



The Bureau of Business and Economic Research

# Results from the 2012-2013 Montana Manufacturers Survey

## Survey Authors

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RESEARCH**



## Results from the 2012-2013 Montana Manufacturers Survey

The Bureau of Business and Economic Research at The University of Montana started an annual survey of Montana's largest manufacturers in 1999. The surveys are conducted each year during November and December, and query manufacturers on a variety of business issues pertaining to both the year just completed and the outlook for the coming year.

The results shown here are from the fourteenth such survey, completed in December 2012. A total of 232 firms were contacted for this year's survey, including Montana's largest manufacturing facilities (as measured by the number of people employed), as well as smaller firms representative of their sectors. Of the firms contacted, 80 percent responded to the survey.

The information collected through the manufacturers survey is featured in the Bureau's annual Montana Economic Outlook Seminar, where it is used in forecasting conditions for the manufacturing sectors for the upcoming year. While partial information is published in the *Outlook* booklet (January 2013), this publication and an article in the summer issue of BBER's *Montana Business Quarterly* (July 2013) provide a more detailed description and analysis of the survey results. Additional information and forecasts for Montana's economy and economic conditions throughout Montana can be found in the spring issue of the *Montana Business Quarterly* or on the Bureau's website at [www.bber.umt.edu](http://www.bber.umt.edu).

### AN OVERVIEW OF MANUFACTURING IN MONTANA

The manufacturing sector includes more than 3,000 entities ranging from large industrial facilities such as oil refineries, to a broad array of lighter production activities, including the assembly of sophisticated high-technology equipment to small cottage industries.

Overall, the state's manufacturing sector in 2012:

- produced approximately \$13 billion in product output,
- directly employed 21,250 workers (including the self-employed) who earned more than \$1 billion in labor income, and
- accounted for roughly 20 percent of Montana's economic base.

Manufacturing industries in the state pay high wages with wage and salary employees averaging over \$43,000 per year

Table 1  
Montana Manufacturing Employment  
and Earnings by County, 2011

	2011 Manufacturing Employment	Percent of Total	2011 Manufacturing Earnings (Millions of 2011 \$)	Percent of Total
<b>Yellowstone</b>	3,426	17%	\$298	29%
<b>Flathead</b>	2,915	14%	\$154	15%
<b>Gallatin</b>	2,702	13%	\$123	12%
<b>Missoula</b>	2,131	10%	\$94	9%
<b>Ravalli</b>	1,089	5%	\$39	4%
<b>Cascade</b>	1,032	5%	\$63	6%
<b>Lewis and Clark</b>	893	4%	\$39	4%
<b>Silver Bow</b>	692	3%	\$46	4%
<b>Lake</b>	610	3%	\$20	2%
<b>Lincoln</b>	384	2%	\$11	1%
<b>Park</b>	341	2%	\$13	1%
<b>Other counties</b>	4,196	21%	\$140	13%
<b>Montana total</b>	20,411	100%	\$1,041	100%

Source: Bureau of Economic Analysis, U.S. Department of Commerce.

Table 2  
Employment in Montana Manufacturing Sectors,  
2010 and 2012

Manufacturing Sector	2010	2012*	Percent Change
<b>Wood, paper &amp; furniture</b>	4,223	4,255	1%
<b>Food &amp; beverage</b>	3,546	3,531	0%
<b>Primary &amp; fabricated metals</b>	2,059	2,730	33%
<b>Chemicals, petroleum &amp; coal</b>	2,085	2,180	5%
<b>Machinery</b>	1,167	1,350	16%
<b>Nonmetallic minerals</b>	938	960	2%
<b>Textiles, clothing &amp; leather goods</b>	774	845	9%
<b>Computers, electronics &amp; appliances</b>	640	785	23%
<b>All other manufacturing</b>	4,371	4,620	6%
<b>Total</b>	19,803	21,256	7%

Source: Bureau of Economic Analysis, U.S. Department of Commerce.  
\*Estimated.

(compared to an average \$36,000 per year for all Montana nonfarm workers).



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### 2012 AND THE RECENT PAST

Although the “Great Recession” officially ended in 2009, manufacturing in Montana continued declining through 2010, falling to under 20,000 workers after the pre-recession level of nearly 24,000. However, both 2011 and 2012 revealed growth for Montana manufacturers, with annual sales increasing to more than \$13 billion and employment topping 21,000 workers for the first time since the recession’s end.

Six Montana counties can boast more than 1,000 manufacturing employees, and worker earnings of manufacturing employees exceeded \$100 million in three counties during 2011 (Table 1).

Virtually all sectors of Montana manufacturing lost employment during the recession but most have turned upward since 2010, with primary and fabricated metals and computers and electronics sectors having the most rapid growth. After losing 2,500 jobs from 2006 to 2010, the wood, paper, and furniture sector has grown modestly in the last year and remains the largest manufacturing sector in Montana by number of employees, with more than 4,200 workers (Table 2). Worker earnings among manufacturing sectors are highest in the chemicals, petroleum, and coal component, which has seen rapid growth in employment as well as earnings during the past several years.

The BBER survey of Montana manufacturers indicates continued improvement in operating conditions for Montana manufacturers in 2012 compared to 2011. In 2012, 50 percent of manufacturers reported increased sales and increased production. Fewer than 25 percent reported decreases in sales and production in 2012, which was similar to 2011 when around 27 percent of responding Montana manufacturers reported decreases in sales and production. Profits increased for 42 percent of responding firms in 2012, up from 37 percent in 2011. However, 30 percent of manufacturers reported decreased profits in 2012 versus 2011, illustrating that 2012 was still a difficult year.

The proportion of respondents that reported production curtailments dropped from 22 percent in 2011 to 20 percent in 2012. Furthermore, 9 percent permanently eliminated production capacity in 2011 versus 6 percent in 2012. Employment declined at 24 percent of respondent facilities in 2012, while 30 percent reported increased employment.

## Manufacturing Categories

*Although the manufacturing industry consists of hundreds of highly specific categories, for the purposes of this report, it has been divided into five segments:*

### **Wood/Paper**

Facilities that process timber into products like lumber, plywood, log homes, MDF, particleboard, and posts and poles, as well as facilities that further process primary wood products into products such as furniture, laminated beams, trusses, window and door frames, and wood carvings.

### **Chemicals/Petroleum/Refining**

Includes a wide range of facilities, such as those manufacturing products by transforming organic and inorganic raw materials by a chemical process (chemical manufacturing ) or by transforming mined or quarried nonmetallic minerals such as sand, gravel, stone, or clay (nonmetallic mineral product manufacturing), as well as facilities engaged in the transformation of crude petroleum and coal into usable products (petroleum and coal products manufacturing), and facilities engaged in smelting and refining ferrous and nonferrous metals (primary metal manufacturing).

### **Food/Beverages**

Facilities that manufacture food and beverages, including primary processors of Montana’s crops and livestock, as well as those producing for retail sale. Examples include sugar beet plants, flour mills, bakeries, and dairies.

### **Machinery/Equipment**

Facilities engaged in manufacturing machinery, equipment, or instruments. Included here are industrial and commercial machinery, computer equipment, electrical equipment, transportation equipment, and fabricated metals.

### **All Others**

Facilities engaged in mostly light manufacturing such as plastic products, sporting goods, games and toys, apparel, and jewelry, as well as those engaged in printing or performing services for the printing trade such as bookbinding.



# Results from the 2012-2013 Montana Manufacturers Survey

Figure 1  
Overall Outlook for 2013

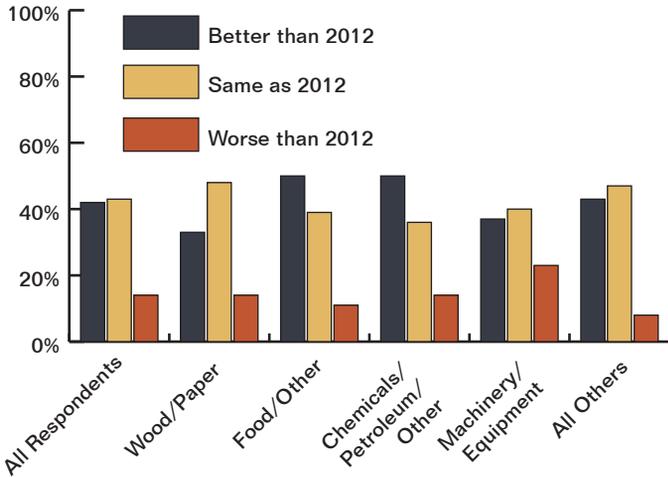


Figure 2  
Sales Outlook for 2013

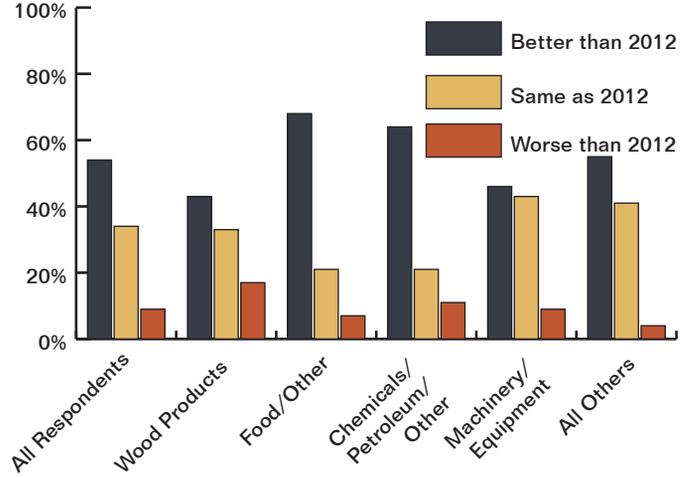


Figure 3  
Production Outlook for 2013

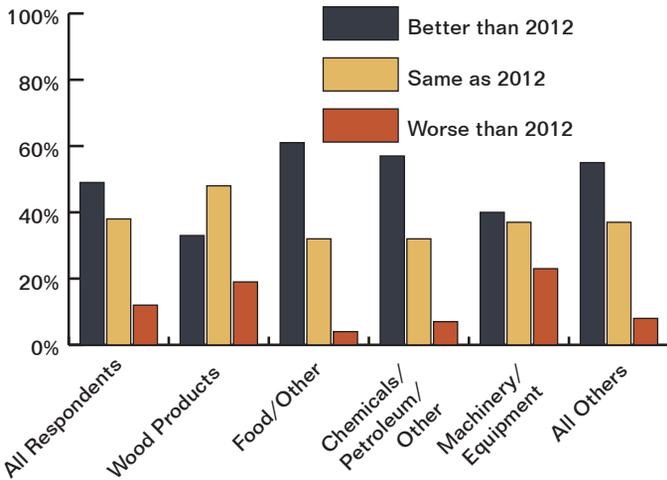
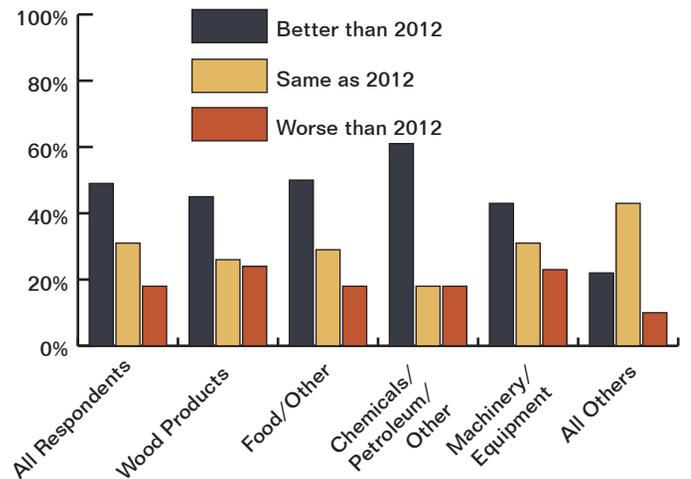


Figure 4  
Profit Outlook for 2013



This is a slight improvement from 2011, when employment declined at 27 percent of the respondent facilities while 29 percent showed an increase.

The number of facilities reporting new product lines declined from 28 percent in 2011 to 24 percent in 2012. The proportion of respondents making major capital expenditures also declined, falling from 44 percent in 2011 to 40 percent in 2012.

## GENERAL OUTLOOK FOR 2013

National forecasts call for modest growth in the U.S. and global economies. Oil and gas development in Montana, North Dakota, and Canada will continue to positively impact Montana manufacturing, with increased business at existing manufacturers and several new facilities planned for 2013 and beyond.



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Increasing reports of “re-shoring” – manufacturing jobs returning to the U.S. from overseas locations like China – are providing encouragement to domestic producers of goods as well as the U.S. labor force. Although statistics to support the anecdotal stories are difficult to come by, increasing evidence suggests that several factors are contributing to growth in domestic manufacturing. Wages and benefits earned by Chinese and other foreign workers are reportedly increasing, narrowing the compensation disparities between American workers and their foreign competitors. Costs associated with energy, transportation of goods, logistics management, and customer service are also being recognized as important and frequently lower with domestic production.

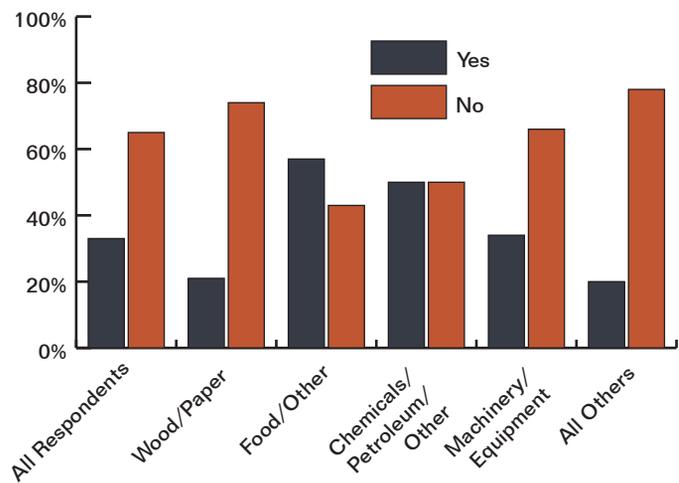
Montana manufacturers who responded to the BBER’s annual survey continue to express optimism in their outlook for the coming year. More than 35 percent expected improved conditions for 2012, and more than 42 percent expect better conditions during 2013, compared to just 14 percent that expect worsening conditions for 2013 (Figure 1). The most optimistic sectors were in the food/beverage and chemical/petroleum/refining, with 50 percent expecting a better year in 2013. When asked about their biggest concerns for 2013, however, most indicated the potential for a weakening of the economy and a number mentioned specifically the resolution of the national fiscal situation.

### SALES, PRODUCTION, AND PROFITS

Fifty-four percent of manufacturers anticipated 2013 sales would increase over 2012 (Figure 2), with 49 percent expecting increased production (Figure 3) and 49 percent anticipating increased profits for 2013 (Figure 4). This is very similar to 2012 when 45 to 50 percent of manufacturers expected increased sales, production, and profits.

Food/beverage manufacturers were the most optimistic about 2013, with more than 68 percent expecting increased sales and more than 61 percent expecting increased production. Chemical/petroleum/refining manufacturers were the next most optimistic, with more than 64 percent expecting increased sales, 57 percent increased production and 61 percent expecting increased profits in 2013. The most pessimistic outlook was among the wood products segment, with only 43 percent expecting increased sales and profits and 33 percent expecting increased production in 2013.

Figure 5  
Outlook for Major Capital Expenditures in 2013



### PLANNED CAPITAL EXPENDITURES

The proportion of firms planning major capital expenditures remained the same between the 2012 and 2013 surveys, with 33 percent of responding firms planning major capital spending in 2013 (Figure 5). Food/beverage facilities reported the highest rate of planned capital expenditures, with 57 percent planning major capital expenditures, while only 21 percent of wood products manufacturers planned major expenditures for 2013.

### EMPLOYMENT AND WORKER AVAILABILITY

As in 2012, 90 percent of manufacturing respondents expect to keep their workforce at the same level or increase employment during 2013. Specifically, the outlook for employment in manufacturing remains stable, with 25 percent expecting increased employment in 2013 and only 9 percent expecting decreases (Figure 6). Last year, 30 percent of manufacturers expected increased employment in 2012, and 7 percent expected decreases. Entering 2010, 28 percent of respondents expected decreases in employment while only 11 percent expected to increase employment. Improving economic conditions have led to a modest increase in the demand for workers, with 20 percent of respondents for 2012 reporting “significant worker shortages” (Figure 7), up from



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19 percent for 2011 and 11 percent for 2010. However, this number is significantly less than the more than 50 percent of firms that reported significant worker shortages for 2007 and 2006.

## BUSINESS-RELATED ISSUES

Survey recipients were given a list of eight business-related issues and were asked to rate each in terms of its importance to their business. There was no specified time frame, indicating the general and enduring nature of these issues.

Once again, health insurance cost was the number one issue, and 81 percent of respondents rated it very important, up slightly from last year. Workers' compensation rates were very important to 57 percent of responding firms, with workers' compensation rules rated as very important to 50 percent. Energy costs were somewhat less important to respondents, with 49 percent rating them as very important the same as last year. Raw material availability was rated very important by 54 percent of respondent firms. The proportion indicating a shortage of qualified workers as very important in 2012 was 52 percent, similar to 2011 at 51 percent, but down from 69 percent in 2006 when the economy was much stronger. Foreign competition and the cost of workforce development were rated as very important issues by 21 and 26 percent of responding firms, respectively (Figure 8).

Changes in federal government spending, particularly in the Department of Defense, could impact numerous Montana manufacturers that produce items used by the military. Changes in federal civilian spending, while considered necessary by many of the manufactures responding to BBER's survey, could impact a variety of firms that provide goods related to the medical, educational, alternative energy and natural resource sectors.

In light of the many ongoing and upcoming changes to health care in the U.S., several questions about health insurance costs were posed to survey participants this year. Almost 70 percent of respondents indicated that their firms' health insurance costs increased during 2012, with just 5 percent saying costs decreased (Figure 9). Just 3 percent of respondents indicated they expected health insurance costs to go down in 2013, and 65 percent expected costs to increase (Figure 10). When asked about the impact of health care reform on their business, about half said they expected a substantial impact involving increased costs, while the remainder expected no impact, generally because they employed fewer than 50 workers or were unsure of the impact.

Figure 6  
Employment Outlook for 2013

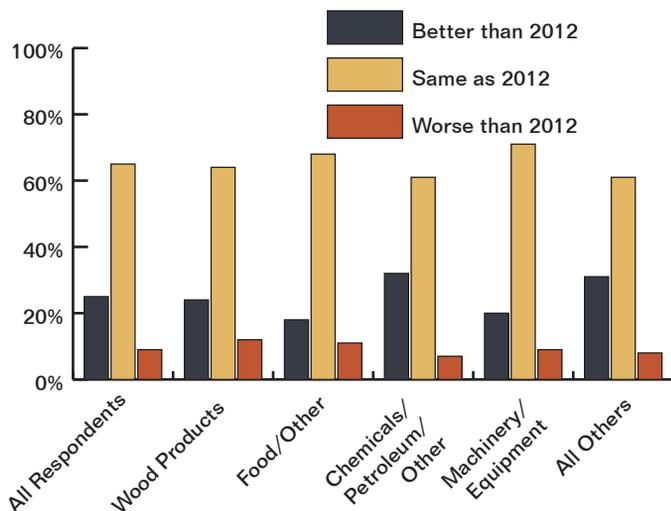
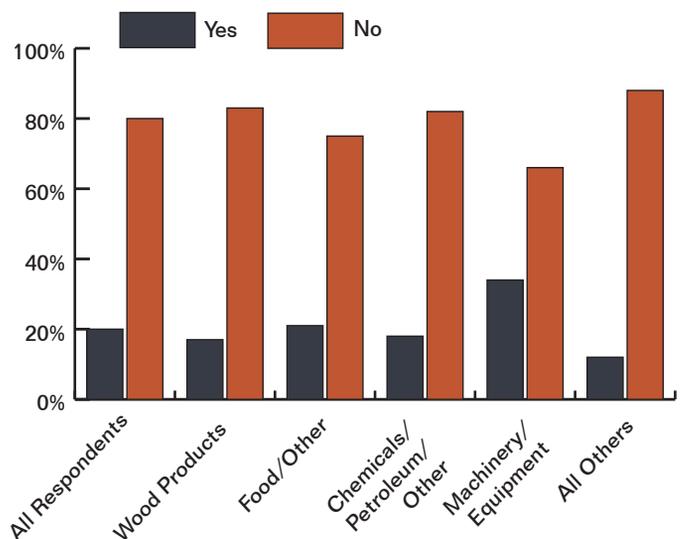


Figure 7  
Significant Worker Shortage During 2012





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Figure 8  
Other Business-Related Issues

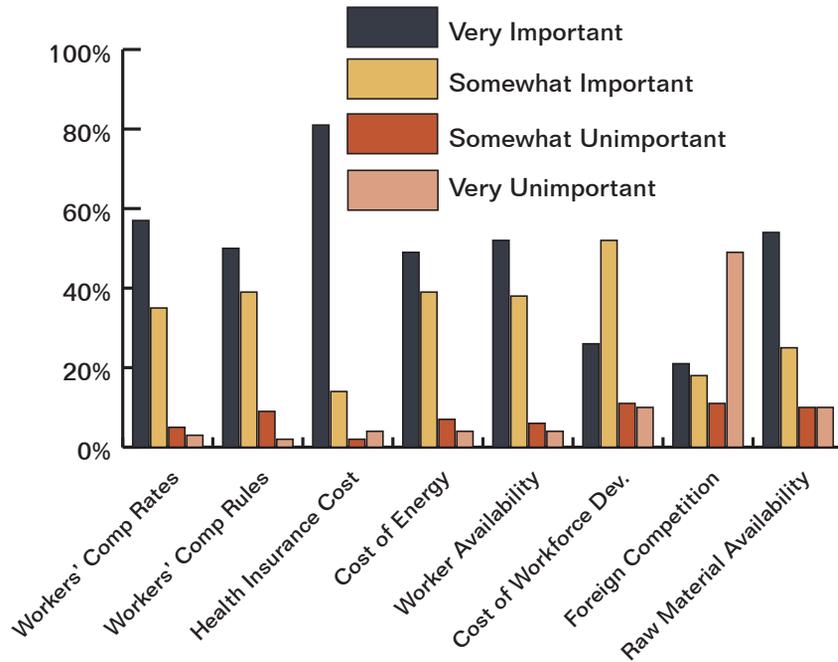


Figure 9  
Health Insurance Costs Change in 2012

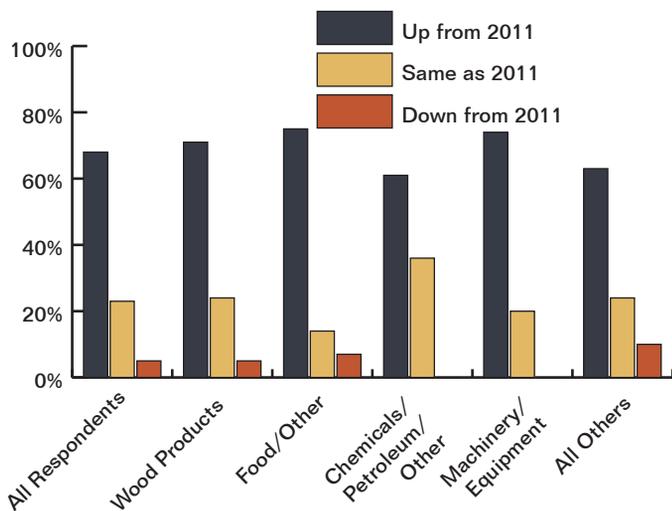
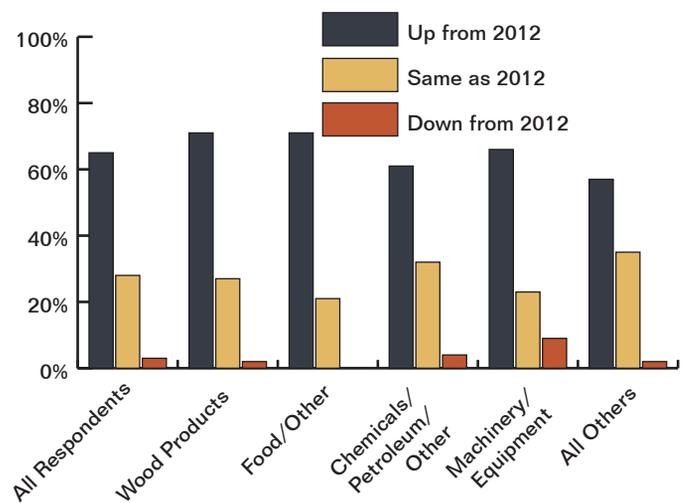


Figure 10  
Health Insurance Cost in 2013





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