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HOW MANY U.S. JOBS DOES THE APPLE IPOD CREATE?

By Michael Mandel

The answer: 13,920, including engineering and retail. But there are 27,250 iPod-related jobs created outside the U.S.

That's according to a terrific new [study](#) called "Innovation and Job Creation in a Global Economy: The Case of Apple's iPod". The authors—Greg Linden, Jason Dedrick and Ken Kraemar, of the Personal Computing Industry Center at UC Irvine—want to address the question: Do U.S. innovations actually create jobs in this country? Alternatively, does globalization imply that most of the labor market benefits of innovation flow overseas?

They take a close look at the iPod and get a split answer—the jobs created by the iPod are mostly outside the U.S., but the wages are mainly in this country. The authors write:

Using the iPod as an example of a recent innovation in this industry, we estimated that the iPod and its components accounted for about 41,000 jobs worldwide, of which about 27,000 are outside the U.S. and 14,000 in the U.S. (Table ES1). The offshore jobs are mostly in low-wage manufacturing while the jobs in the U.S. are more evenly divided between high wage engineers and managers and lower wage retail and non-professional workers.

As a result of this, and of cross-country wage differences, U.S. workers earned \$753 million, while workers outside the U.S.

earned \$318 million (Table ES2). While China accounts for the largest number of jobs outside the U.S., Japan earns by far the largest share of the non-U.S. wage bill (\$102,380,000) because of its role in supplying key components like small hard-drives and displays.

To summarize these results, the iPod supports nearly twice as many jobs offshore as in the U.S., yet wages paid in the U.S. are over twice as much as those paid overseas. The most important factor is that Apple keeps most of its R&D, marketing, top management and corporate support functions in the U.S., creating over 5,800 professional and engineering jobs for U.S. workers that can be attributed to the success of the iPod.

I'd love to see a similar analysis of solar and wind power...how many jobs does investment in green technology produce in the U.S.? When I asked Kraemer in an email about the feasibility of such a study, he said that it could be done, but the length and cost would depend on having cooperation from a couple of companies (they did the iPod study without participation from Apple). Maybe that could be a prerequisite of getting government money.