Recent Price Trends in the Semiconductor Industry

An overview of Semiconductor Manufacturing price indexes

2019

www.bls.gov/mxp

U.S. Import and Export Price Indexes contain data on changes in the prices of nonmilitary goods and services traded between the United States and the world. The U.S. Bureau of Labor Statistics produces these indexes, which are Principal Federal Economic Indicators.

Q: How have import semiconductor prices trended over the 2016–2018 period? (See chart 1)

- Semiconductor manufacturing import prices advanced 1.7 percent from December 2015 to December 2018. The import semiconductor manufacturing price index declined 2.3 percent from December 2015 to December 2016. The price index then increased 2.5 percent in 2017 and 1.5 percent in 2018.

- Import prices for semiconductor manufacturing rose 3.2 percent for the 12-month period ended February 2018, the largest over-the-year increase since the index was first published in December 2005.

- Despite fears of a global economic slowdown and volatility from trade friction, strong demand for integrated circuits and chips related to computer memory contributed to the continual upward trend in import semiconductor manufacturing prices in 2018.

Q: How did import semiconductor prices compare with other economic data?

- The price index for import semiconductor manufacturing declined more sharply than the corresponding export and producer price indexes in 2016. Both import and export prices then trended upward in 2017 and 2018. However, producer prices continued to trend downwards over the same period.

- The producer price index for semiconductor manufacturing decreased 1.9 percent from December 2015 to December 2016. Producer prices for semiconductor manufacturing continued to fall over the next two years, declining 1.6 percent in 2017 and 0.7 percent in 2018. Domestic producer prices for semiconductors decreased 4.1 percent over the 3-year period ended December 2018.

![Chart 1](chart1.png)

**Chart 1: Import, export, and producer semiconductor manufacturing price indexes**

- **Import semiconductor manufacturing price index**
- **Export semiconductor manufacturing price index**
- **Producer semiconductor manufacturing price index**

Q: How have export semiconductor prices trended over the 2016–2018 period? (See chart 1)

- The export semiconductor manufacturing price index advanced from December 2015 to December 2018, increasing 2.2 percent. Export semiconductor manufacturing prices declined 0.8 percent in 2016 and then rose 1.5 percent in both 2017 and 2018.
- Export semiconductor prices advanced 4.0 percent for the year ended July 2018, the largest 12-month increase since the index was first published in December 2005.

Q: What are the top six exporting states and territories for semiconductor manufacturing? (See chart 2)

- In 2018, the total trade value of exported semiconductors was $59.4 billion, a 1.6-percent increase from 2017. The top 6 exporting states made up over 67.0 percent of the value.
- Texas and California totaled $26.4 billion in semiconductor manufacturing exports in 2018, ranking first and second in the United States.
- Oregon ranked third with $5.6 billion in trade dollar value, an 11.9-percent decline from the state’s total export trade value of semiconductors in 2017.

Q: How are import and export price indexes useful to you?

Import and export price indexes can provide a new perspective for your trade analyses. Although many sources report domestic market prices and trade volume, IPP data are unique in measuring import and export price movement.

For example, if you are involved in the semiconductor industry and are considering conducting business overseas, IPP semiconductor manufacturing indexes can supplement your industry research by providing long-term import and export price trends.

Q: How are import and export price indexes used?

Import and export price indexes are used for a variety of purposes:
- In the conversion of U.S. trade figures from current dollars to constant dollars in U.S. trade statistics including the Bureau of Economic Analysis’ Quarterly Gross Domestic Product and the Census Bureau’s monthly U.S. trade statistics.
- To assess the impact of international trade on domestic inflation and the competitive position of the United States.
- As a tool for analyzing fiscal and monetary policy, measuring the impact of exchange rates, and escalating trade contracts.
- To identify industry-specific and global price trends.

Chart 2: Top six exporting states and territories for semiconductor manufacturing in 2018

<table>
<thead>
<tr>
<th>State</th>
<th>Trade Value (Billion of dollars)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Texas</td>
<td>$13.8</td>
</tr>
<tr>
<td>California</td>
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</tr>
<tr>
<td>Oregon</td>
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<td>Florida</td>
<td>$1.8</td>
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SOURCE: U.S. Census Bureau, Foreign Trade Statistics.