Economic Case Studies

Case studies also provide valuable insight on the "return on investment" for materials research. Specifically, investment in scientific research is the starting point for economic development. Modern computing, manufacturing systems and societal infrastructures (examples on left) have all had a dramatic impact on today’s economy, and all are built on scientific advancements and innovation.

While it may be difficult to assign a universal “return on investment” for broad scientific research, and specifically for materials research, there is a direct correlation between science, materials and the economy. Specifically, investment in scientific research is the starting point for economic development.

At present, economics scholars offer the best insight into the impact of science on the economy:

- **From 1948-2007, 58% of growth in manufacturing output is attributable to R&D.**

- **For every ½% of GDP investment in R&D, a nation’s GDP increases by 9.5%.**

- **34% of economic growth can be traced to ‘growth in knowledge’.**

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