The State of Our Manufacturing Economy

Oklahoma Conference on Manufacturing
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Federal Reserve Bank of Kansas City
www.kansascityfed.org/oklahomacity
Federal Reserve Districts and Office Locations
The U.S. Economy and Manufacturing
U.S. GDP growth improved in Q2 2013 after slowing earlier with the fiscal cliff

Growth in Real GDP

Percent change from the previous period, SAAR

Source: U.S. Bureau of Economic Analysis, Haver Analytics
But growth in U.S. factory output and jobs slowed through the first half of 2013

U.S. Manufacturing Employment and Output
Percent change, year-over-year

Source: U.S. Bureau of Labor Statistics
Productivity growth remained moderate, with compensation closely tracking it

U.S. Manufacturing Indicators
Percent change, year-over-year

Output/hour
Hourly compensation

Source: U.S. Bureau of Labor Statistics
Q3 data suggest U.S. economic growth picked up, including in manufacturing.
In its latest projections, the FOMC expected unemployment to continue to improve.

Source: U.S. Bureau of Labor Statistics, FOMC
On interest rates, most FOMC participants expect little change until 2015.

Federal Funds Rate
Year-end target

Note – Number of participants who project the initial increase will occur in the specified year in parenthesis.

Source: U.S. Bureau of Economic Analysis, FOMC.
The Oklahoma Economy and Manufacturing
Employment in Oklahoma remains above pre-recession levels, but has eased lately.
A drop in energy jobs has hurt the state this year, but manufacturing jobs have held up.
And unemployment rates in nearly all of Oklahoma remain better than the U.S. rate

County Unemployment Rates
July 2013

Source: OK Employment Security Commission
Oklahoma manufacturing exports have risen recently, more than the nation.
Aircraft and machinery have driven the rebound in Oklahoma exports this year.

Manufacturing Exports by Industry
(Top 5 Oklahoma export industries)
Jul-12 YTD vs. Jul-13 YTD

Source: WiserTrade
Oklahoma’s exports to Europe have surged, and exports to China have remained solid.
As in the nation, regional manufacturing activity improved in the third quarter.
And expectations among regional plant managers increased in September.
For most of the past decade, Oklahoma factory jobs have grown faster than the U.S.
Manufacturing’s share of employment in Oklahoma is now similar to the nation.
Nearly all of the net job gains in the state have been in machinery or primary metals.

**Oklahoma Manufacturing Employment by Industry**

*Change in number of jobs, 2002-2012*

- Machinery
- Primary metal
- Beverage & tobacco
- Chemical
- Elec. equip., appliance, & comp.
- Petroleum
- Paper
- Fabricated metal
- Nonmetallic mineral
- Furniture
- Misc.
- Computer & electronic
- Wood
- Printing
- Plastics & rubber
- Food
- Transportation equipment

Source: U.S. Bureau of Labor Statistics
Machinery, metals, petroleum, and mineral manufacturing make the state most unique.

<table>
<thead>
<tr>
<th>Industry</th>
<th>Percent of Total Output</th>
<th>Location Quotient</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>U.S.</td>
<td>Oklahoma</td>
</tr>
<tr>
<td>Petroleum &amp; coal products</td>
<td>4.4</td>
<td>13.9</td>
</tr>
<tr>
<td>Machinery</td>
<td>7.1</td>
<td>16.4</td>
</tr>
<tr>
<td>Nonmetallic mineral products</td>
<td>2.3</td>
<td>4.5</td>
</tr>
<tr>
<td>Fabricated metal products</td>
<td>7.2</td>
<td>14.3</td>
</tr>
<tr>
<td>Paper</td>
<td>3.6</td>
<td>5.2</td>
</tr>
<tr>
<td>Plastics &amp; rubber products</td>
<td>4.1</td>
<td>4.6</td>
</tr>
<tr>
<td>Food</td>
<td>12.2</td>
<td>9.9</td>
</tr>
<tr>
<td>Transportation equipment</td>
<td>12.6</td>
<td>9.4</td>
</tr>
<tr>
<td>Elec. equip., appliance, &amp; components</td>
<td>2.5</td>
<td>1.8</td>
</tr>
<tr>
<td>Primary metal</td>
<td>3.8</td>
<td>2.7</td>
</tr>
<tr>
<td>Printing &amp; related support activities</td>
<td>2.3</td>
<td>1.4</td>
</tr>
<tr>
<td>Miscellaneous</td>
<td>4.5</td>
<td>2.1</td>
</tr>
<tr>
<td>Beverage &amp; tobacco products</td>
<td>3.7</td>
<td>1.7</td>
</tr>
<tr>
<td>Wood products</td>
<td>1.3</td>
<td>0.6</td>
</tr>
<tr>
<td>Chemical</td>
<td>16.1</td>
<td>7.4</td>
</tr>
<tr>
<td>Furniture &amp; related products</td>
<td>1.4</td>
<td>0.6</td>
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<td>3.5</td>
</tr>
</tbody>
</table>

Note - Location quotient is the division of local employment share by national employment share.

Source: U.S. Census Bureau ASM
Summary

• U.S. manufacturing slowed in early 2013 as jobs and hours flattened out, but growth has risen since Q2

• Regional and Oklahoma factory activity has also picked up lately, driven in part by stronger exports
Questions and Links

For more information about the Kansas City Fed’s **Monthly Survey of Manufacturers**, please go to our website:
www.kansascityfed.org/research/indicatorsdata/mfg

For more information about the Oklahoma economy, subscribe to the quarterly **Oklahoma Economist** at:
www.kansascityfed.org/publications/research/oke