HOW PENNSYLVANIA'S ECONOMY BENEFITS FROM TRADE & INVESTMENT

Overview

With more than 95 percent of the world’s population and 80 percent of the world’s purchasing power outside the United States, future economic growth and jobs for Pennsylvania and America increasingly depend on expanding U.S. trade and investment opportunities in the global marketplace.

The following pages feature key facts and figures drawn from new Business Roundtable research, U.S. government data, and other data sources that demonstrate the benefits of international trade and investment to economic growth and jobs in Pennsylvania.

Trade Creates & Supports Jobs in Pennsylvania

- **International trade, including exports and imports, supports 1,526,300 Pennsylvania jobs – nearly one in five.** These trade-related jobs grew six times faster than total employment from 1992 to 2017 and are at large and small companies, on farms, in factories, and at the headquarters of Pennsylvania’s globally engaged firms. *(See Pennsylvania Jobs Depend On Two-Way Trade)*

- **Pennsylvania exported $38.5 billion in goods and $21.2 billion in services in 2017**, including foundry products, products from purchased steel, sawmill & wood products and travel services. Of Pennsylvania’s 15,015 exporters, 89 percent are small- and medium-sized companies with less than 500 workers. *(See Pennsylvania Businesses Grow With Exports)*

- **Customers in 211 countries and territories buy Pennsylvania-made goods and services**, including billions of dollars in annual exports to top markets like Canada, Mexico and China. Pennsylvania’s exports have grown more than 30 percent faster than state GDP since 2007. *(See Pennsylvania Companies Export Throughout The World)*

- **Imports lower prices and increase choices for Pennsylvania companies and families.** Lower raw material and input costs help Pennsylvania companies stay competitive in global markets, while families can stretch paychecks further as trade agreements reduce the cost of products by eliminating costly barriers to trade. *(See Pennsylvania Companies Use Imports to Make Competitive Products)*

- **Free trade agreements (FTAs) have helped fuel rapid export growth from Pennsylvania to partner countries.** In 2017, $18.1 billion of Pennsylvania’s goods exports, or 47 percent, went to FTA partners. This represents an increase of 26 percent since 2007. *(See Pennsylvania Needs Trade Agreements To Grow)*

- **Foreign-owned companies invest and build facilities and employ 301,000 workers in Pennsylvania.** *(See Foreign Investment In Pennsylvania Creates Jobs)*

Contact: Paul DeLaney, Business Roundtable: pdelaney@brt.org
www.brt.org/trade
Overview

Creating and preserving quality U.S. jobs is a goal shared by all Americans. With more than 95 percent of the world’s population and 80 percent of the world’s purchasing power outside of the United States, future American economic growth and job creation depend on open markets abroad.

Trade Supports Jobs in Pennsylvania

- Export growth increases jobs by generating new business for Pennsylvania’s manufacturers, service providers and farmers. Imports support jobs and keep costs low, helping Pennsylvania businesses compete and saving Pennsylvania families real dollars at the cash register.
- Nearly one in five Pennsylvania jobs depends upon international trade.
- Pennsylvania’s trade-related employment grew six times faster than total employment from 1992 to 2017.
- Jobs in export-dependent industries pay about 16 percent more than jobs in less export-intensive industries.
- U.S. exporting plants increase employment 2 to 4 percent faster annually than plants that do not export. Exporting plants also are less likely to go out of business.
- Trade-supported jobs are not just at companies that export and import. Trade supports higher wages for workers and lower costs for companies and consumers, providing them with more money to spend on other things. This spending supports additional jobs throughout the U.S. economy in sectors like entertainment, education and construction.

By the Numbers

1,526,300

Number of Jobs in Pennsylvania Supported by Trade

Share of Jobs Tied to Trade
Increased 96 percent from 1992 to 2017

<table>
<thead>
<tr>
<th>Year</th>
<th>Share</th>
</tr>
</thead>
<tbody>
<tr>
<td>1992</td>
<td>10.1%</td>
</tr>
<tr>
<td>2017</td>
<td>19.9%</td>
</tr>
</tbody>
</table>

Jobs Tied to Trade
Top Sectors, 2017

<table>
<thead>
<tr>
<th>Sector</th>
<th>Jobs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trade &amp; Distribution</td>
<td>326,600</td>
</tr>
<tr>
<td>Prof., Scient. &amp; Tech. Services</td>
<td>240,600</td>
</tr>
<tr>
<td>Personal &amp; Rec. Services</td>
<td>95,800</td>
</tr>
<tr>
<td>Manufacturing</td>
<td>85,700</td>
</tr>
<tr>
<td>Finance, Insurance</td>
<td>82,200</td>
</tr>
</tbody>
</table>

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Pennsylvania exported an estimated $38.5 billion in goods and $21.2 billion in services in 2017. Between 2007 and 2017, Pennsylvania goods exports have increased by 33 percent and services exports by 58 percent. Large companies now account for 68 percent of the value of Pennsylvania’s goods exports, with the rest provided by small- and medium-sized enterprises (SMEs).

Small & Large Employers Partner to Export

In addition to exporting directly themselves, thousands of American SMEs export indirectly when they sell goods and services to large U.S. exporters. Based on their direct and indirect export activity combined, SMEs represent more than 40 percent of the value of U.S. exports.

Top Pennsylvania Exports

- Pennsylvania ranks among the top 5 state exporters in 22 industries, including first in foundry products ($126 million), first in products from purchased steel ($90 million), first in sawmill & wood products ($410 million), and first in sugar & confectionery products ($634 million).
- Pennsylvania is America’s 32nd largest exporter of agricultural products. It is the fifth largest exporter of cattle, the sixth largest exporter of greenhouse & nursery products, the seventh largest exporter of sheep, goats & fine animal hair, and the eighth largest exporter of miscellaneous animal products.
- One of Pennsylvania's fastest growing export categories is oil & gas, which increased by 6,227 percent since 2007. In 2017, exports of these products reached $810 million.

By the Numbers

15,015
Number of Pennsylvania Businesses that Exported in 2016

89%
Share of Pennsylvania Exporters that are Small- & Medium-Sized Businesses

Top Pennsylvania Exports, 2017

<table>
<thead>
<tr>
<th>Goods</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pharmaceuticals &amp; Medicines</td>
<td>$3.2 billion</td>
</tr>
<tr>
<td>Coal &amp; Petroleum Gases</td>
<td>$2.7 billion</td>
</tr>
<tr>
<td>Basic Chemicals</td>
<td>$2.4 billion</td>
</tr>
<tr>
<td>Misc. General Purpose Machinery</td>
<td>$1.4 billion</td>
</tr>
<tr>
<td>Navigational &amp; Meas. Instruments</td>
<td>$1.4 billion</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Services</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Travel</td>
<td>$4.0 billion</td>
</tr>
<tr>
<td>Mgmt. &amp; Advisory Services</td>
<td>$3.7 billion</td>
</tr>
<tr>
<td>R&amp;D &amp; Testing Services</td>
<td>$1.6 billion</td>
</tr>
</tbody>
</table>

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In 2017, Pennsylvania companies sold their products in 211 countries and territories.

Top export markets include:

- **Canada**: Goods Exports: $10.2 billion, Services Exports: $1.7 billion
- **Germany**: Goods Exports: $1.5 billion, Services Exports: $766 million
- **China**: Goods Exports: $2.6 billion, Services Exports: $1.4 billion
- **Mexico**: Goods Exports: $4.1 billion, Services Exports: $797 million
- **United Kingdom**: Goods Exports: $1.9 billion, Services Exports: $1.2 billion
- **Japan**: Goods Exports: $1.7 billion, Services Exports: $2.0 billion

**Fast Facts: How Exports Help the Pennsylvania Economy Grow**

- Goods and services exports accounted for 7.9 percent of Pennsylvania’s state GDP in 2017.
- Pennsylvania’s exports have grown more than 30 percent faster than state GDP since 2007. The average annual export growth during this period was 4.0 percent, while the average annual state GDP growth was 3.0 percent.
- Pennsylvania’s top export markets for goods are Canada, Mexico, and China. Its top market for services is the United Kingdom.
- Pennsylvania’s goods exports to Brazil have grown by 16 percent per year since 2007, while Pennsylvania’s services exports to China have grown by 17 percent per year.

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Overview

In 2017, 58 percent ($1.3 trillion) of the products imported into the United States were inputs and components used by American producers. Lower cost inputs keep U.S. manufacturing competitive in international markets. Imports frequently contain components (like cotton or semiconductors) and services inputs (like design) provided by U.S. companies and farmers, including companies and farmers in Pennsylvania.

- Services, especially transportation from Pennsylvania’s ports, finance and insurance, marketing and legal services are needed to bring imported goods to American manufacturers and households.
- In 2016, about 75 percent of identified U.S. importers were very small businesses with less than 20 employees.
- Trade and investment liberalization policies save the average Pennsylvania family of four more than $10,000 per year.
- Imports help keep prices down for Pennsylvania families while increasing their choices for goods and services. Prices for imported consumer goods tend to drop year after year.

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Overview

Trade with our free trade agreement (FTA) partner countries supports millions of American jobs. Trade agreements level the playing field by lowering other nations’ trade barriers, opening up foreign markets to U.S. exports and setting strong, enforceable rules for trade between the United States and those other countries.

- In 2017, $18.1 billion of Pennsylvania's goods exports, or 47 percent, went to FTA partners.
- Since 2007, Pennsylvania's goods exports to countries with FTAs in effect with the United States in 2017 have increased by 26 percent.
- Pennsylvania's goods exports to Canada and Mexico have increased by $10.1 billion (238 percent) since NAFTA went into effect in 1994.
- Pennsylvania's goods exports to Singapore have increased by 102 percent since the FTA took effect in 2004.
- Pennsylvania's exports to Panama of aerospace products & parts have increased from $271,000 to $33 million since the FTA went into effect in 2012.
- The Dominican Republic bought 56 percent of Pennsylvania's exports of miscellaneous crops in 2017.
- In 2017, $5.0 billion of Pennsylvania's services exports, or 24 percent, went to FTA partners.
- Pennsylvania's exports to Australia of equipment installation, maintenance & repair services have increased from $10 million to $52 million, or by 420 percent, since 2006 (earliest year available).

By the Numbers

26%
Increase in Pennsylvania Goods Exports to FTA Partners Between 2007 and 2017

Per Capita Purchases of Pennsylvania Goods, 2017

$38.97

$3.03
Non-FTA Countries
FTA Partner Countries*

* U.S. FTAs in effect with countries in 2017.

In 2017, FTA partners purchased 12.9 times more goods per capita from Pennsylvania than non-FTA partners.

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Foreign-owned companies invest significant amounts of capital to open or expand facilities in Pennsylvania every year. Foreign-owned companies from around the world employed hundreds of thousands of workers in Pennsylvania, including:

- 53,100 workers employed by companies based in the United Kingdom;
- 43,000 workers employed by companies based in the Netherlands;
- 36,600 workers employed by companies based in Germany;
- 29,600 workers employed by companies based in France;
- 24,300 workers employed by companies based in Japan.

Selected Foreign-Owned Companies Employing Workers in Pennsylvania

<table>
<thead>
<tr>
<th>Company</th>
<th>Industry</th>
<th>Country</th>
</tr>
</thead>
<tbody>
<tr>
<td>ABB Inc.</td>
<td>Power Distribution Services</td>
<td>Switzerland</td>
</tr>
<tr>
<td>Akzo Nobel Coatings Inc.</td>
<td>Chemicals Manufacturing</td>
<td>Netherlands</td>
</tr>
<tr>
<td>Arcelormittal USA</td>
<td>Steel Manufacturing</td>
<td>Luxembourg</td>
</tr>
<tr>
<td>BAE Systems Inc.</td>
<td>Defense/Security/Aerospace Services</td>
<td>United Kingdom</td>
</tr>
<tr>
<td>Domtar Paper Company LLC</td>
<td>Paper Manufacturing</td>
<td>Canada</td>
</tr>
<tr>
<td>Giant Food Stores, Inc.</td>
<td>Retailing</td>
<td>Netherlands</td>
</tr>
<tr>
<td>Lanxess Corp.</td>
<td>Plastic and Rubber Manufacturing</td>
<td>Germany</td>
</tr>
<tr>
<td>Mott Macdonald</td>
<td>Engineering Services</td>
<td>United Kingdom</td>
</tr>
<tr>
<td>Olympus</td>
<td>Optics Manufacturing</td>
<td>Japan</td>
</tr>
<tr>
<td>SAP America Inc.</td>
<td>Software Development</td>
<td>Germany</td>
</tr>
<tr>
<td>Siemens Energy &amp; Automation</td>
<td>Electronics and Engineering Services</td>
<td>Germany</td>
</tr>
<tr>
<td>UBS Financial Services</td>
<td>Financial Services</td>
<td>Switzerland</td>
</tr>
</tbody>
</table>

Foreign-Owned Companies Employed 301,000 Pennsylvania Workers Across Many Industries, 2016

- Manufacturing: 105,000
- Other: 83,000
- Retail Trade: 47,400
- Prof., Sci. & Tech. Services: 26,100
- Wholesale Trade: 17,200
- Finance & Insurance: 14,300
- Information: 7,900

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DATA SOURCES

PENNSYLVANIA JOBS DEPEND ON TWO-WAY TRADE


PENNSYLVANIA BUSINESSES GROW WITH EXPORTS

Small and Large Firms Partnering to Export (for 2006, the most recent year for which data were available): U.S. International Trade Commission, Small and Medium-Sized Enterprises: Characteristics and Performance, November 2010, (http://www.usitc.gov/publications/332/pub4189.pdf)


PENNSYLVANIA COMPANIES EXPORT THROUGHOUT THE WORLD


PENNSYLVANIA COMPANIES USE IMPORTS TO MAKE COMPETITIVE PRODUCTS


Imports as Components: Derived from Census end-use import data


Price Changes: Derived from BLS Consumer Price Index database (http://www.bls.gov/cpi/)

PENNSYLVANIA NEEDS TRADE AGREEMENTS TO GROW


Per Capita Purchases of Pennsylvania Goods: Derived from The Trade Partnership (http://tradepartnership.com/data/cdxports-and-cdxjobs) and World Bank population estimates

FOREIGN INVESTMENT IN PENNSYLVANIA CREATES JOBS

Employment Data: BEA “Direct Investment & Multinational Companies” database (http://bea.gov/iTable/index_MNC.cfm)

Foreign Investors: Uniworld BP database of “Foreign Firms Operating in the United States” (http://www.uniworldbp.com)

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