

The Economic Impacts of Immigrant Labor on U.S. Dairy Farms

**Labor Issues Facing Agriculture & The Rural Midwest
Federal Reserve Bank of Chicago**

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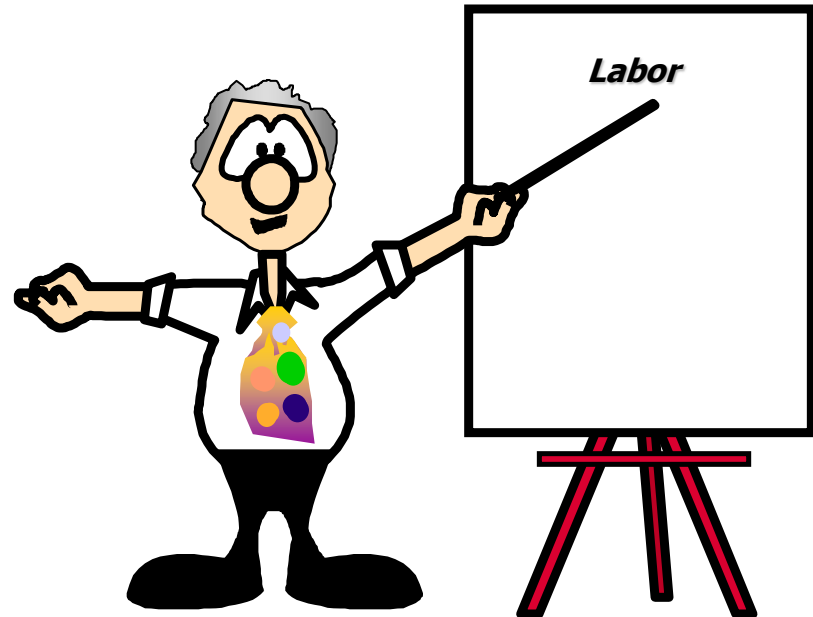
Flynn Adcock

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Overview

- Survey of Dairy Farmers
- Economic Importance of Immigrant Labor
- Some Implications



The Survey

- Supported by National Milk Producers Federation
- 2015 Survey Sent to 5,000 Dairy Farm in Hard Copy and Electronic Form
- 1,223 Questionnaires were Returned – 1,000 were Usable

Representative of Industry

- Responses Came from All U.S. Regions and from All Herd Sizes
- Higher Proportion of Responses from Larger Farms that Hire Labor
- Geographic Dispersion Similar to NASS Reported Dairy Farm Data

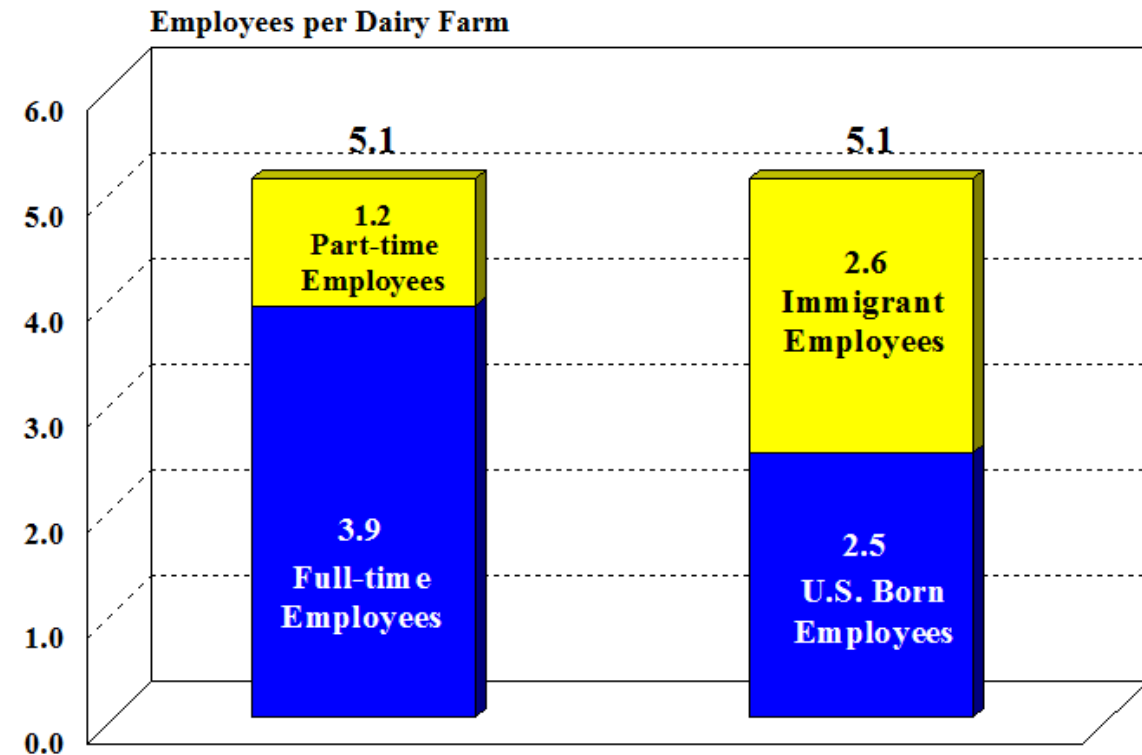
Survey Respondents by Farm Size and Region		
Number of Dairy Cows	Number of Dairy Farms Responding	% of Total Respondents
<50	45	4.5%
50-199	193	19.3%
200-499	154	15.4%
500-999	269	26.9%
1,000-1,999	184	18.4%
2,000+	155	15.5%
Region of the United States	Number of Dairy Farms Responding	% of Total Respondents
Northeast	172	17.3%
Southeast	38	3.8%
Midwest	467	46.9%
Southwest	72	7.2%
West	246	24.7%

U.S. Dairy Farm Labor

- Survey Results Indicate 114,092 Full-Time and 36,326 Part-Time Employees on U.S. Dairies for a Total of 150,418

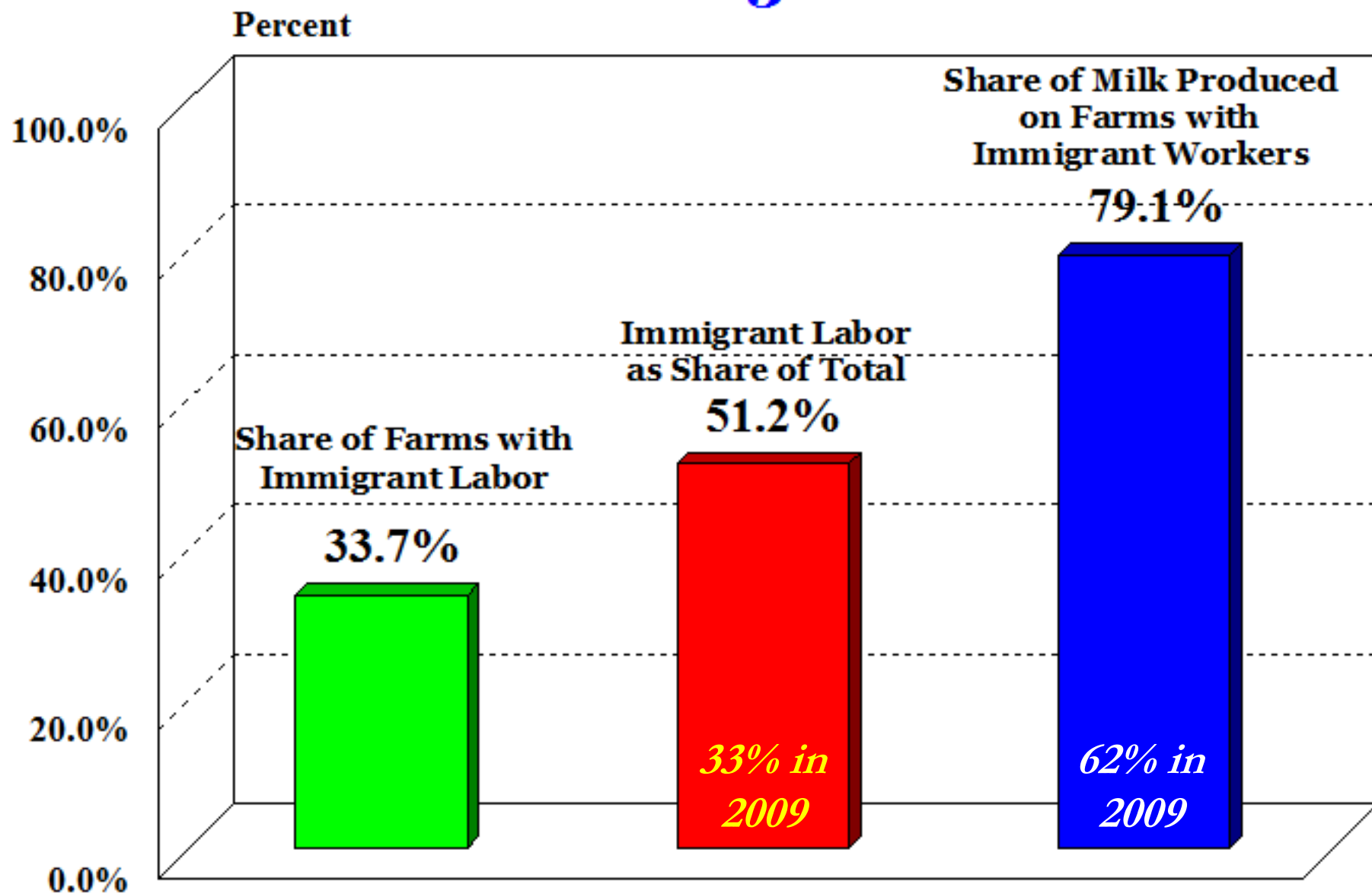
Workers on Dairy Farms Average, 2013

- Slightly More than Half, 76,968, of U.S. Dairy Labor are of Immigrant Origin



Source: National Dairy Labor Survey, n=911

Immigrant Workers on U.S. Dairy Farms, 2013

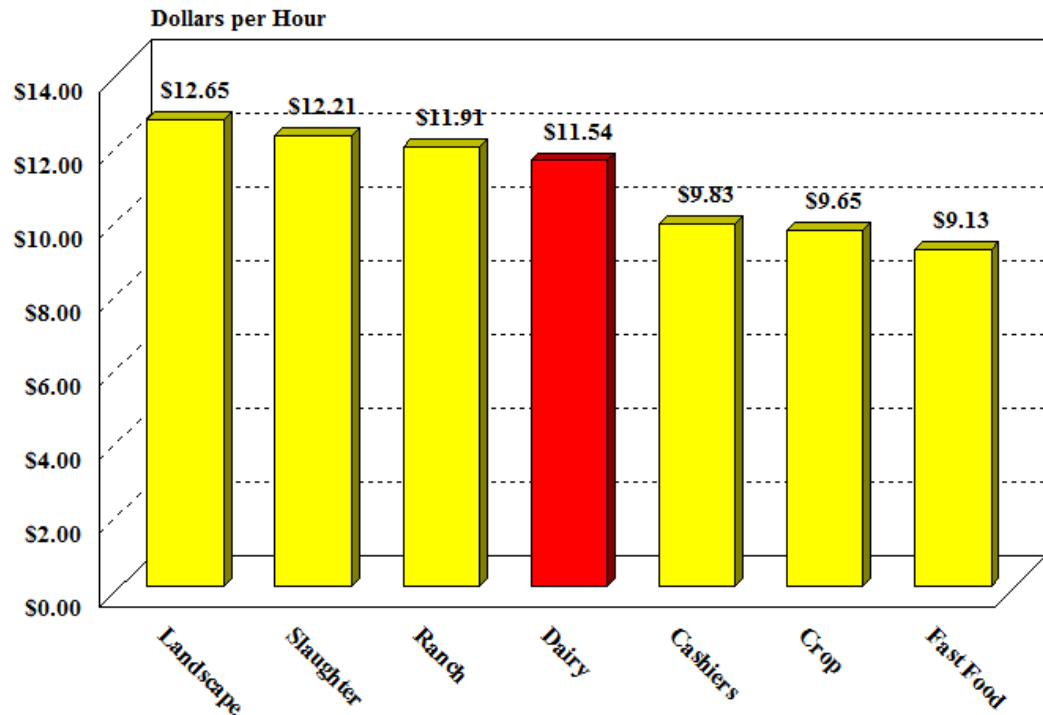


Source: National Dairy Labor Survey, n=911; Percents are for Farms with 50 or More Cows

U.S. Dairy Labor Compensation

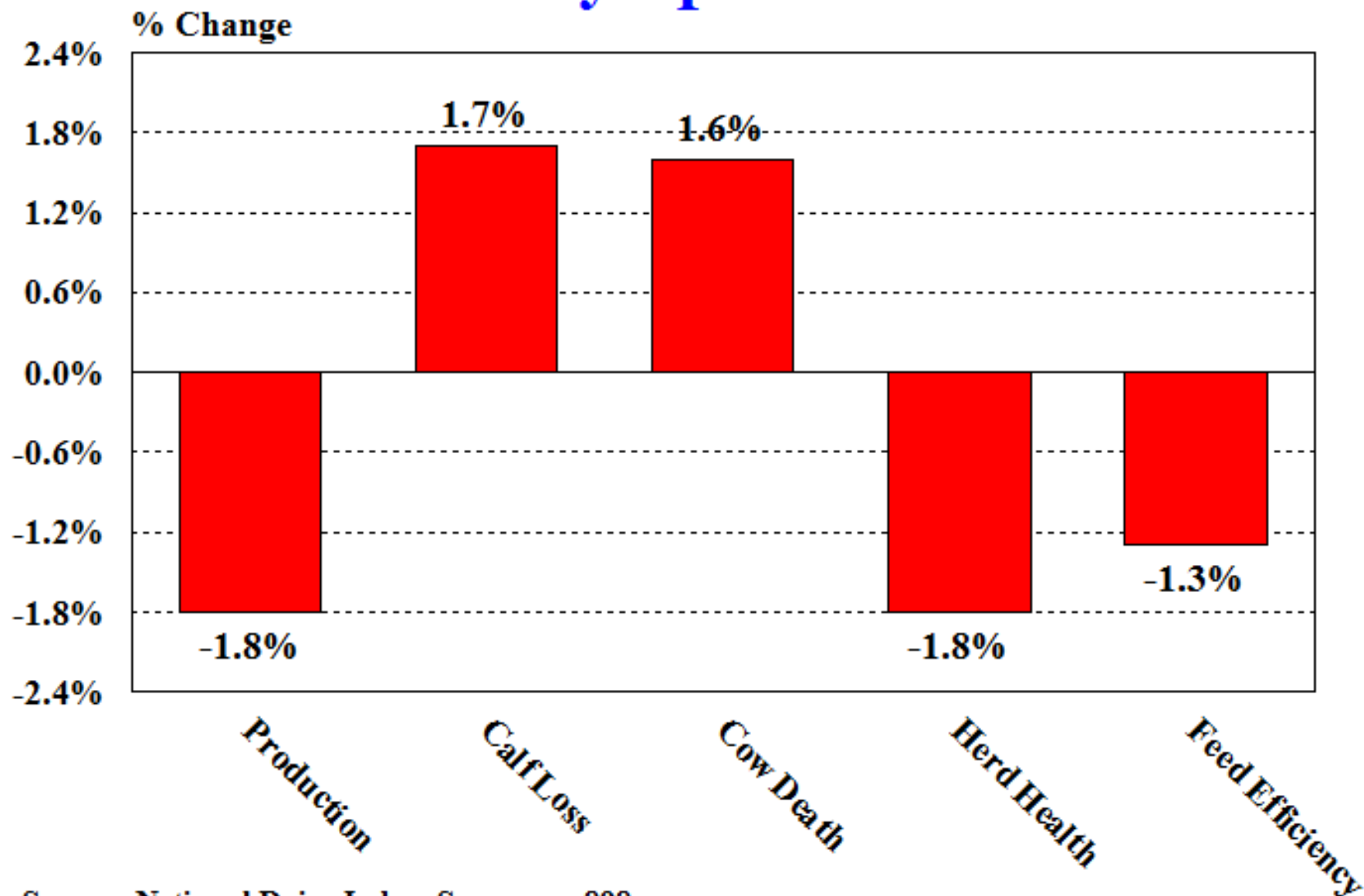
- **U.S. Dairy Employees Earn an Average \$11.54/Hour**
 - **Dairies with Immigrant Labor Pay \$11.69/Hour**
- **Dairy Employees Work an Average of 54 Hours per Week, Earn \$623/Week or >\$31,000/Year**
- **Most Dairy Farms Pay a Wide Array of Benefits**

Hourly Wage Comparison, 2013



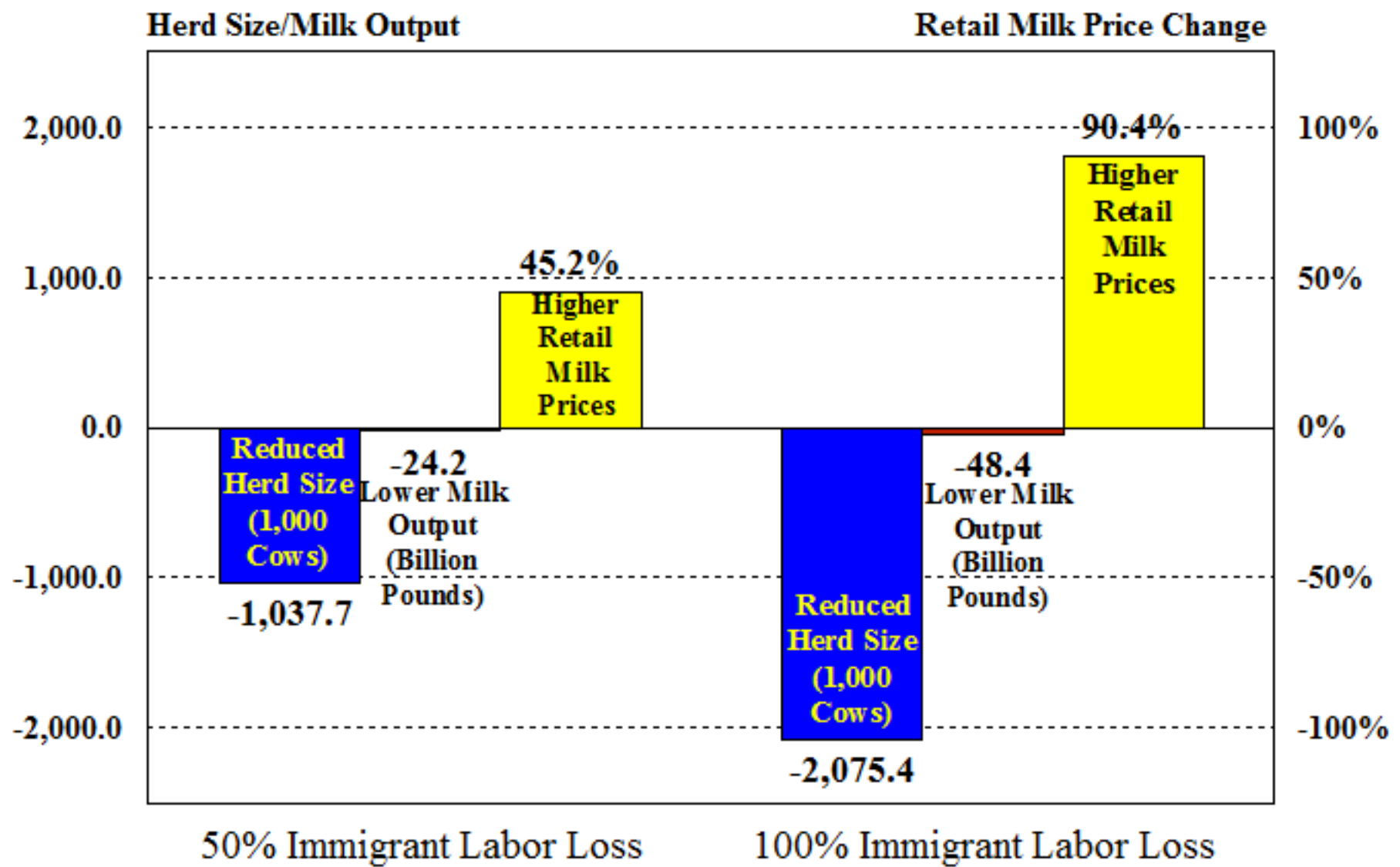
Source: National Dairy Labor Survey and Bureau of Labor Statistics

Effects of Employee Turnover on Surveyed Dairy Operations



Source: National Dairy Labor Survey, n=898

Immigrant Labor Loss Reduces Dairy Herd and Production & Raises Retail Milk Prices

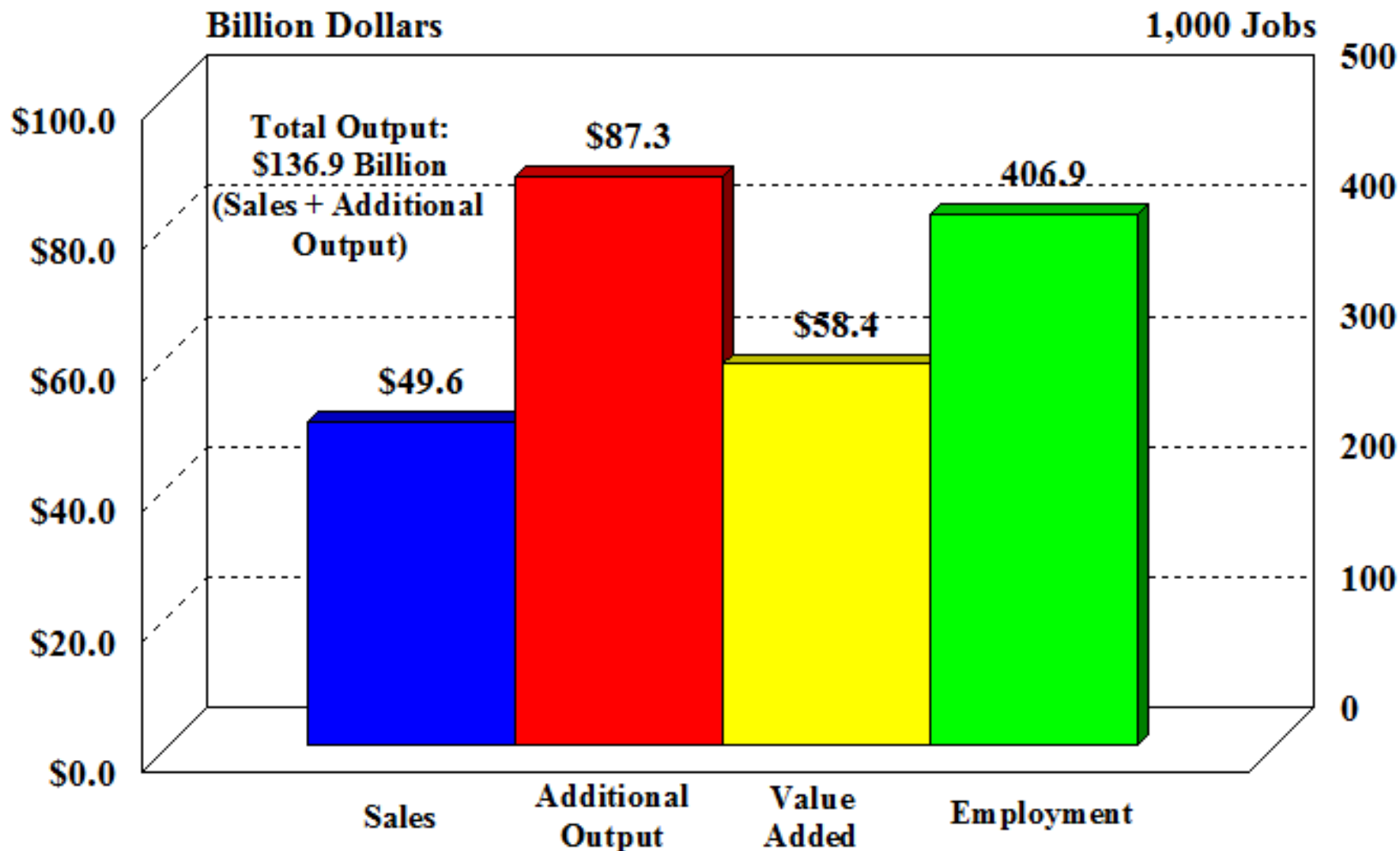


Source: National Dairy Labor Survey, n=955

Input/Output Definitions

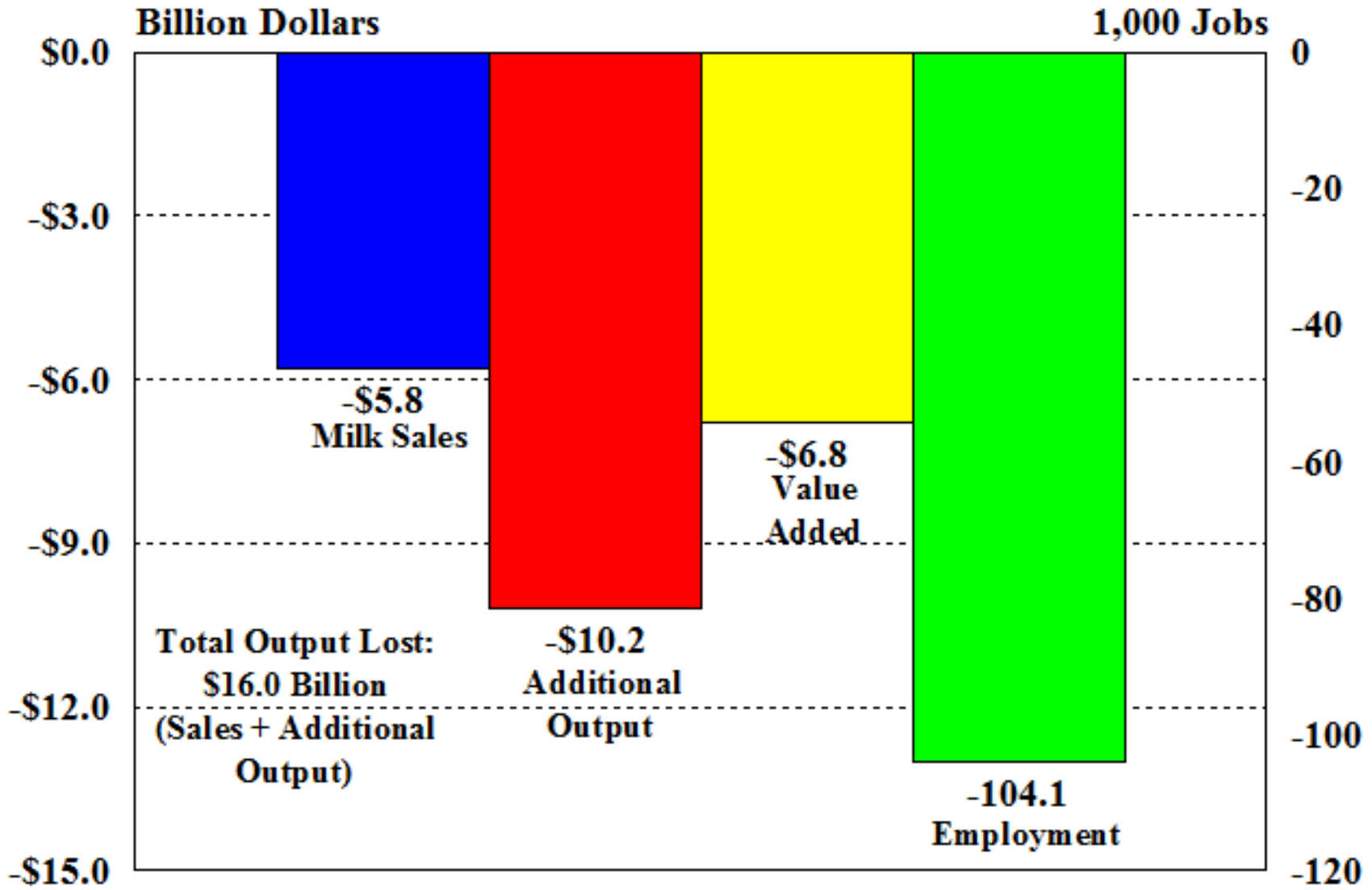
- ***Output***: Increase in Business Sales Required to Support \$1 of Exports
- ***Value Added***: Additional Gross National/ State Product due to \$1 in Exports
- ***Employment***: Additional Employees Required for \$1 Million in Exports
- ***Direct***: Sales of Output to Customers
- ***Indirect***: Purchases of Inputs Required to Produce the Products for Sale
- ***Induced***: Expenditures by Employees and Households in the Input Industries

U.S. Dairy Sales Support Economic Activity



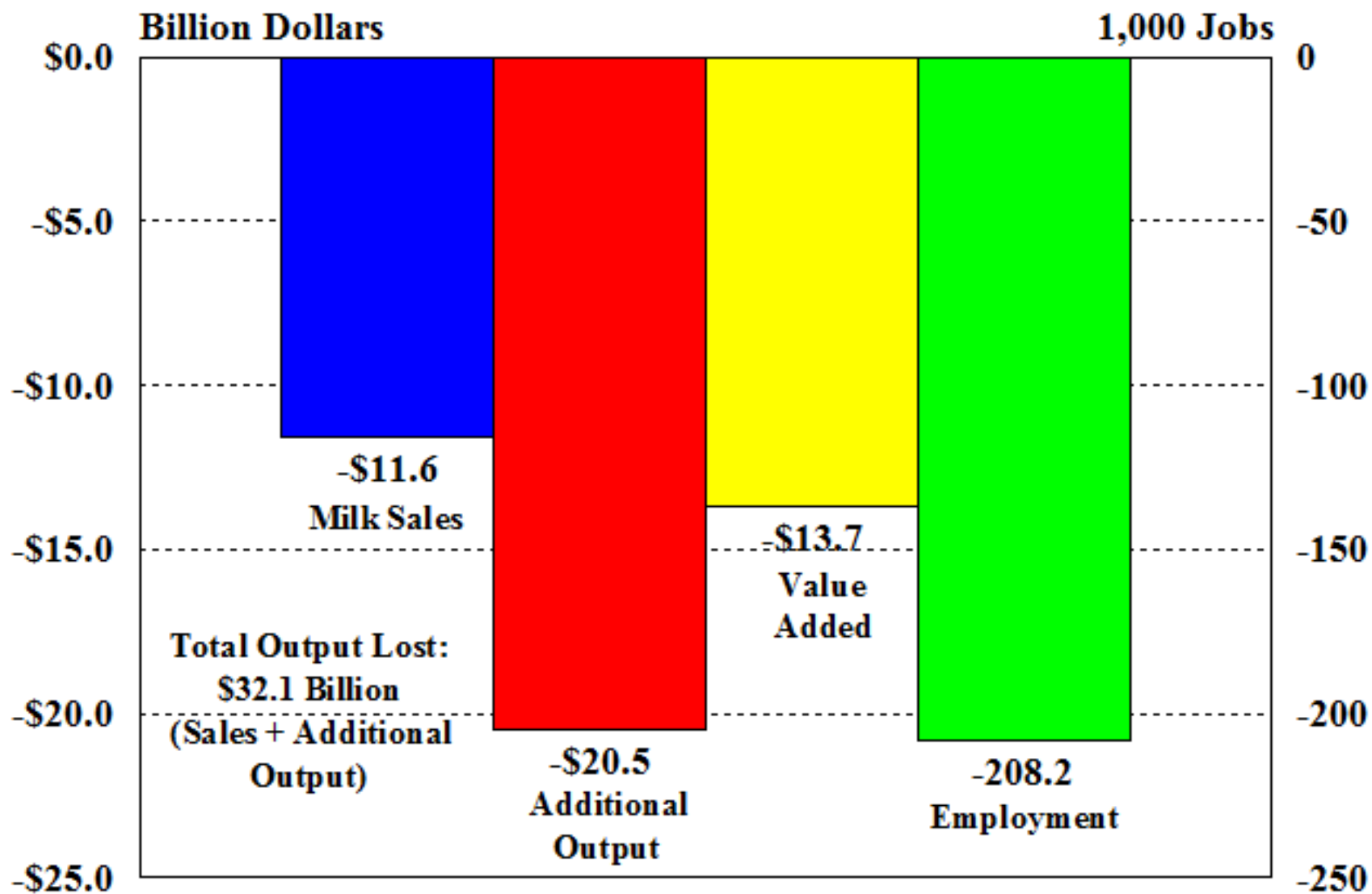
Source: National Dairy Labor Survey and IMPLAN

Economic Impacts of 50% Immigrant Labor Loss



Source: National Dairy Labor Survey and IMPLAN

Economic Impacts of 100% Immigrant Labor Loss



Source: National Dairy Labor Survey and IMPLAN

Implications

- U.S. Dairies are Highly Dependent on Immigrant Labor for Milk Production
- A Significant Loss of Immigrant Labor Would:
 - Lower Milk Production
 - Increase the Price to Consumers
 - Cost the Economy Billions of Dollars in Output and Thousands of Jobs

Implications

- Substitute Capital for Labor
- Robotic Milking Technology
- Advantages:
 - Increase production
 - Increase quality
 - Better management
- Disadvantages:
 - Cost
 - High management ability and development