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## Silicon Valley Doesn't Believe U.S. Productivity Is Down

Timothy Aeppel, The Wall Street Journal, July 17, 2015

Google Inc. chief economist Hal Varian is an evangelist for Silicon Valley's contrarian take on America's productivity slump.

Swiveling to a large screen on the desk behind him. Mr. Varian types in a search for the most commonly asked question on the subject economists elsewhere are wringing their hands over. Up pops. "What is productivity?" See. he says, vindicated: "Most people don't know what it even means." To Mr. Varian and other wealthy brains in the world's most innovative neighborhood,



productivity means giving people and companies tools to do things better and faster. By that measure, there is an explosion under way, thanks to the shiny gadgets, apps and digital geegaws spewing out of Silicon Valley.

Official U.S. figures tell a different story. For a decade, economic output per hour worked—the federal government's formula for productivity—has barely budged.... Productivity matters, economists point out. because at a 2% annual growth rate, it takes 35 years to double the standard of living; at 1%, it takes 70. Low productivity growth slows the economy and holds down wages.

The 68-year-old Mr. Varian. dressed in a purple hoodie and khaki pants, says the U.S. doesn't have a productivity problem, it has a measurement problem, a sound bite shaping up as the gospel according to Silicon Valley.

"There is a lack of appreciation for what's happening in Silicon Valley." he says, "because we don't have a good way to measure it."

One measurement problem is that a lot of what originates here is free or nearly free. Take, for example, a recent walk Mr. Varian arranged with friends. To find each other in the sprawling park nearby, he and his pals used an app that tracked their location, allowing them to meet up quickly. The same tool can track the movement of workers in a warehouse, office or shopping mall.

"Obviously that's a productivity enhancement." Mr. Varian says. "But I doubt that gets measured anywhere."

Consider the efficiency of hailing a taxi with an app on your mobile phone, or finding someone who will meet you at the airport and rent your car while you're away, a new service in San Francisco. Add in online tools that instantly translate conversations or help locate organ donors—the list goes on and on.

Surely, Mr. Varian says, they also make the U.S. more productive....

One problem with the government's productivity measure, Mr. Varian says, is that it is based on gross domestic product, the tally of goods and services produced by the U.S. economy. GDP was conceived in the 1930s, when economists worried mostly about how much, for example, steel and grain were produced—output easy to measure compared with digital goods and services.

Technological improvements and time- saving apps are trickier. For one thing, it is tough to capture the full impact of quality improvements. For example, if a newer model car breaks down less often than older models but costs the same, the consumers' gain can get lost in the ether....

The U.S. Labor Department has sought to update its GDP measure over the years to include more intangibles, such as adjusting for higher quality. Productivity measures of computer chips, for example, are periodically updated to account for faster speeds. But critics say the process lags behind badly....

Silicon Valley's complaints echo earlier eras. The introduction in the last century of indoor plumbing and household appliances drastically increased the efficiency of performing domestic chores. But since domestic labor isn't counted in GDP either, the time saved hauling water or washing clothes by hand didn't show up in productivity numbers.

However, these timesaving technologies—among other factors—eventually led to the flood of women into the workforce starting in the 1960s, which, in turn, sent U.S. output soaring.

Mr. Varian is convinced something similar will happen again. At the heart of his argument is the Internet search, cutting short the time to, say, learn how to grow geraniums or find the best Mexican restaurant—a free tool that provides uncounted value at home and at work.... "To be fair," he says, "as we adopt technologies that save time in these nonmarket activities, that frees up time for market-based activities which will show up in GDP."