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# **Determinants of Wages, Benefits and Bonuses for Farm Employees**

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# Determinants of Wages, Benefits and Bonuses for Farm Employees

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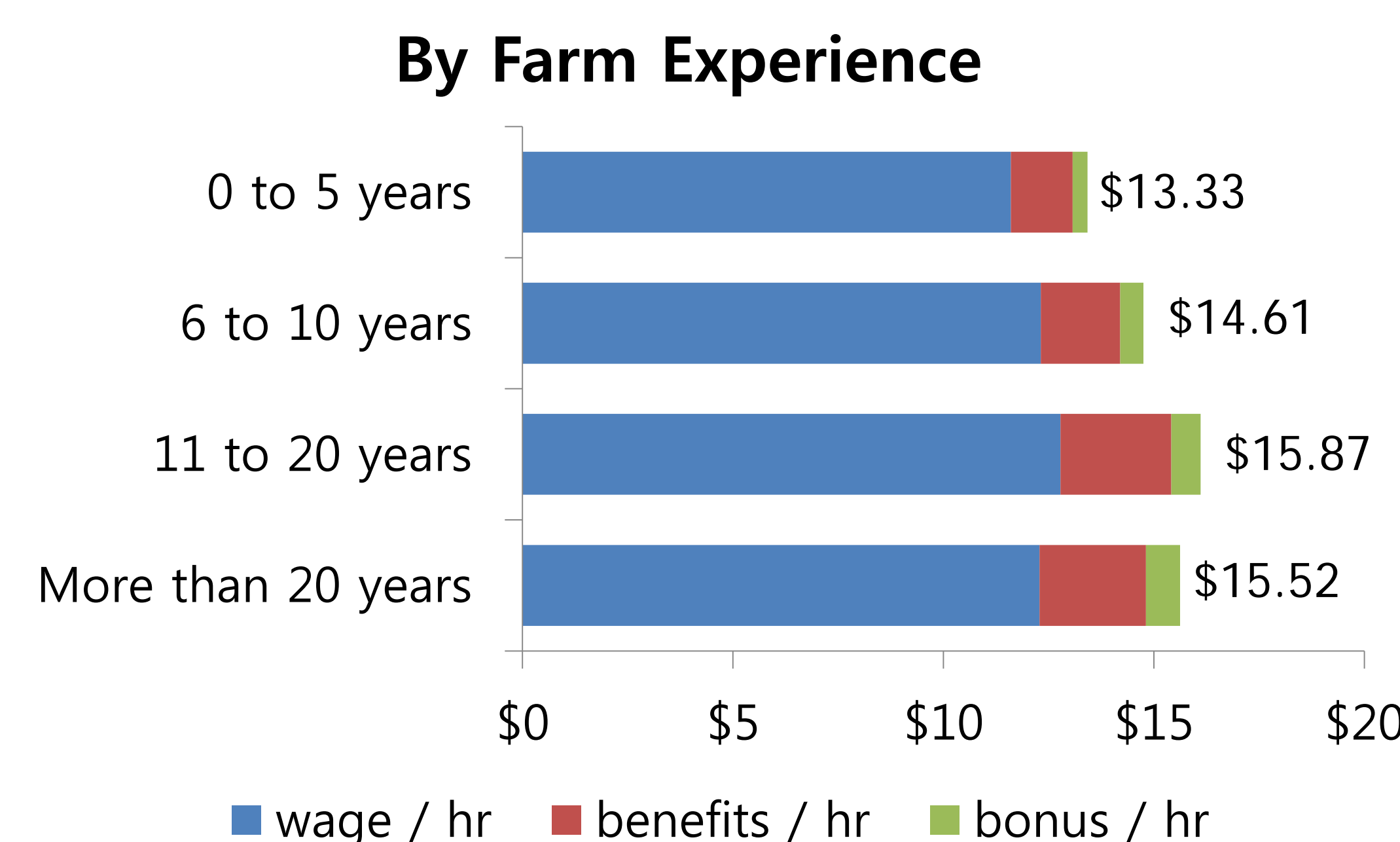
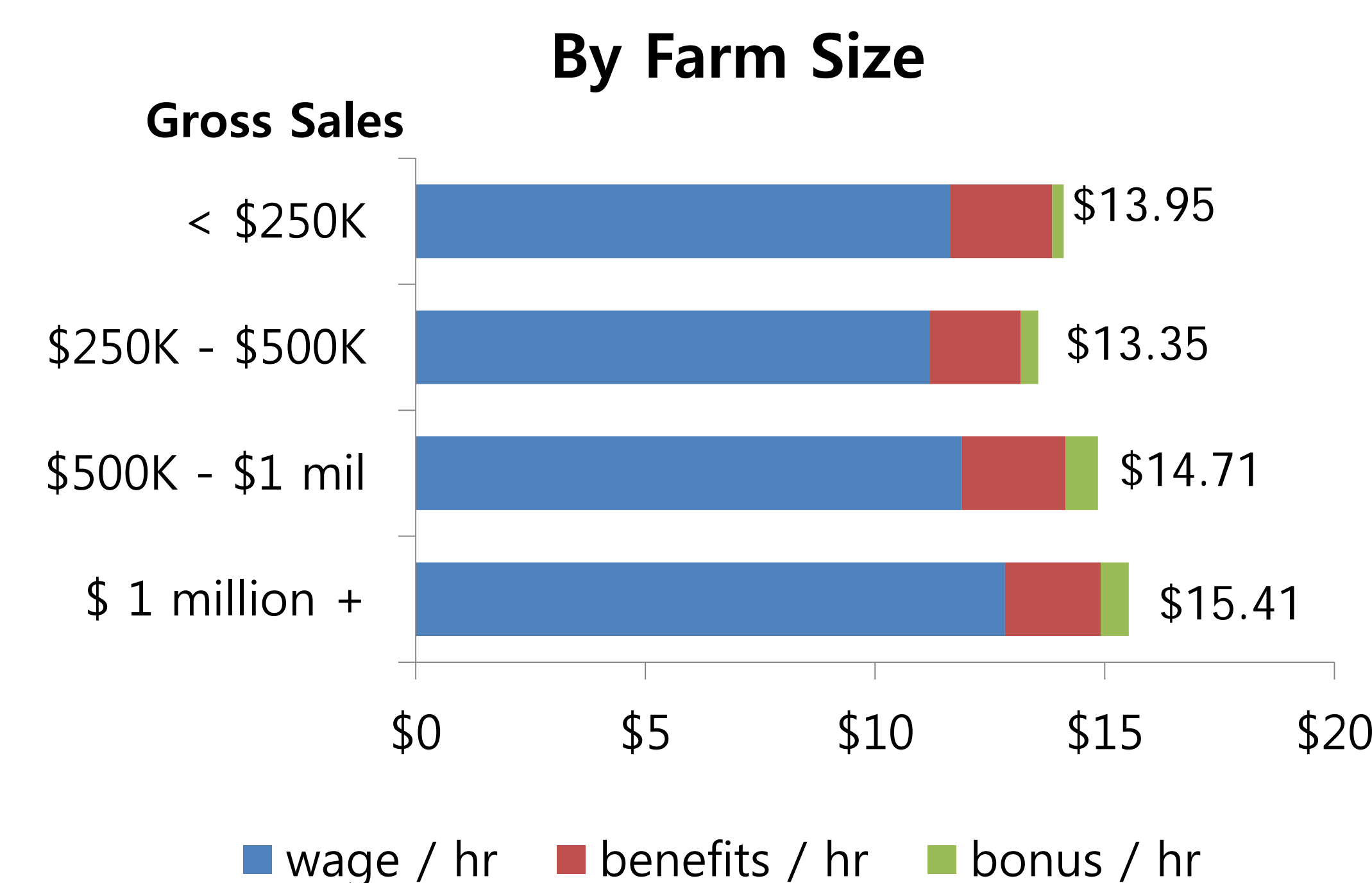
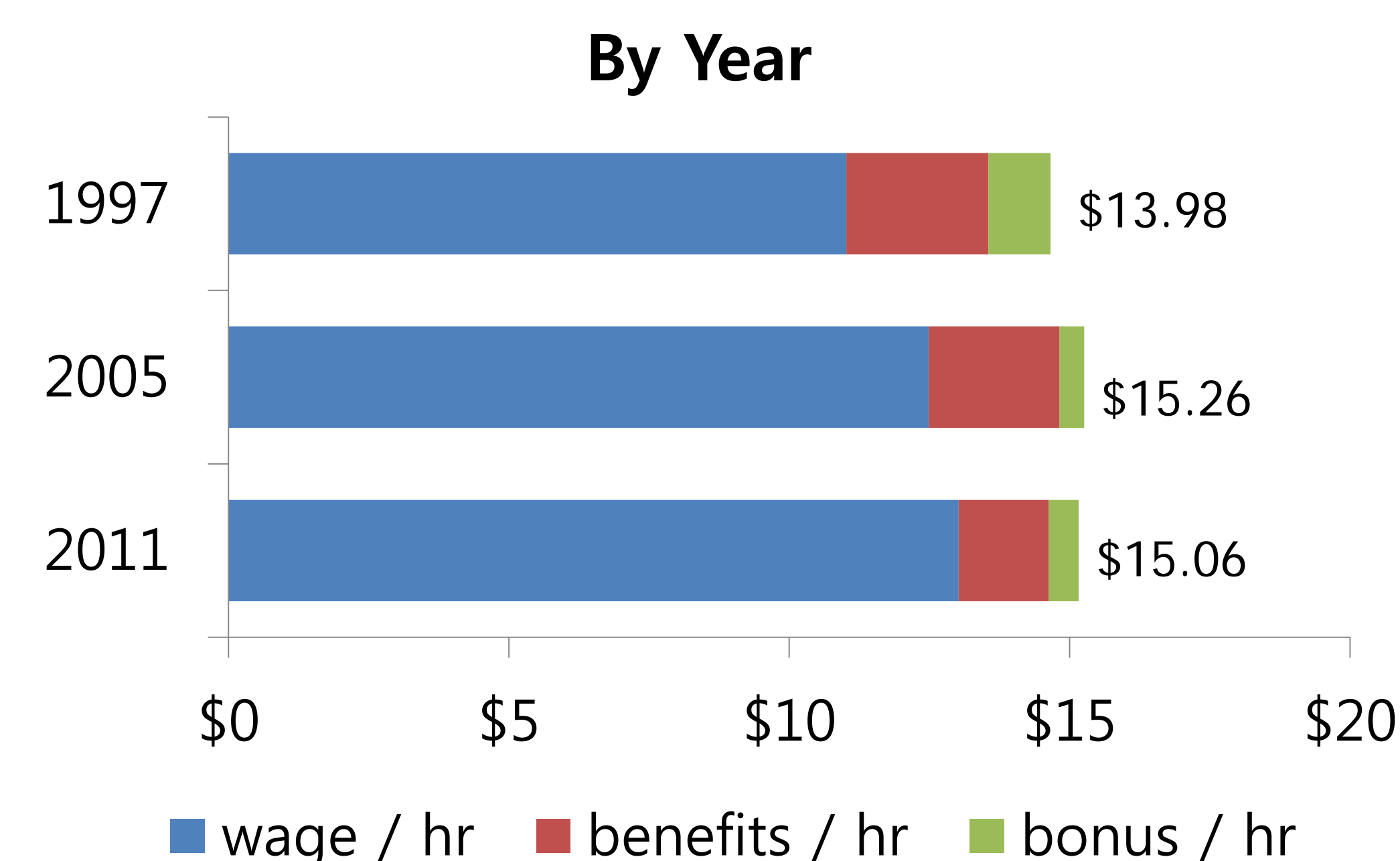
## Rationale

- Farm employee management is an increasingly important issue, especially in livestock production.
- A clear understanding of current levels of compensation and the factors that influence them will help farm operators compete effectively for workers.

## Data

Employers of full-time farm labor in Iowa were surveyed in 1997, 2005 and 2011. Data on wages, fringe benefits, and cash bonuses paid to each employee were collected on employees who worked 1,500 hours or more and at least 150 days during the previous year, excluding immediate family members. All data were adjusted to 2011 dollars.

Average Total Compensation Per Hour (in 2011\$)



Estimated Percent Difference in \$/Hour Relative to 1997 base

	Wages	Benefits	Bonus	Total Comp'n
Year 2005	14.7% ***	21.9%	14.4%	9.7%***
Year 2011	20.7% ***	11.2%	-14.6%	13.0%***
Farm Type (base: Crops)				
Beef	9.4%**	-14.6%	-29.0%	4.0%
Swine	-8.4%*	-51.9%**	-66.6%**	-12.7%***
Dairy	-7.4%**	-9.9%	-25.9%	-9.5%**
Farm Size (base: Gross Sales < \$500K)				
\$500K - \$million gross sales	2.5%	25.8%*	44.2%*	8.8%**
> \$1 million gross sales	7.1%*	21.5%	14.0%	11.7%***
Education (base: High School or Less)				
Some college / 2 year degree	-2.7%	5.0%	-10.1%	-2.6%
4 year degree or higher	9.5%**	-12.0%	8.6%	1.4%
Male	14.4%*	0.1%	74.2%*	3.2%
Years of Farm Experience	1.4%***	-2.7%	-3.3%	1.1%**
Years of Experience on this farm	0.3%	9.3%***	18.5%***	1.0%**
Performed supervisory duties	10.0%***	-11.7%	-1.4%	7.6%***
Paid fixed salary (vs. hourly)	-2.6%	87.8%***	82.2%***	10.0%***
N	595	534	303	595
R_squared	0.194	0.159	0.239	0.222

Estimated marginal effects from log-linear earnings regressions; standard errors clustered by farm id, to account for multiple observations per farm. Asterisks denote significance at the 10 percent (\*), 5 percent (\*\*), and 1-percent (\*\*\*) levels.

## Key Findings

- Real wages and total compensation rose between 1997 and 2011, while the value of benefits and bonuses changed little.
- Relative to crop farm employees, workers on swine and dairy farms earn less.
- All else equal, larger farms offer higher levels of compensation.
- Level of education has little effect on overall compensation
- Each additional year of general farm experience increases wages by 1.4%; while each added year of experience with current employer increases the value of benefits 9.3% and bonuses 18.5%.
- Workers who are paid a fixed wage (salary) earn wages similar to workers who are paid hourly, but receive much higher levels of benefits and bonuses.