

Measuring Indiana's Goods and Services: Gross State Product 1987 to 1997

The value of all goods and services produced in the nation is measured by Gross Domestic Product (GDP). The counterpart on the state level is Gross State Product (GSP). It tells us the value added to a good or service by economic activities within the state. Value added is simply the dollar amount of sales less the amounts paid for inputs purchased from outside the area.

For example, an automobile sold in Indiana may be imported from Missouri with a transmission built in Indiana. The value added in Indiana is the activity at the dealership as well as the activity at the transmission plant. GSP for Missouri is the assembly effort. The easiest way to think of value added is the price charged for goods at the shipping dock minus the cost of inputs at the receiving dock. All that happens in between is valued added by labor and capital, broadly defined, within the plant.

There are three major components to GSP: compensation of employees, returns to owners, and non-income taxes paid by the firm¹. For Indiana, in 1997, employees contributed 60 percent of GSP, capital or ownership 34 percent and indirect business taxes (perhaps a proxy for government services) 6 percent.

Indiana's Gross State Product has advanced from \$108 billion in 1987 to \$148 billion in 1997 (as measured in constant 1992 dollars-see **Figure 1**). The rise has been steady except during the recession and its aftermath in 1990 and 1991. From 1991 to 1994, Indiana enjoyed a rising share of the nation's output and has been in relative decline since then. The apparent rise in the early '90s was the result of poor performance in the California economy rather than any strength in Indiana.

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Figure 1
Gross State Product

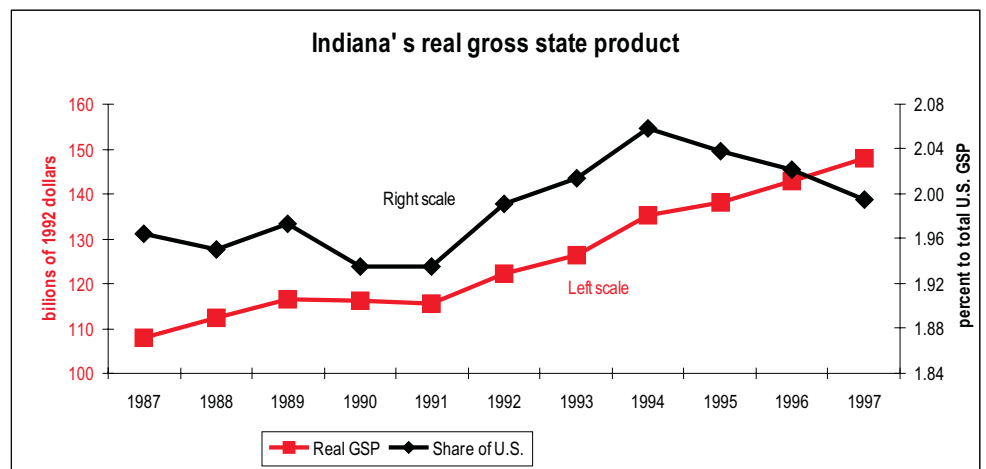


Table 1
Major Industries By Relative Size

| Major divisions, summary | Indiana \$ mil | Industry as a percent of | | Indiana's rank in U.S. | | Change in rank | Between 1987 and 1997 | |
|-------------------------------------|----------------|--------------------------|----------|------------------------|------|----------------|-----------------------|------------------------|
| | | Indiana GSP | U.S. GSP | 1987 | 1997 | | Indiana fell below | Indiana moved ahead of |
| Total | 161,701 | 100.0 | 100.0 | 15 | 15 | 0 | WA | MD |
| Manufacturing | 50,155 | 31.0 | 17.0 | 11 | 9 | 2 | | NJ, MA |
| Services | 25,676 | 15.9 | 20.4 | 20 | 21 | -1 | CO | |
| Finance, insurance, and real estate | 21,351 | 13.2 | 19.4 | 20 | 22 | -2 | AZ, CO | |
| Government | 15,732 | 9.7 | 11.9 | 20 | 20 | 0 | | |
| Retail trade | 14,807 | 9.2 | 8.8 | 15 | 16 | -1 | WA, TN | MD |
| Transportation & public utilities | 12,369 | 7.6 | 8.3 | 14 | 17 | -3 | WA, MA, CO | |
| Wholesale trade | 10,036 | 6.2 | 6.9 | 20 | 18 | 2 | | MD, CT |
| Construction | 7,845 | 4.9 | 4.1 | 19 | 14 | 5 | WA | MD, MA, MO, AZ, MN, CT |
| Agriculture, forestry, and fishing | 2,883 | 1.8 | 1.6 | 19 | 14 | 5 | | MO, WI, KY, MI, NY |
| Mining | 846 | 0.5 | 1.5 | 25 | 24 | 1 | AZ | MS, ND |

The leading sector of the Indiana economy, as measured by GSP, has been manufacturing, which accounted for more than 30 percent of total output, compared to 17 percent nationally. This is in sharp contrast to the nation, where the leading sector was services followed closely by finance, insurance, and real estate (see **Figure 2** and **Table 1**).

Indiana ranked 15th in the nation in total GSP in 1987 and retained that position in 1997, but was surpassed by the state of Washington during this period. At the same time, we moved ahead of Missouri in the rankings. In manufacturing, Indiana found its highest ranking (9th place in 1987) advancing over New Jersey and Massachusetts. In construction as well as in agriculture, forestry, and

Figure 2
Distribution By Sector

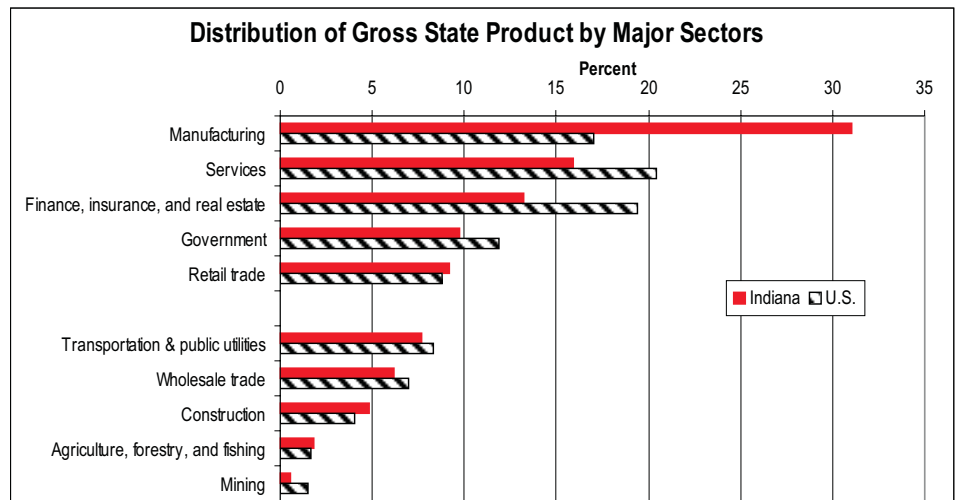


Table 2
Major Industries: Change 1987 to 1997

| Major divisions, Change '87 to '97 | Indiana's percent share of U.S. | | | Real percent change 1987 to 1997 | | Percent of change 1987 to 1997 | | Contribution to Indiana's growth relative to 1987 share |
|-------------------------------------|---------------------------------|------|--------|----------------------------------|------|--------------------------------|-------|---|
| | 1987 | 1997 | Change | Indiana | U.S. | Indiana | U.S. | |
| Total gross state product | 1.96 | 2.00 | 0.03 | 37.0 | 29.7 | 100.0 | 100.0 | |
| Wholesale trade | 1.63 | 1.78 | 0.15 | 80.1 | 64.8 | 7.3 | 7.6 | 1.36 |
| Mining | 0.80 | 0.70 | -0.10 | 68.9 | 27.2 | 0.2 | 0.9 | 0.26 |
| Agriculture, forestry, and fishing | 2.04 | 2.19 | 0.14 | 56.0 | 43.2 | 1.5 | 1.3 | 0.77 |
| Manufacturing | 3.21 | 3.64 | 0.43 | 51.4 | 31.5 | 30.8 | 14.2 | 0.99 |
| Construction | 1.82 | 2.39 | 0.57 | 50.5 | 14.5 | 5.6 | 3.2 | 1.29 |
| Retail trade | 2.05 | 2.08 | 0.03 | 42.2 | 40.0 | 8.4 | 8.0 | 0.86 |
| Services | 1.56 | 1.55 | -0.01 | 31.4 | 34.3 | 19.1 | 25.3 | 1.43 |
| Finance, insurance, and real estate | 1.40 | 1.36 | -0.04 | 18.1 | 26.6 | 13.8 | 21.4 | 1.09 |
| Transportation & public utilities | 2.18 | 1.83 | -0.35 | 17.9 | 41.9 | 4.5 | 7.4 | 0.45 |
| Government | 1.60 | 1.63 | 0.03 | 13.3 | 11.6 | 8.8 | 10.7 | 0.84 |

fisheries, Indiana jumped five places from 19th to 14th in the national rankings. During the same period, the Hoosier state declined three places in transportation and public utilities from 14th to 17th place. Again, see **Table 1** where the major industry divisions are shown by relative size in Indiana.

Of greater importance than ranks are market shares. From 1987 to 1997, Indiana's share of the nation grew slightly from 1.96 percent to 2.00 percent. This was a consequence of more rapid growth in Indiana (37 percent after adjustment for inflation) than in the nation (29.7%)(see **Table 2**).

Figure 3 shows that in seven of the ten major divisions of economic activity, Indiana's GSP grew faster than the nation between 1987 and 1997. But the rate of growth does not indicate the importance of each sector's contribution to total growth. For example, wholesale trade grew by more than 80 percent in the decade, but contributed only 7.3 percent of the state's total GSP increase. Manufacturing, which had a more modest advance (31.5%), added 30.8 percent of state's total GSP growth (see **Table 2** again).

We have placed two additional tables on the web with the same types of data, but presented for 62 detailed sectors of the state's economy. Most noteworthy are Indiana's primary metals industry (ranked 2nd in the nation) and motor

vehicles sector (ranked 3rd nationally). But primary metals accounted for only 2.3 percent of the state's growth while motor vehicles and parts contributed 7.1 percent of that advance. Retail trade made the greatest contribution of these 62 sectors only because it is not disaggregated into its separate parts.

One way to put these data in perspective is to compare a sector's contribution to GSP relative to the sector's share of GSP in 1987. These numbers are shown in **Table 2**. It can be seen that Services as well as Wholesale Trade contributed to output growth well beyond their initial role in the economy. Manufacturing and F.I.R.E. were more in line with their original dimensions, while Transportation and Public Utilities failed to match their size.

In examining these data for the period 1987 to 1997, readers should be careful to remember the opening point: Indiana's role in the nation at the end of the period was diminished. The gains seen in 1997, relative to 1987, may be wiped out by the time data for the current year become available to us.

Note

¹These "indirect business taxes" include taxes not explicitly charged to the customer (for example motor fuel taxes, property taxes, franchise taxes, and license fees).

Figure 3
Change 1987 to 1997

