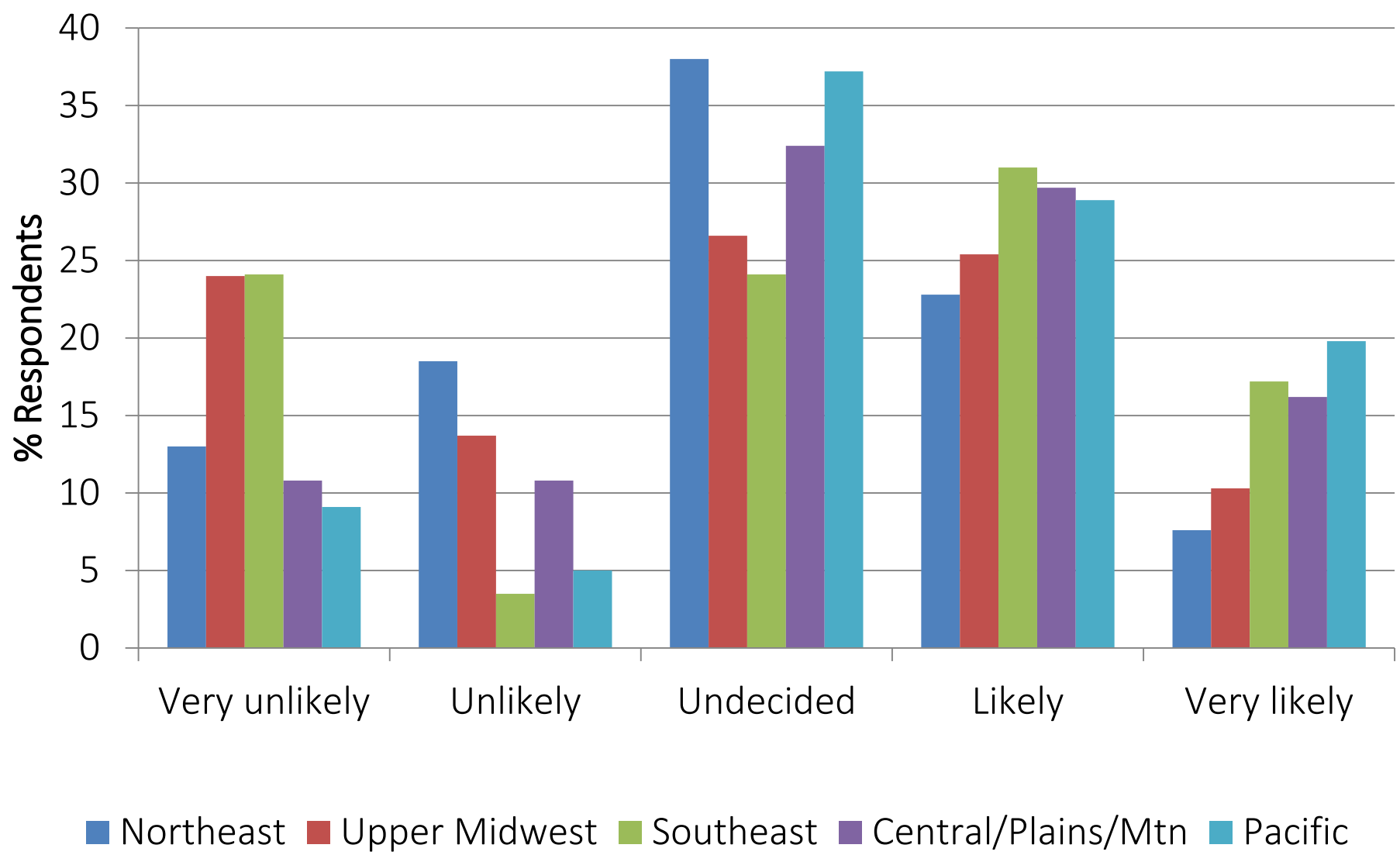




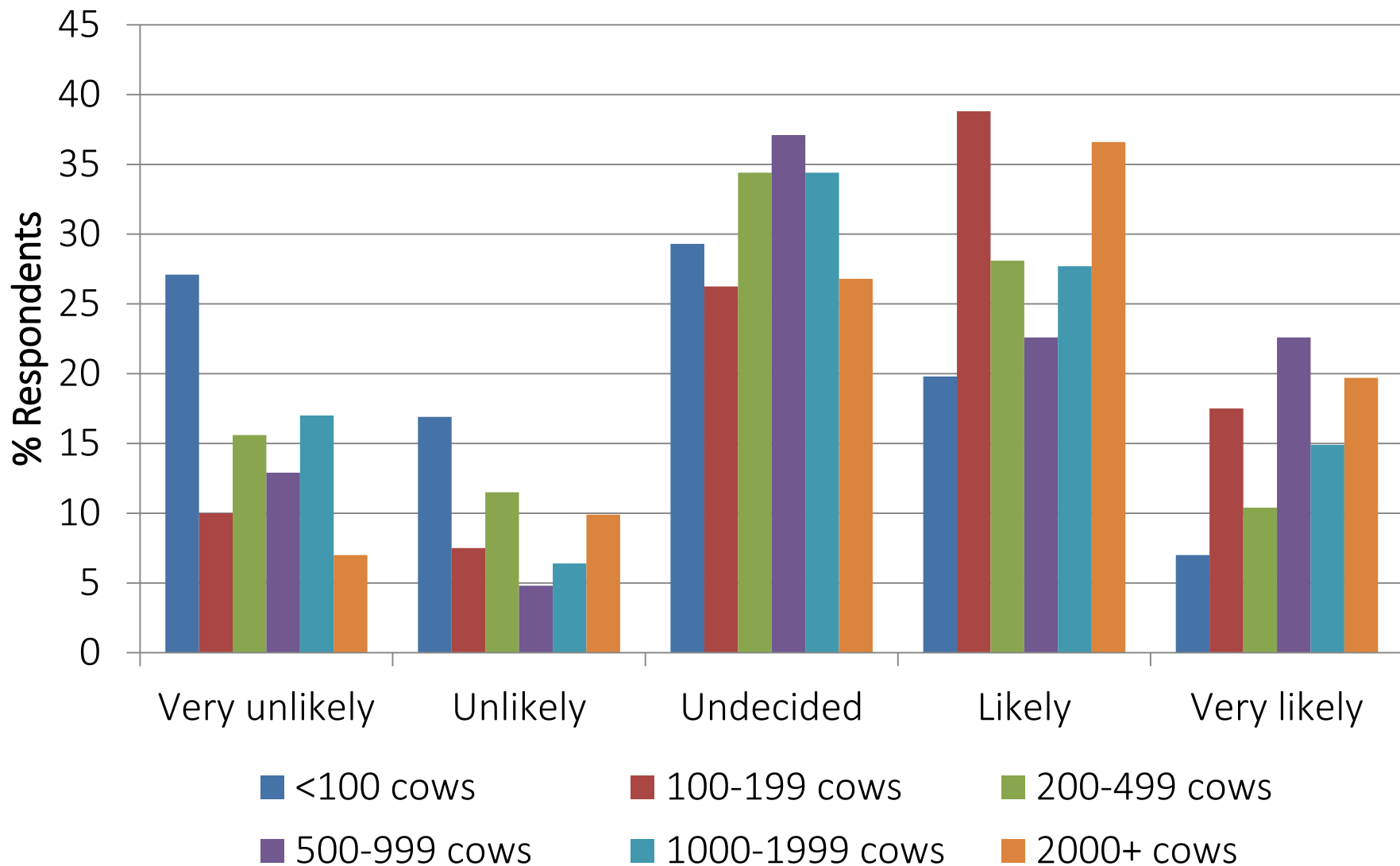
# Will Dairy Producers Register for MPP-Dairy?



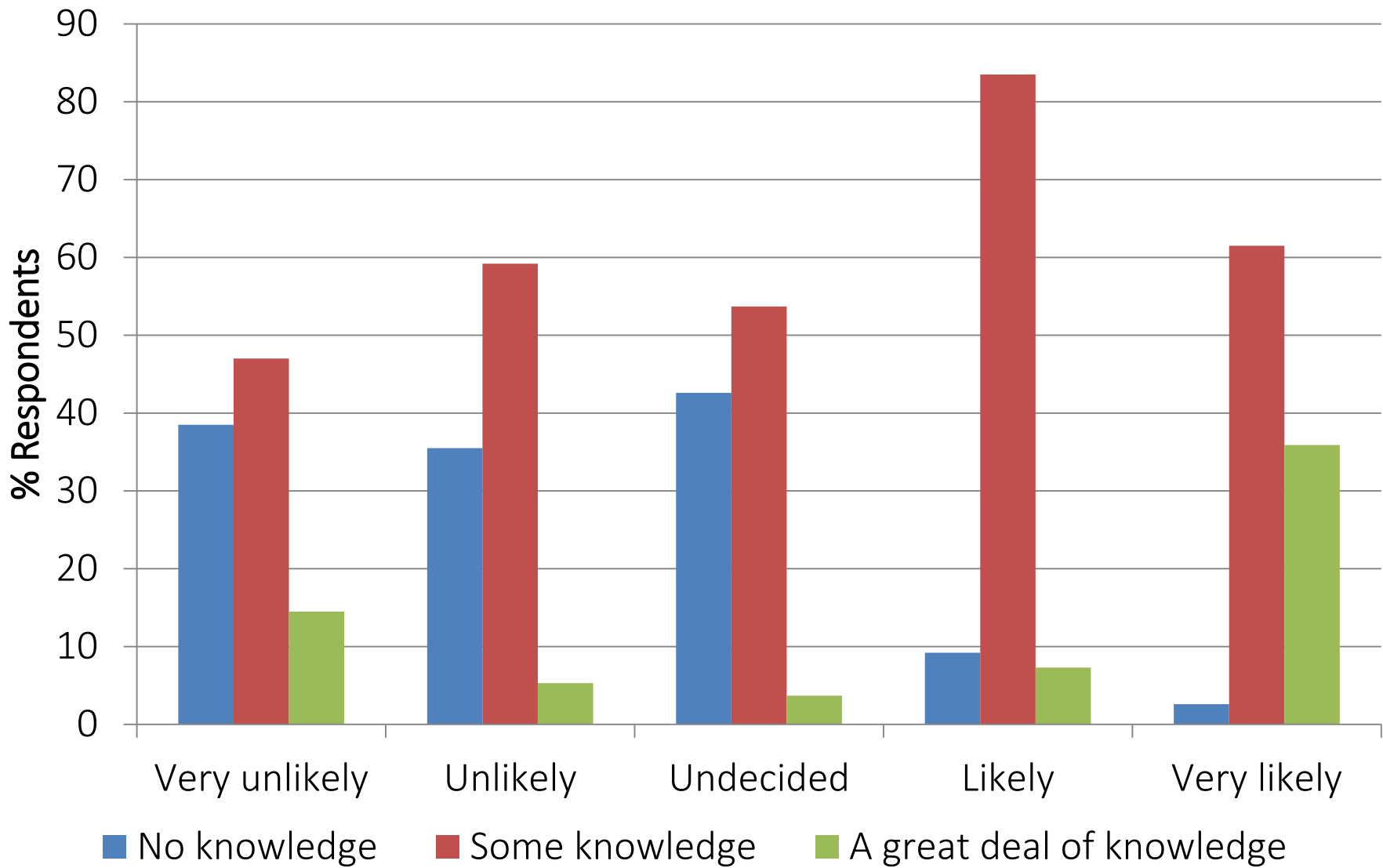
# Will Dairy Producers Register for MPP-Dairy?



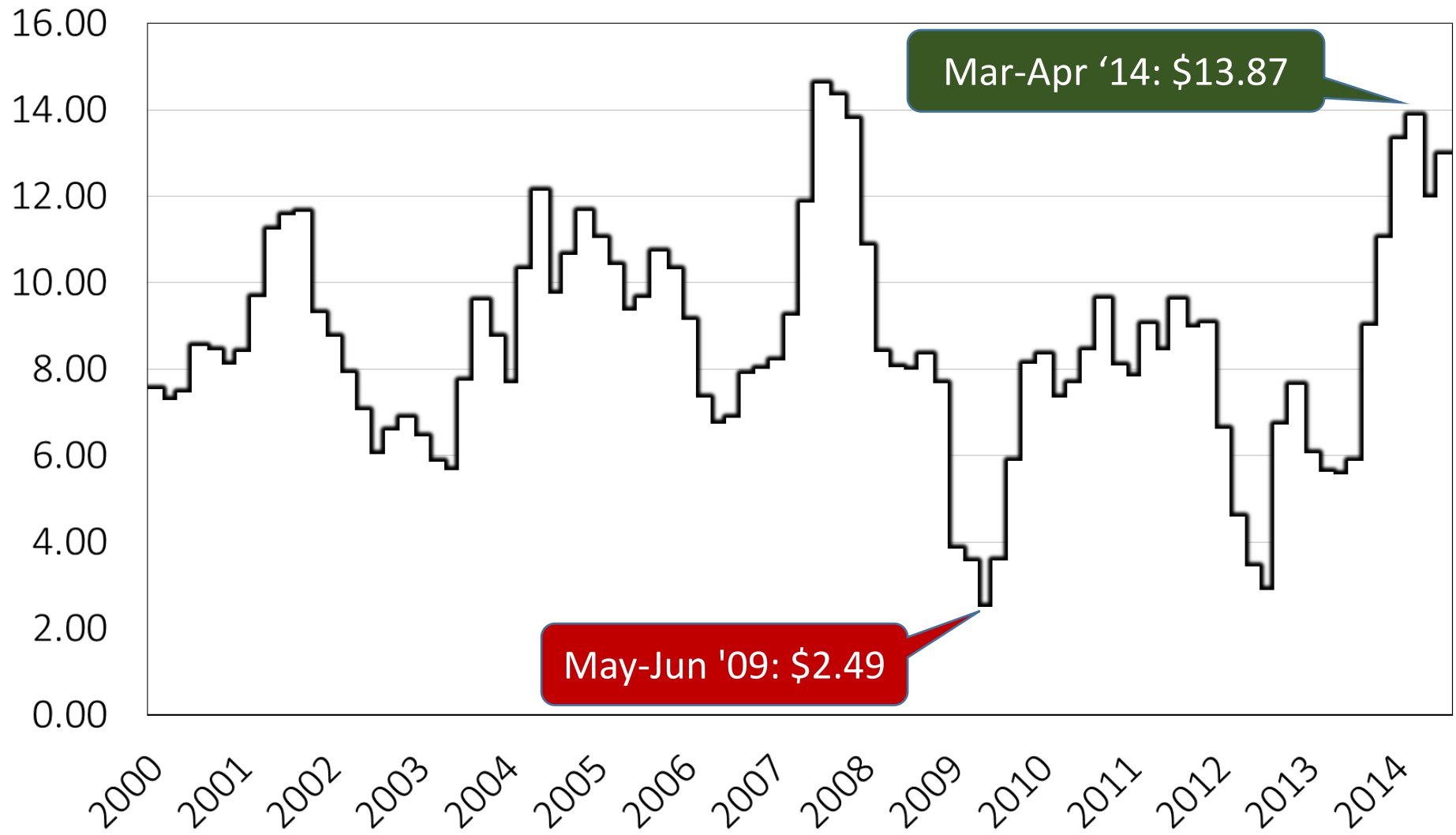
# Will Dairy Producers Register for MPP-Dairy?



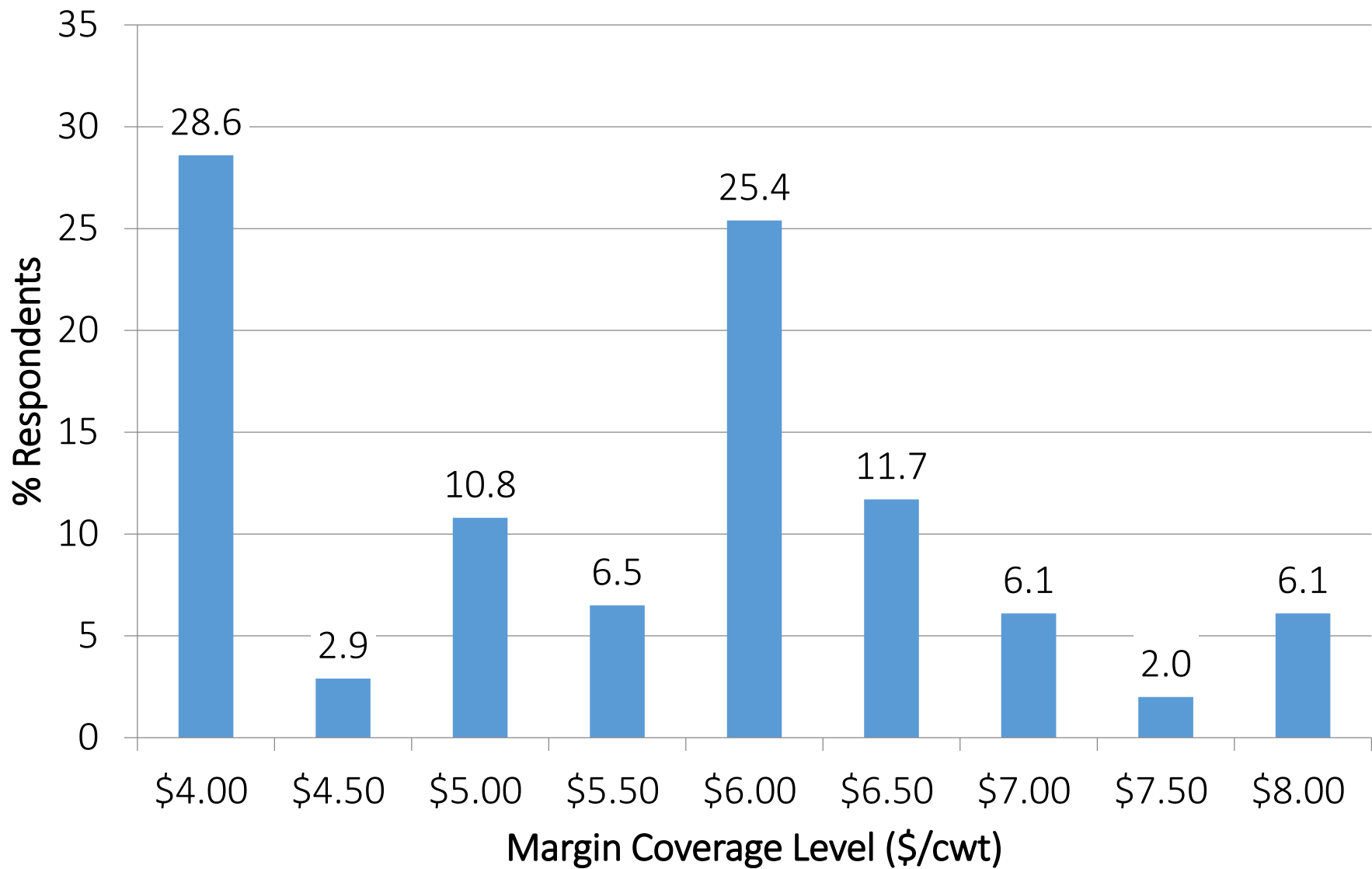
# Will Dairy Producers Register for MPP-Dairy?



# Actual Dairy Production Margin: Historical



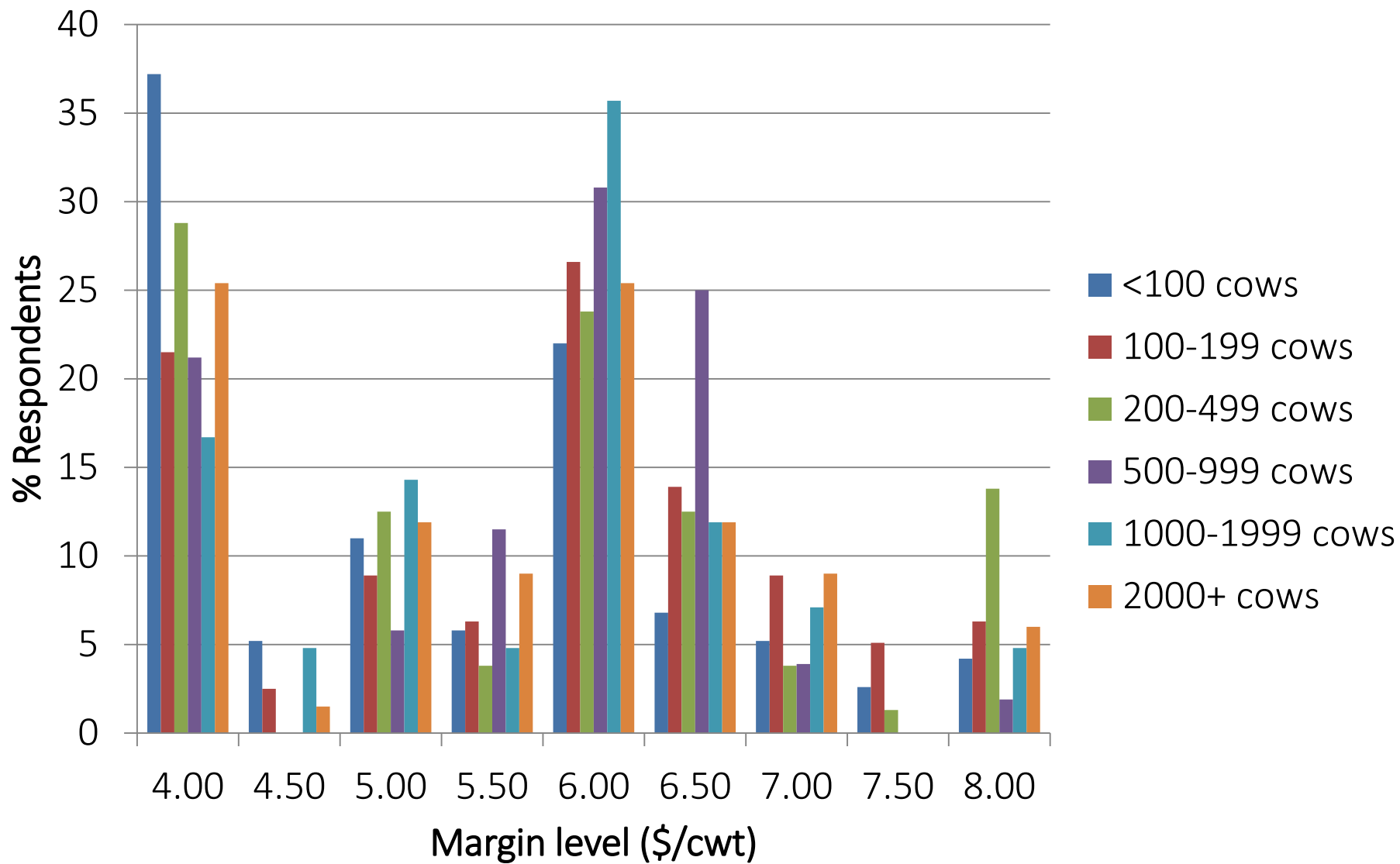
# What Coverage Level will Dairy Producers Use?



# MPP Coverage Levels and Premiums

Coverage Level	Tier 1 ≤ 4mil lbs CPH (\$/cwt)	Tier 2 >4 M lbs. CPH (\$/cwt)
\$4.00	\$0.000	\$0.000
\$4.50	\$0.010	\$0.020
\$5.00	\$0.025	\$0.040
\$5.50	\$0.040	\$0.100
\$6.00	\$0.055	\$0.155
\$6.50	\$0.090	\$0.290
\$7.00	\$0.217	\$0.830
\$7.50	\$0.300	\$1.060
\$8.00	\$0.475	\$1.360

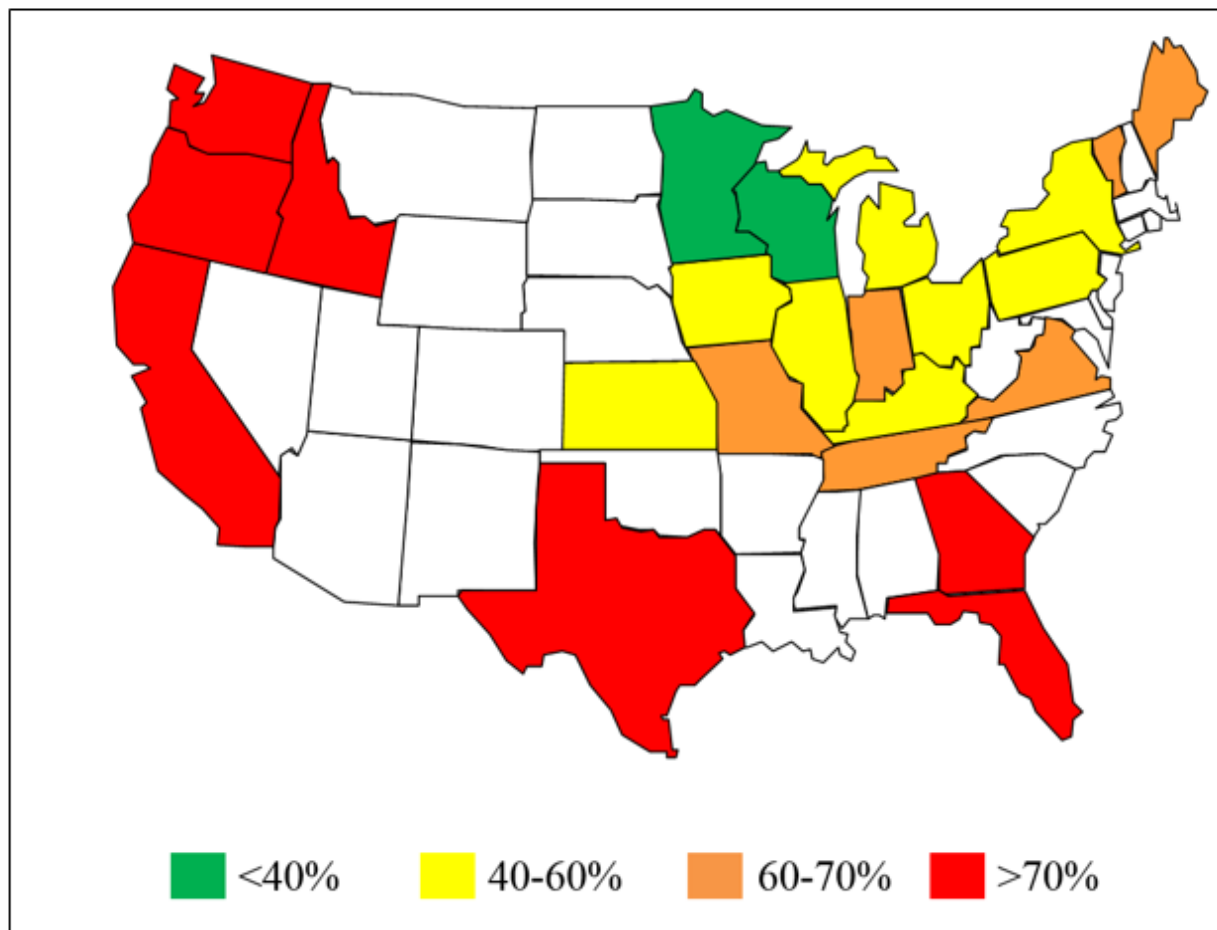
# What Coverage Level will Dairy Producers Use?





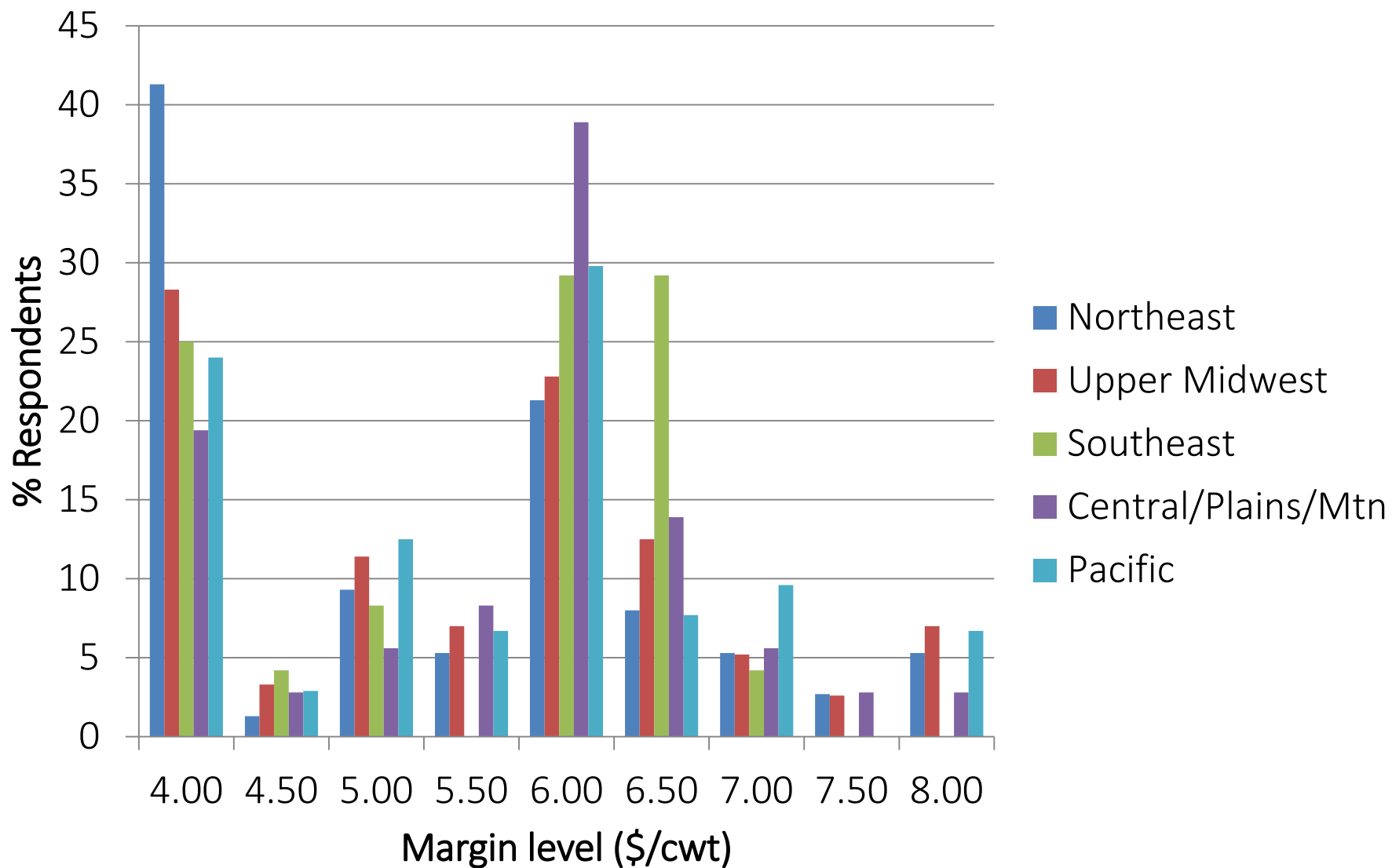
# What Coverage Level will Dairy Producers Use?

Purchased Feed as Percent of Total Feed Costs



State	Pctg.
California	79.4%
Idaho	78.3%
Indiana	62.1%
Iowa	45.7%
Kansas	56.1%
Michigan	54.3%
<b>Minnesota</b>	<b>35.3%</b>
New York	57.6%
Pennsylvania	55.7%
Texas	74.3%
Wisconsin	35.6%

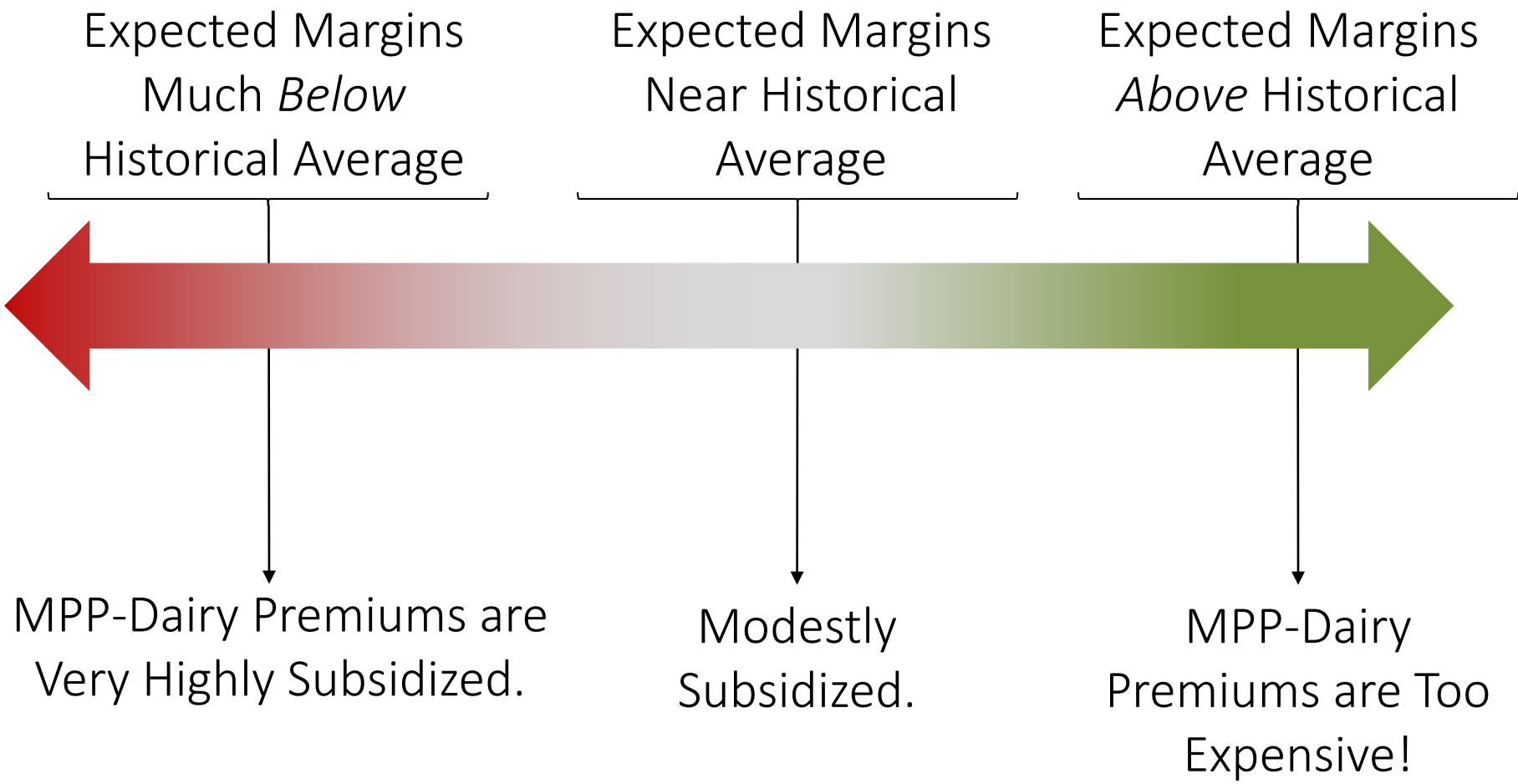
# What Coverage Level will Dairy Producers Use?



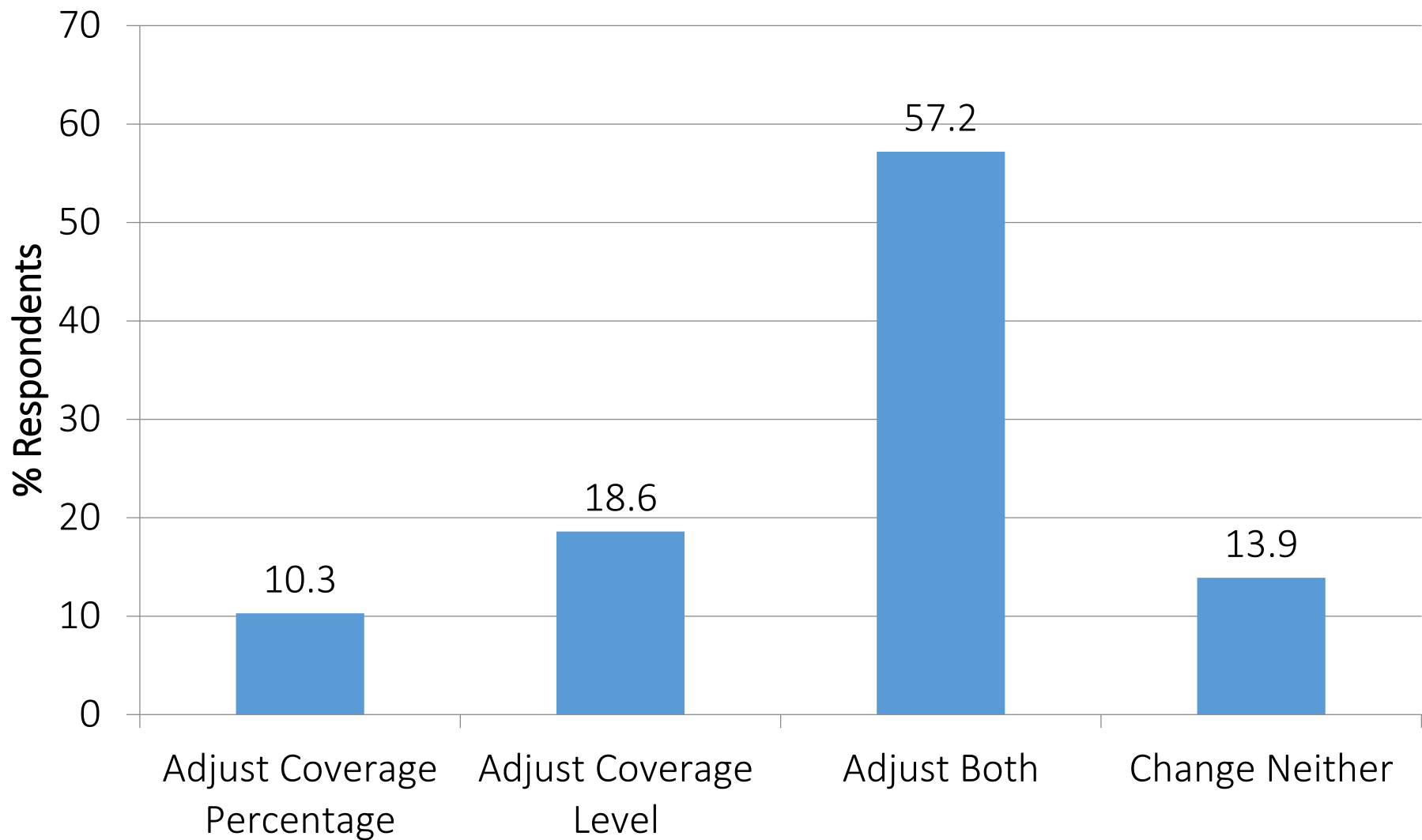
# MPP Coverage Levels and Premiums

Coverage Level	Tier 1 ≤ 4mil lbs CPH (\$/cwt)	Tier 2 >4 M lbs. CPH (\$/cwt)
\$4.00	\$0.000	\$0.000
\$4.50	\$0.010	\$0.020
\$5.00	\$0.025	\$0.040
\$5.50	\$0.040	\$0.100
\$6.00	\$0.055	\$0.155
\$6.50	\$0.090	\$0.290
\$7.00	\$0.217	\$0.830
\$7.50	\$0.300	\$1.060
\$8.00	\$0.475	\$1.360

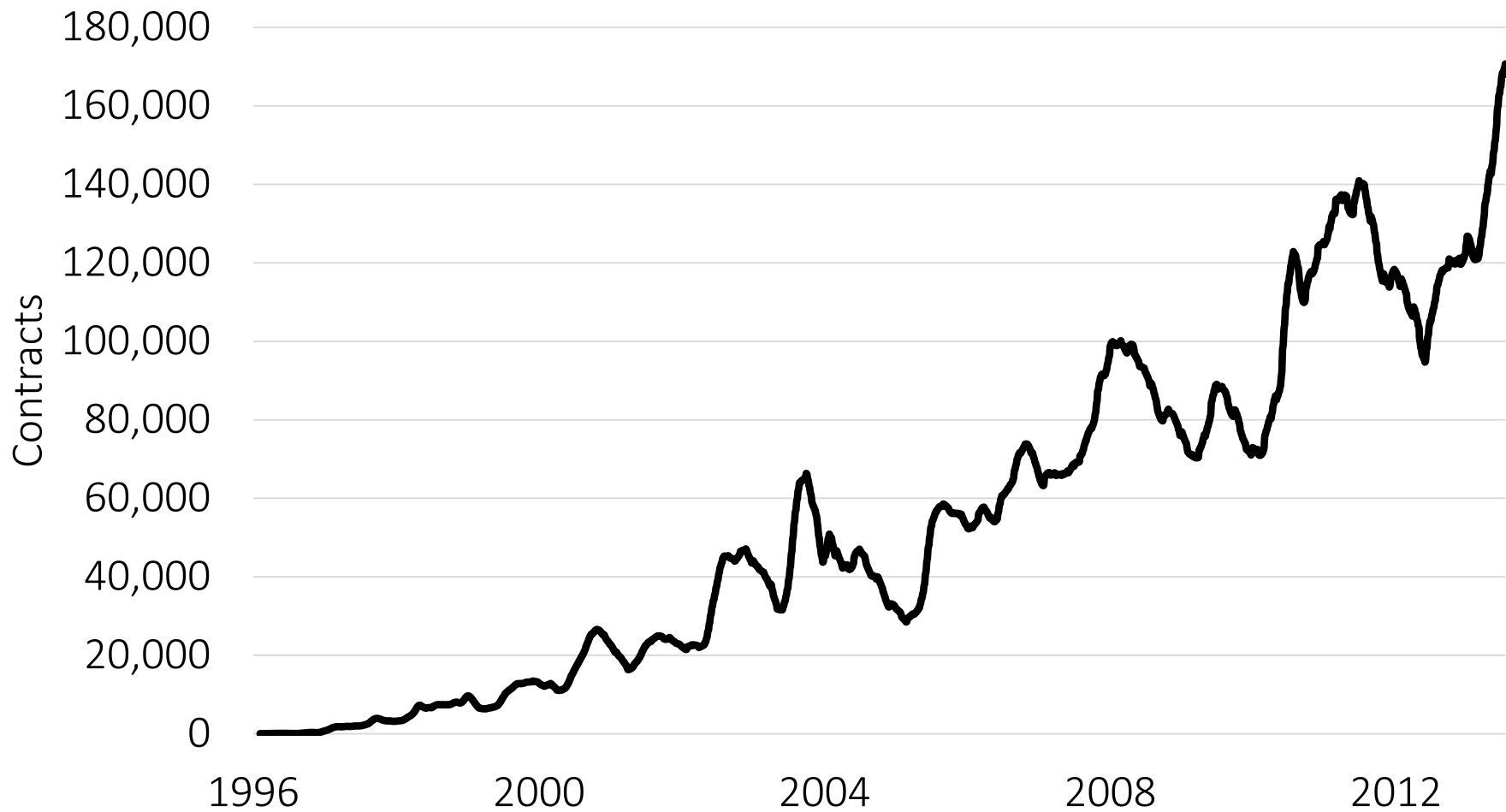
# MPP-Dairy Subsidies are *Implied* in Margin Forecasts



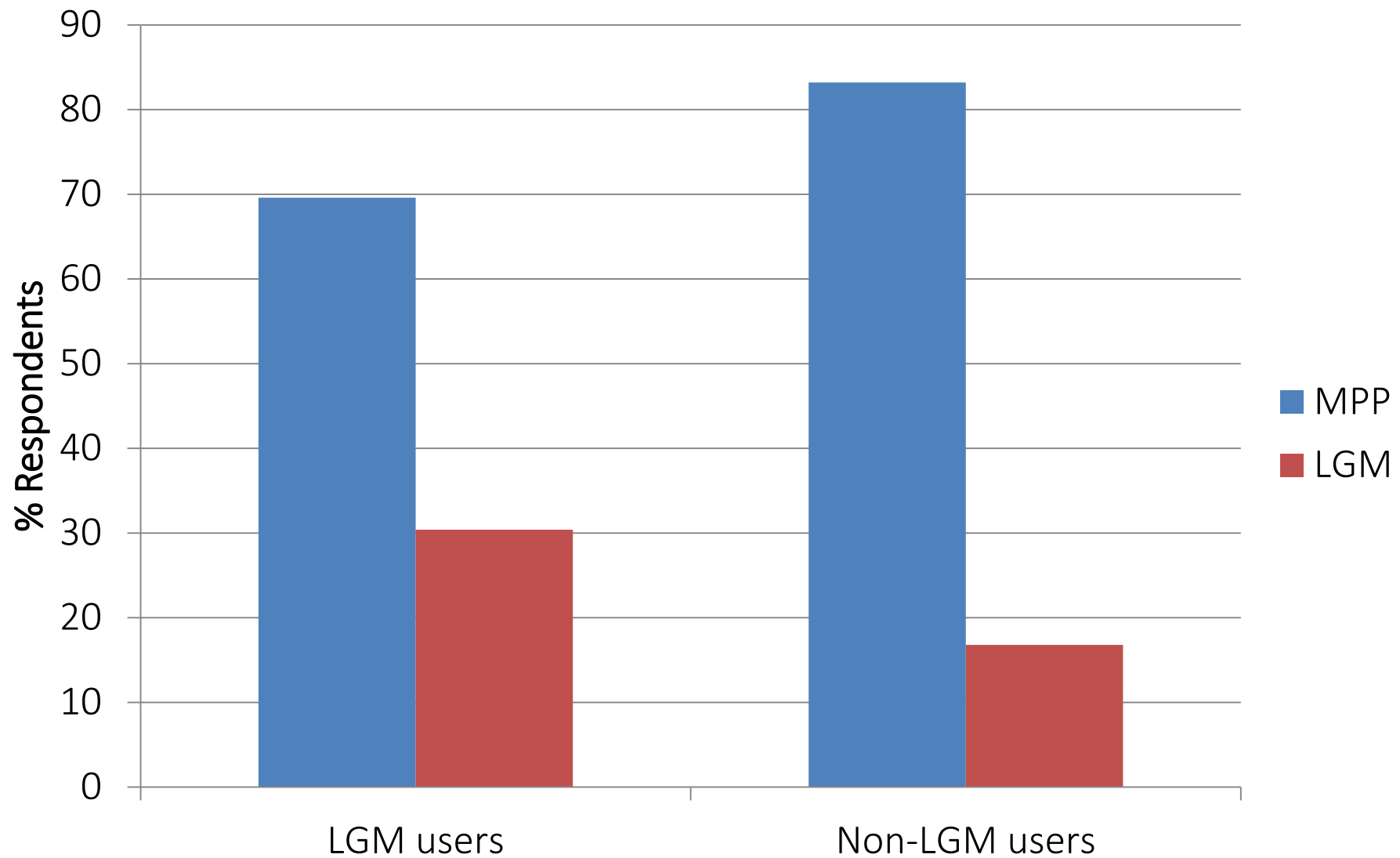
# What Choices Will Dairy Producers Change Annually?



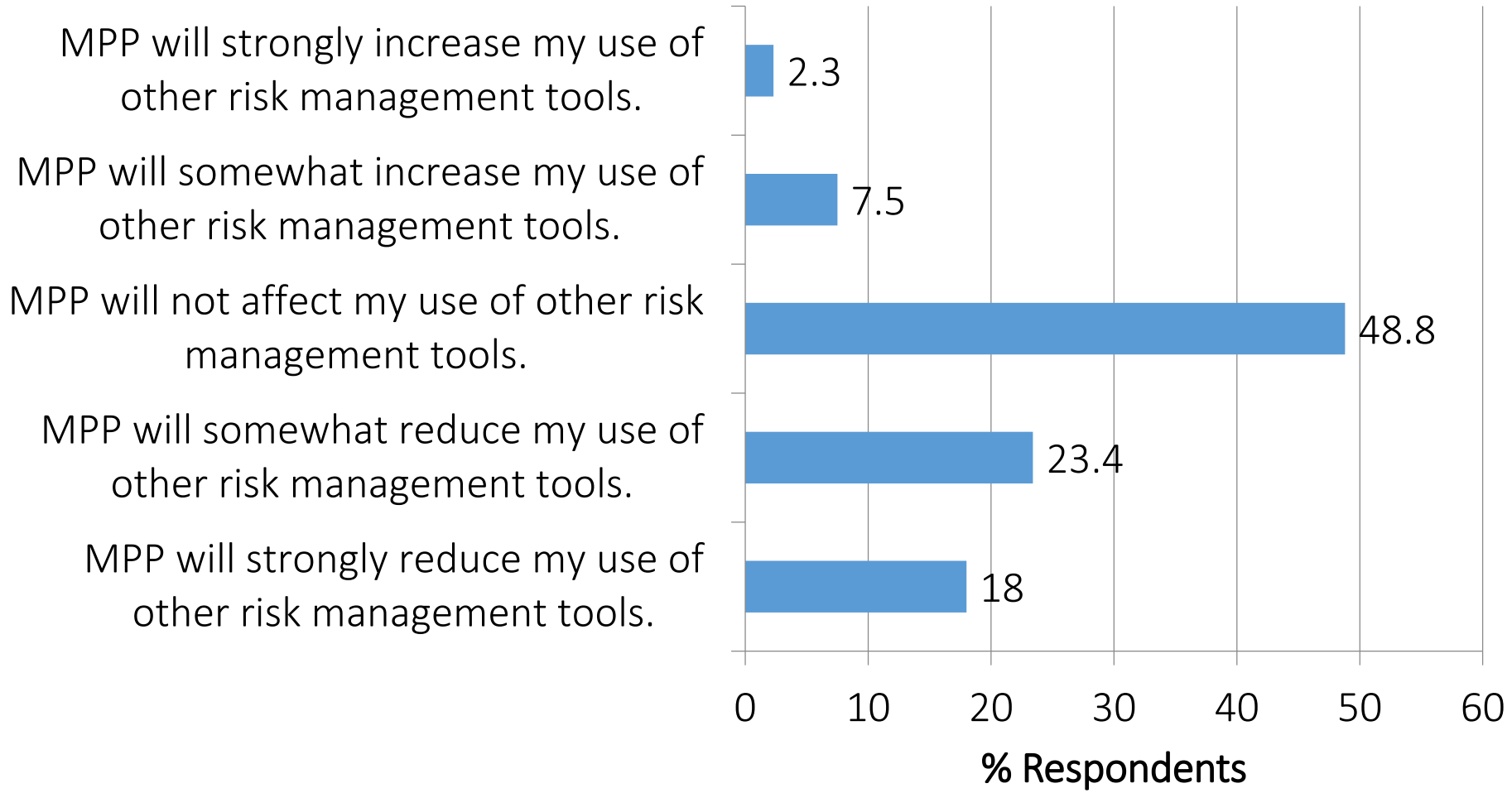
# Open Interest in All Dairy Futures and Options



# MPP vs LGM-Dairy – One Time Irreversible Choice

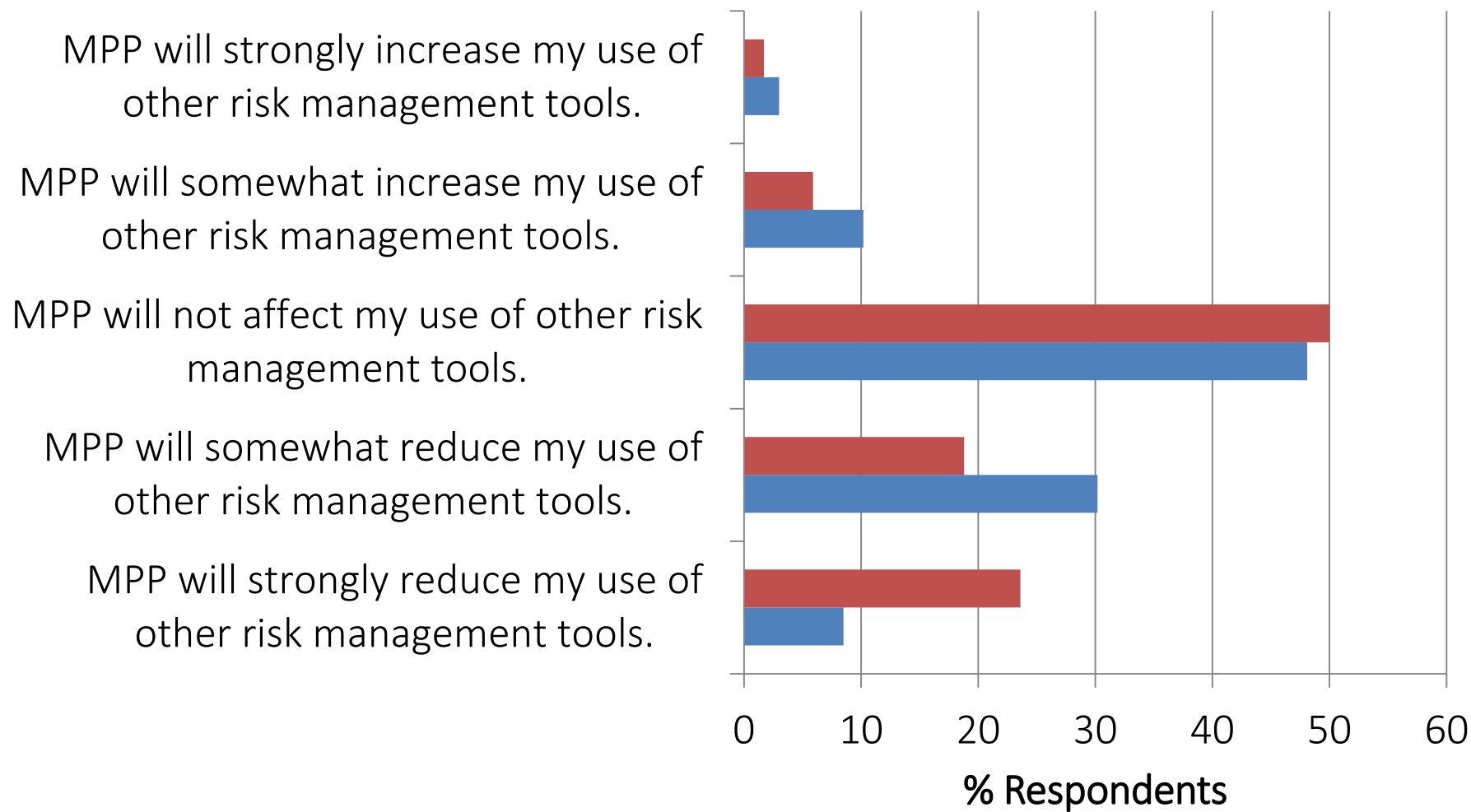


# MPP vs LGM-Dairy – One Time Irreversible Choice



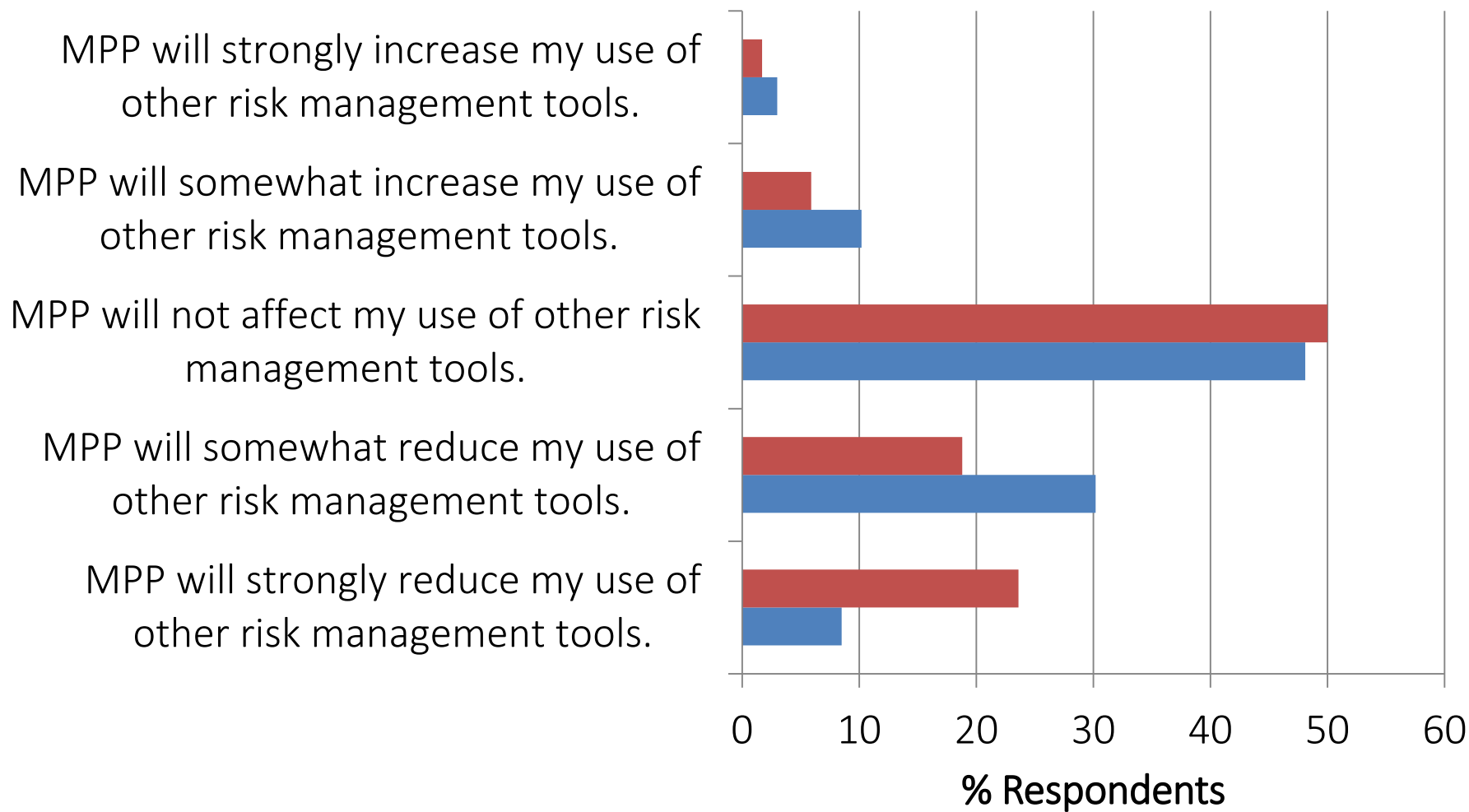


# MPP vs LGM-Dairy – One Time Irreversible Choice



■ Milk price Risk Tool Non-users      ■ Milk Price Risk Tool Users

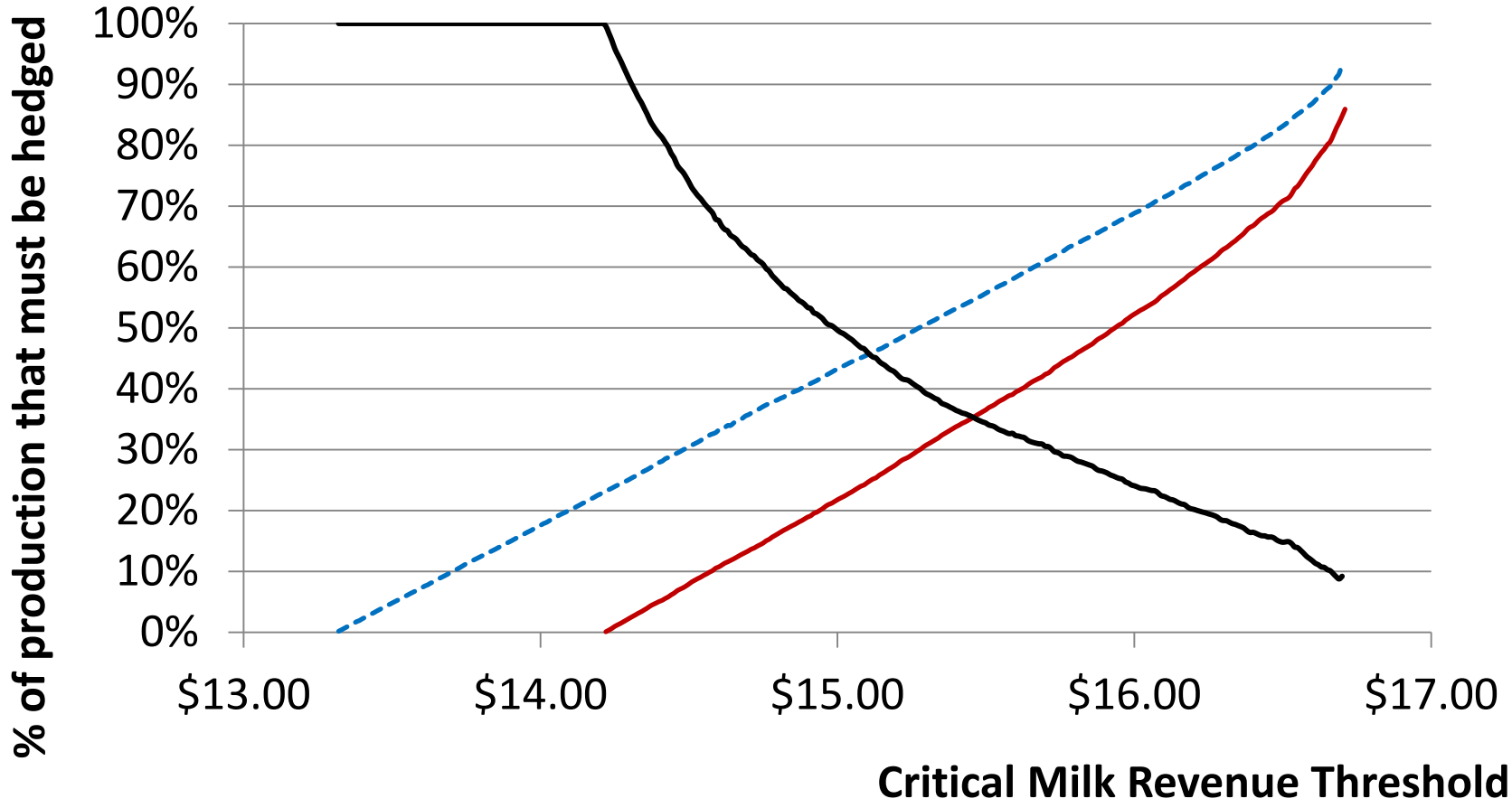
# MPP vs LGM-Dairy – One Time Irreversible Choice



■ Milk price Risk Tool Non-users      ■ Milk Price Risk Tool Users

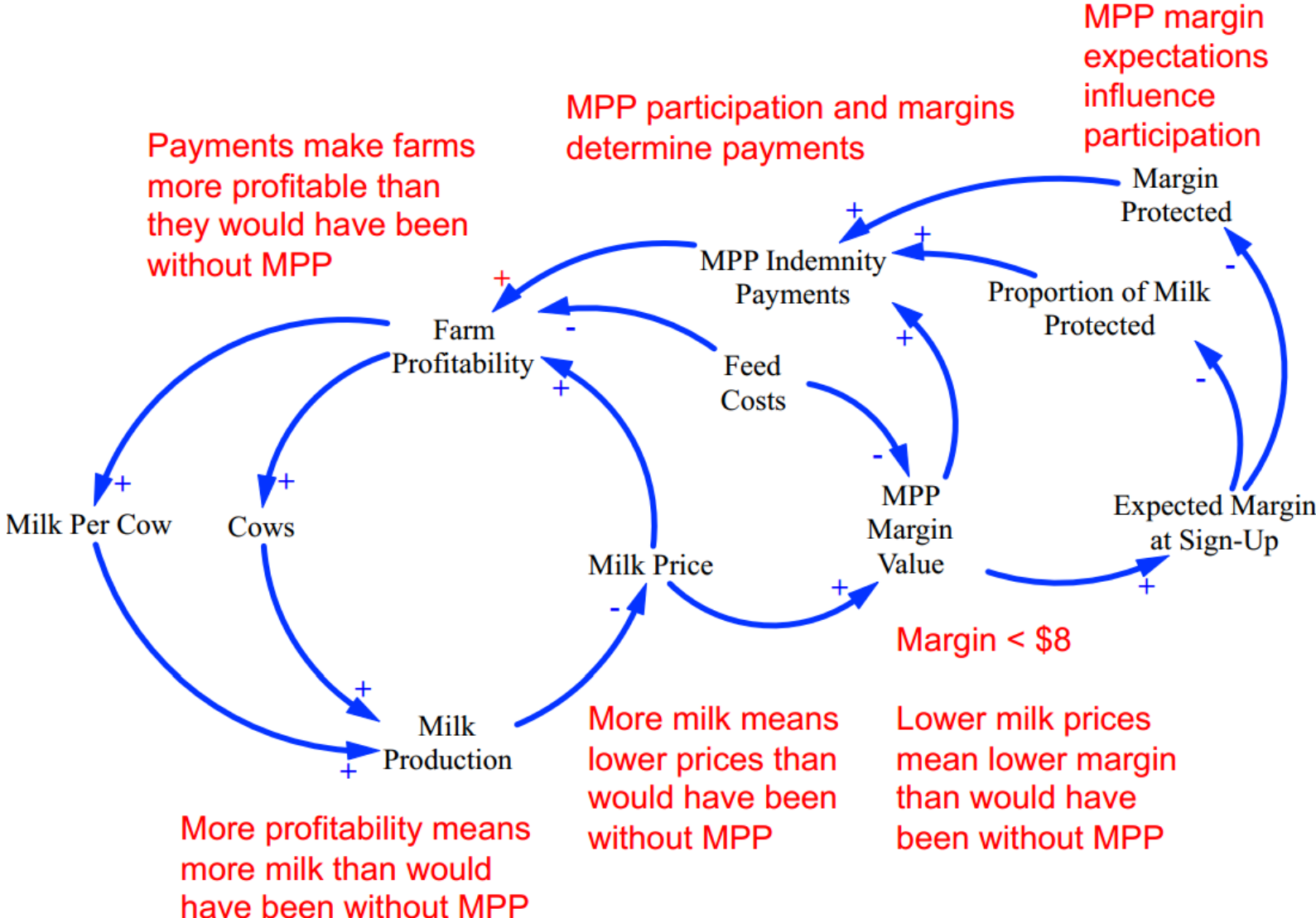
# Safety-First Preferences and Crowding Out

## Oct 1, 2008 sign-up for 2009 Coverage Period

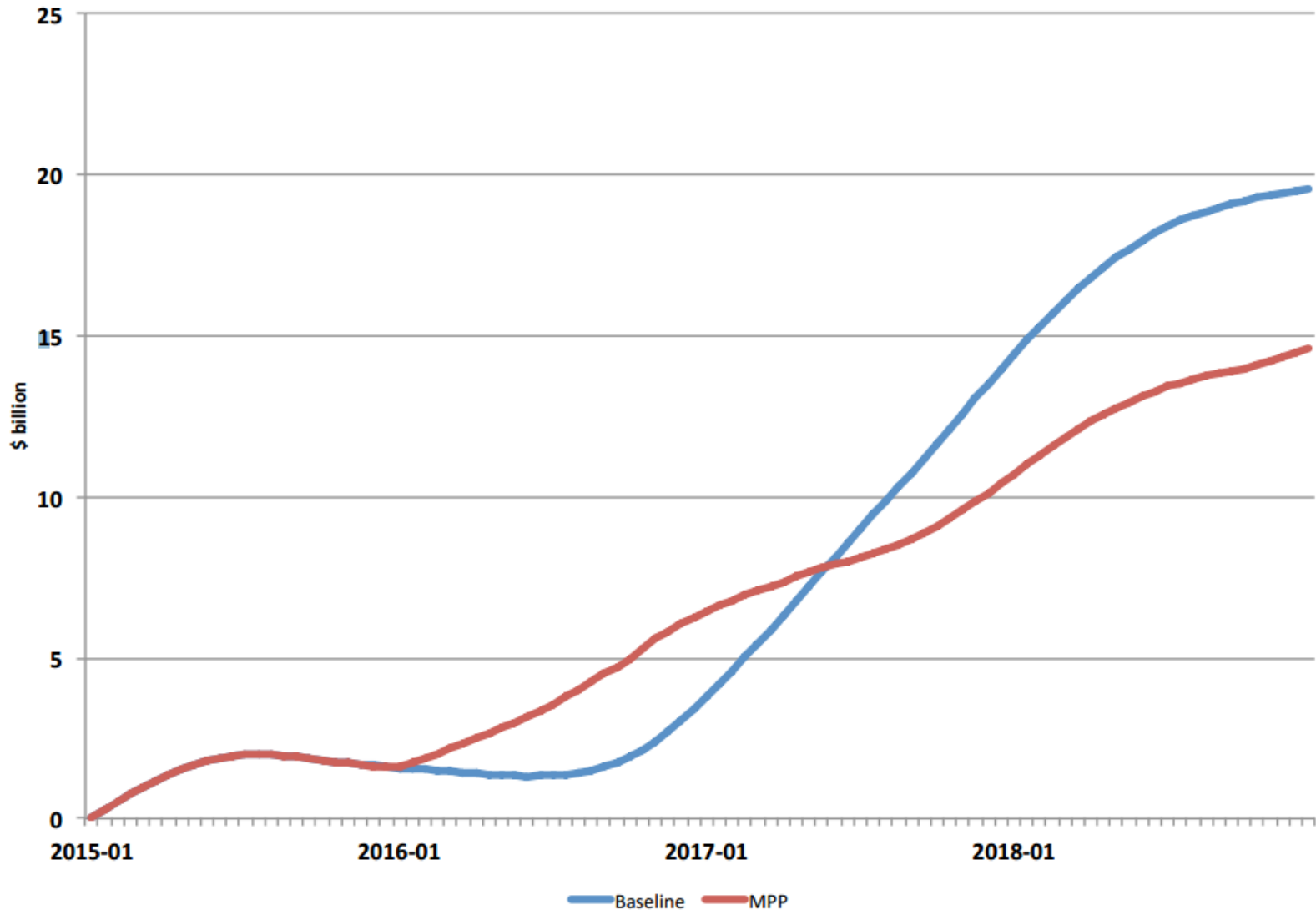


- Milk Futures Only
- Futures & MPP (CL:\$6.50, CP:90%)
- Crowding-out

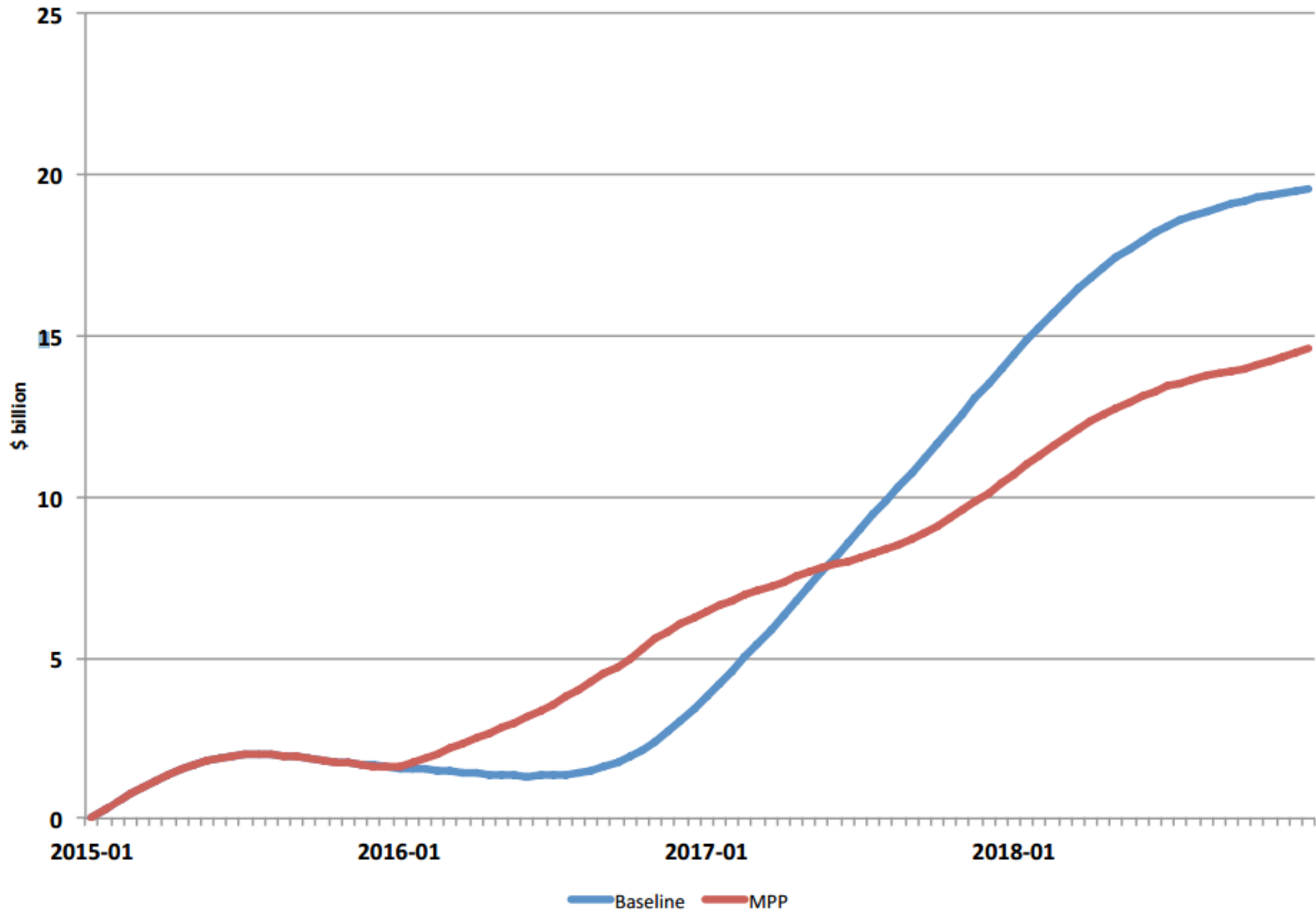
# Dynamic Market Effects of MPP-Dairy



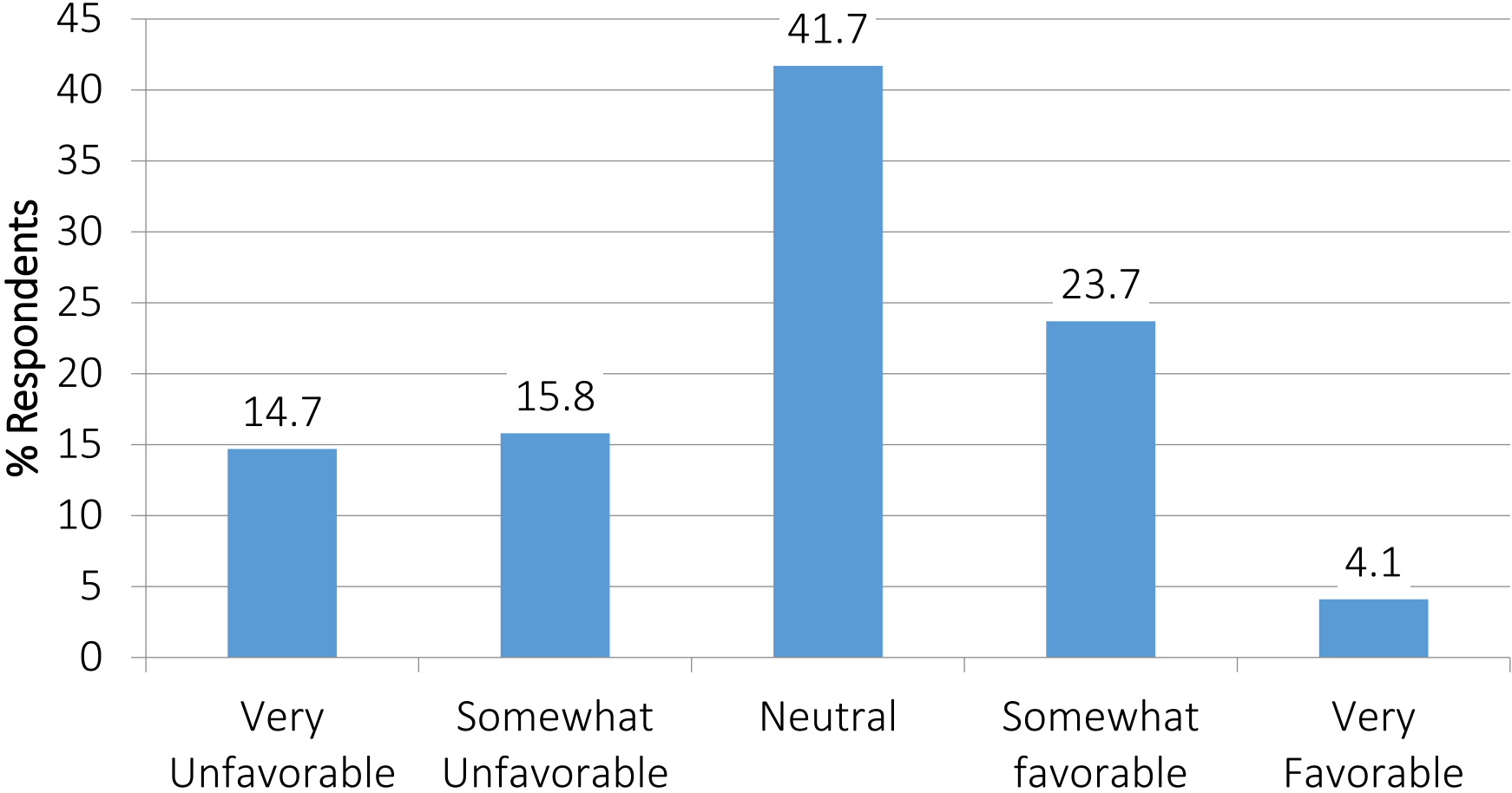
# Cumulative Net Farm Operating Income for US Dairy Farms



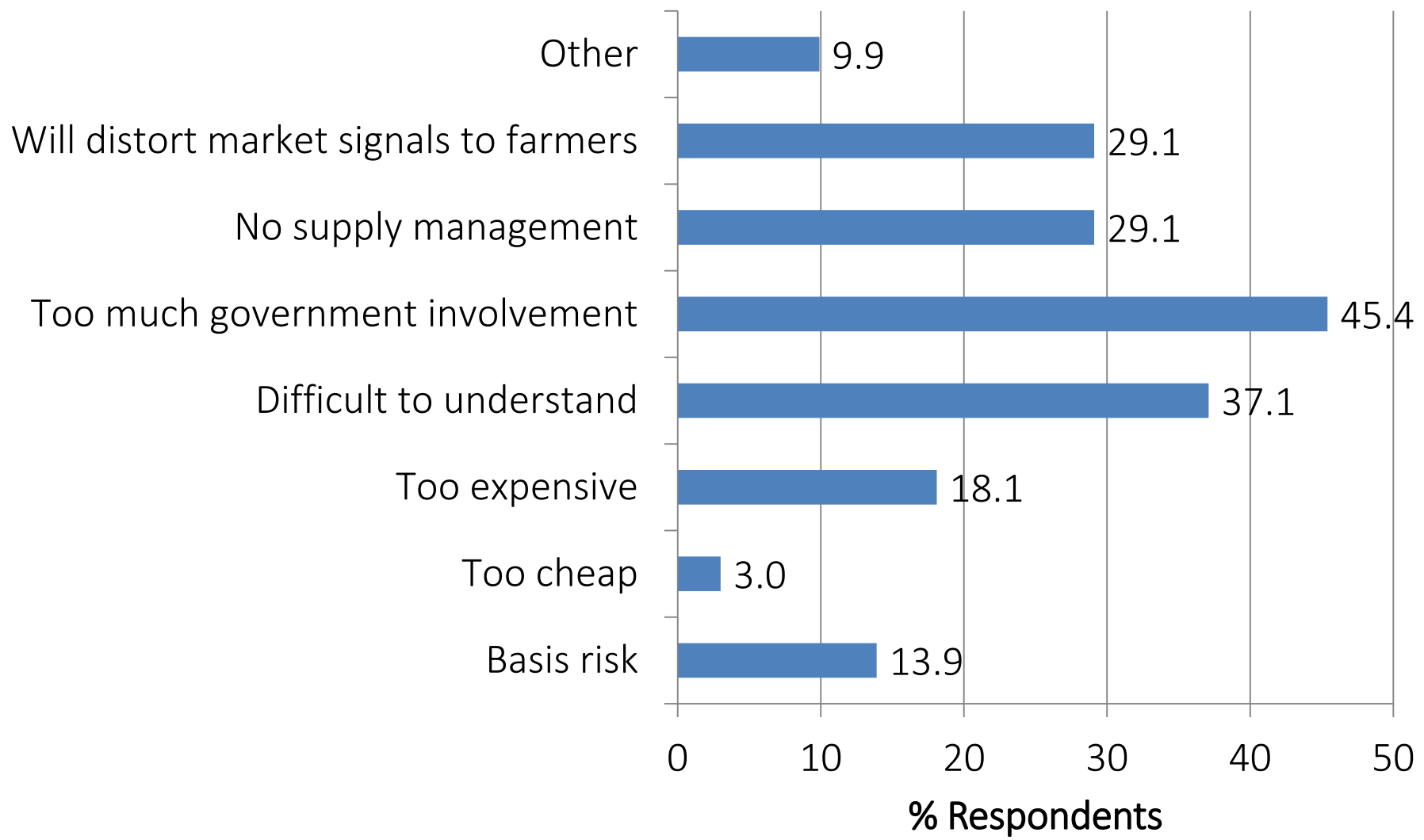
# Cumulative Net Farm Operating Income for US Dairy Farms



# Dairy Producer Impression of MPP-Dairy



# Dairy Producer Impression of MPP-Dairy





# What Do We Find?

- Do dairy producers understand the MPP-Dairy?
  - **Outreach is critical.**
- Will they register to participate in the MPP-Dairy?
  - **50-60% of producers, 60% of milk for 2015.**
- Will the program suffer from adverse selection issue?
  - **Yes, very likely.**
- Will producers still use private risk management programs?
  - **40% of producers indicate they will reduce usage of other instruments.**
- Will MPP-Dairy distort dairy markets?
  - **Possibly, but fears about distortion – may reduce distortions.**

# Margin Protection Program for Dairy Producers: Implementation, Participation, Consequences

Co-authors:

Chris Wolf (Michigan State University)

Fanda Yang (PhD Student, University of Minnesota)

John Newton (University of Illinois Urbana-Champaign)

Cameron Thraen (The Ohio State University)

Dr. Marin Bozic

[mbozic@umn.edu](mailto:mbozic@umn.edu)

Department of Applied Economics

University of Minnesota-Twin Cities

317c Ruttan Hall

1994 Buford Avenue

St Paul, MN 55108

UNIVERSITY OF MINNESOTA

Driven to Discover<sup>SM</sup>