Indiana Economic Forecast Update

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Tom Jackson, Principal Economist, +1 215 789 7432
tom.jackson@ihsmarkit.com
US policy assumptions in the March forecast

• A reduction in the statutory corporate income tax rate from 35% to 20%, partially offset by fewer tax credits, starting in 2018
  • No border adjustments
  • No expensing of capital expenditures
• Personal income tax reforms that lower the average effective federal tax rate from 20.7% to 19.7% in January 2018
• An increase in public infrastructure investments totaling USD250 billion over 10 years
• Federal Reserve policy rate increases of 75 basis points in 2017, 2018, and 2019, bringing the rate to a long-term equilibrium of 3%
• * - No noteworthy changes in April forecast
Changes to forecast since December update

• Higher manufacturing employment, production
  • State-level employment data revised higher for Indiana
• National outlook has improved
  • Demand for durables is improving, especially from fixed business investment
  • Inventory over-hang has been mostly worked off, so more product needed to meet current demand
• U.S. corporate profits around 5% higher
  • Revenues about the same
  • Interest, wage expenses lower
With labor productivity rising, real GDP growth will outpace employment growth.

Source: IHS Markit © 2017 IHS Markit
Indiana’s real GSP growth also outpaces economic growth, indicating higher productivity and wages

Source: IHS Markit
## Key economic indicators for Indiana

<table>
<thead>
<tr>
<th></th>
<th>2015</th>
<th>2016</th>
<th>2017</th>
<th>2018</th>
<th>2019</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Units: Percent change</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Payroll employment</td>
<td>1.9</td>
<td>1.6</td>
<td>1.1</td>
<td>1.1</td>
<td>0.9</td>
</tr>
<tr>
<td>Unemployment rate (%)</td>
<td>4.8</td>
<td>4.4</td>
<td>4.1</td>
<td>4.0</td>
<td>4.0</td>
</tr>
<tr>
<td>Wage income</td>
<td>4.8</td>
<td>4.2</td>
<td>4.6</td>
<td>5.0</td>
<td>4.9</td>
</tr>
<tr>
<td>Personal income</td>
<td>4.0</td>
<td>3.9</td>
<td>4.0</td>
<td>4.7</td>
<td>4.8</td>
</tr>
<tr>
<td>Real gross state product</td>
<td>1.4</td>
<td>1.9</td>
<td>1.8</td>
<td>2.3</td>
<td>2.0</td>
</tr>
<tr>
<td>Personal consumption exp.</td>
<td>2.4</td>
<td>3.6</td>
<td>4.8</td>
<td>4.3</td>
<td>4.4</td>
</tr>
<tr>
<td>Housing starts (thousands)</td>
<td>16.5</td>
<td>19.2</td>
<td>21.4</td>
<td>21.9</td>
<td>22.6</td>
</tr>
<tr>
<td>Share of multi-family (%)</td>
<td>22.9</td>
<td>20.9</td>
<td>17.7</td>
<td>18.0</td>
<td>17.2</td>
</tr>
</tbody>
</table>

Source: IHS Markit © 2017 IHS Markit
Indiana’s job market remains solid; service sector growing more slowly than national average

Indiana employment growth vs. United States

Source: IHS Markit © 2017 IHS Markit

© 2017 IHS Markit
Higher productivity, fewer available workers will translate into higher wages
Revised historic data, improved outlook make manufacturing the leading job provider

<table>
<thead>
<tr>
<th>Sector</th>
<th>Job change</th>
<th>Thousands</th>
</tr>
</thead>
<tbody>
<tr>
<td>Utilities &amp; mining</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Leisure &amp; hospitality</td>
<td>-2</td>
<td>-2</td>
</tr>
<tr>
<td>Wholesale trade</td>
<td>-4</td>
<td>-4</td>
</tr>
<tr>
<td>Construction</td>
<td>-6</td>
<td>-6</td>
</tr>
<tr>
<td>Education</td>
<td>-8</td>
<td>-8</td>
</tr>
<tr>
<td>Information</td>
<td>-10</td>
<td>-10</td>
</tr>
<tr>
<td>Health &amp; social services</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Prof. &amp; business services</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>State &amp; local govt.</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>Other services</td>
<td>6</td>
<td>6</td>
</tr>
<tr>
<td>Retail trade</td>
<td>8</td>
<td>8</td>
</tr>
<tr>
<td>Manufacturing</td>
<td>10</td>
<td>10</td>
</tr>
<tr>
<td>Federal government</td>
<td>12</td>
<td>12</td>
</tr>
<tr>
<td>Financial services</td>
<td>-10</td>
<td>-10</td>
</tr>
<tr>
<td>Manufacturing</td>
<td>39,500</td>
<td>39,500</td>
</tr>
</tbody>
</table>

Job change = 39,500

Source: IHS Markit

© 2017 IHS Markit
Peak in vehicle sales will limit further gains in auto manufacturing sector, a major Indiana employer.

US light-vehicle sales have peaked

Source: IHS Markit © 2017 IHS Markit

© 2017 IHS Markit
Professional/business services, construction will supplement further gains in health care sector

Change in Indiana payroll employment, 2016q4-2019q2

Prof. & business services
Manufacturing
Health & social services
Construction
State & local govt.
Leisure & hospitality
Wholesale trade
Information
Retail trade
Utilities & mining
Financial services
Other services
Transport & warehousing
Education
Federal government

Total change = 75,700

Source: IHS Markit
Home-building increasing steadily in Indiana, but certainly not booming

Indiana housing starts continue to rebound

Source: IHS Markit

© 2017 IHS Markit
Rocky Mountain, Pac Northwest leading the way in job growth
Indiana population growth relatively slow, but outpacing most neighboring states

Population growth through 2022

Source: IHS Markit
Bottom line for Indiana

- Wage and salary income growth gets a boost from higher average wages, even as job growth slows, as productivity increases
- Manufacturing still has some room to grow, even as auto sales level off
  - Out-migration of jobs is an ongoing risks factor, while automation looms
- Continued increase in labor force is key to attracting and retaining employers and sustaining state economic growth
  - This is difficult for states with slow population growth
  - Achieved through in-migration and increased participation
- Service sector can be supported by strong education system, attractive business environment
  - High-tech sectors showing growth and innovation
  - Some sectors are dependent on local population growth as demand base
- As with all of our state forecasts, keeping an eye on policy developments at the national level

Source: IHS Markit
## Bottom line for Indiana

<table>
<thead>
<tr>
<th>Forecast date</th>
<th>U.S. GDP 2016 (%)</th>
<th>U.S. GDP 2017 (%)</th>
<th>Indiana Employment 2016 (%)</th>
<th>Indiana Employment 2017 (%)</th>
<th>Indiana Income 2016 ($)</th>
<th>Indiana Income 2017 ($)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dec 2015</td>
<td>2.7</td>
<td>3.0</td>
<td>1.5</td>
<td>1.2</td>
<td>4.1</td>
<td>5.0</td>
</tr>
<tr>
<td>Apr 2016</td>
<td>2.1</td>
<td>2.8</td>
<td>1.7</td>
<td>1.3</td>
<td>3.7</td>
<td>4.6</td>
</tr>
<tr>
<td>Dec 2016</td>
<td>1.6</td>
<td>2.3</td>
<td>1.2</td>
<td>0.8</td>
<td>3.4</td>
<td>4.2</td>
</tr>
<tr>
<td>Mar 2017</td>
<td>1.6</td>
<td>2.3</td>
<td>1.2</td>
<td>1.0</td>
<td>3.8</td>
<td>4.0</td>
</tr>
</tbody>
</table>

Source: IHS Markit
US Economy Appendix
US economic growth will strengthen by spring

- Consumer spending will increase at a moderate pace, sustained by robust gains in employment, real incomes, and household net worth.
- Business fixed investment will benefit from an improving tax and regulatory environment, along with a recovery in energy prices.
- With demand outpacing supply, homebuilding continues its slow recovery, even as interest rates rise.
- The revival in industrial production will gain momentum as the inventory correction nears completion in mid-2017.
- Fiscal stimulus, accelerating wages, and strengthening loan demand will lead to higher interest rates.
- In response to the dollar’s appreciation, real import growth will outpace real export growth.
US economic growth rebounds in 2017 and 2018, as investment leads the way

<table>
<thead>
<tr>
<th>Real GDP and its components</th>
<th>2016</th>
<th>2017</th>
<th>2018</th>
<th>2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>Percent change</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Real GDP</td>
<td>1.6</td>
<td>2.3</td>
<td>2.6</td>
<td>2.3</td>
</tr>
<tr>
<td>Consumption</td>
<td>2.7</td>
<td>2.8</td>
<td>3.3</td>
<td>2.9</td>
</tr>
<tr>
<td>Residential investment</td>
<td>4.9</td>
<td>4.2</td>
<td>3.5</td>
<td>2.2</td>
</tr>
<tr>
<td>Business fixed investment</td>
<td>-0.5</td>
<td>4.7</td>
<td>4.8</td>
<td>3.4</td>
</tr>
<tr>
<td>Federal government</td>
<td>0.6</td>
<td>-0.2</td>
<td>-0.9</td>
<td>-1.0</td>
</tr>
<tr>
<td>State &amp; local government</td>
<td>1.0</td>
<td>0.2</td>
<td>2.1</td>
<td>1.7</td>
</tr>
<tr>
<td>Exports</td>
<td>0.4</td>
<td>2.6</td>
<td>2.0</td>
<td>2.6</td>
</tr>
<tr>
<td>Imports</td>
<td>1.1</td>
<td>5.3</td>
<td>6.2</td>
<td>4.7</td>
</tr>
</tbody>
</table>

Source: IHS Markit
Job growth slows as US approaches full employment, while inflation remains steady

**Key indicators**

<table>
<thead>
<tr>
<th>Percent change</th>
<th>2016</th>
<th>2017</th>
<th>2018</th>
<th>2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>Industrial production</td>
<td>-0.9</td>
<td>1.9</td>
<td>2.9</td>
<td>2.2</td>
</tr>
<tr>
<td>Payroll employment</td>
<td>1.8</td>
<td>1.6</td>
<td>1.3</td>
<td>1.0</td>
</tr>
<tr>
<td>Light-vehicle sales (Million units)</td>
<td>17.5</td>
<td>17.4</td>
<td>17.6</td>
<td>17.6</td>
</tr>
<tr>
<td>Housing starts (Millions)</td>
<td>1.18</td>
<td>1.26</td>
<td>1.32</td>
<td>1.38</td>
</tr>
<tr>
<td>Consumer Price Index</td>
<td>1.3</td>
<td>2.5</td>
<td>1.9</td>
<td>2.4</td>
</tr>
<tr>
<td>Core CPI</td>
<td>2.2</td>
<td>2.4</td>
<td>2.0</td>
<td>2.1</td>
</tr>
<tr>
<td>Brent crude oil price (USD/barrel)</td>
<td>44</td>
<td>58</td>
<td>57</td>
<td>64</td>
</tr>
<tr>
<td>Federal funds rate (%)</td>
<td>0.4</td>
<td>1.0</td>
<td>1.7</td>
<td>2.6</td>
</tr>
<tr>
<td>10-year Treasury yield (%)</td>
<td>1.8</td>
<td>2.7</td>
<td>3.2</td>
<td>3.8</td>
</tr>
</tbody>
</table>

Source: IHS Markit © 2017 IHS Markit
Industrial production will rebound as domestic demand strengthens and the inventory correction ends.

Source: IHS Markit © 2017 IHS Markit
The US surplus in services trade partially offsets the deficit in merchandise trade

Source: IHS Markit © 2017 IHS Markit
Interest rates will continue to rise as the Federal Reserve normalizes monetary policy.
Prices in the oil complex continue to rebound

Crude oil and gasoline prices to rise from recent lows

Source: IHS Markit © 2017 IHS Markit