# Historical Geography of the Semiconductor Industry

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A relentless decline in the cost of transformation, storage, and transmission of data has been a key driver of economic growth since the mid-twentieth century, attributable in large part to advances in the manufacture of solid-state electronics using components made of semiconducting materials. Tracing the impact of technical changes in the electronics manufacturing industry and unpacking the knock-on effects throughout the economy requires time-consistent and geography-consistent data spanning more than 50 years and some 30 countries. We provide annual-frequency production and absorption of semiconductors (microchips) by country beginning in 1957 and document the sources and methods used. Detail is provided for three types of device (memory, processors, and other) and three stages of production (design, fabrication, and testing). We explore several alternative approaches to accounting for differences in the quality of production across geography and over time, including area of silicon shipped, area scaled by transistor density, benchmark performance trends, and constant-quality price indexes.