

IP-Intensive Manufacturing Industries: *Driving U.S. Economic Growth*

Key Findings

Innovative industries in the United States owe much of their success to economic returns resulting from their high levels of R&D or intellectual capital investment. IP-intensive manufacturing industries accounted for over 80% of annual R&D spending across all U.S. manufacturing industries between 2000 and 2012.

Our findings show that IP-intensive manufacturing industries outperformed non-IP-intensive manufacturing industries in all key economic measures during the past 15 years including during economic downturns, reflecting the sustainability of these industries.

- IP-intensive manufacturing industries invest more than 12 times in R&D per employee than non-IP-intensive manufacturing industries (\$30,000 compared to \$2,500 per employee annually).
- During the most recent economic recovery period, IP-intensive industries' employment levels remained unchanged while other non-IP-intensive industries experienced job losses.
- IP-intensive manufacturing industries pay 50% higher wages than non-IP-intensive manufacturing industries (\$60,000 compared to \$40,000 per employee annually).
- While IP-intensive manufacturing industries employ nearly 30% of American manufacturing workers, they account for nearly 50% of gross output of manufacturing industries. Gross output per employee in IP-intensive manufacturing industries is more than two times that of their counterparts in non-IP-intensive manufacturing industries (\$600,000 compared to \$270,000 per employee annually).
- Net economic contribution (gross sales minus intermediate products or value added) per employee in IP-intensive manufacturing industries is nearly two times that of their counterparts in non-IP-intensive manufacturing industries (\$250,000 compared to \$130,000 per employee annually).
- Annual exports per employee in IP-intensive manufacturing industries are 3.5 times greater than exports per employee in non-IP-intensive manufacturing industries (\$130,000 compared to \$40,000 per employee annually).

With higher demand for their products and services and increased revenues based on the high value of these products and services, these companies are able to build new facilities and hire additional workers. Workers in IP-intensive manufacturing industries in turn are more productive and contribute higher economic value to the U.S. economy compared to workers in non-IP intensive industries.