

Why isn't the iPhone made in America?



John McCain provided some good laughs and made himself look stupid on a recent ABC news interview by telling Diane Sawyer that the iPhone and iPad are great examples of products that are made in America.

They're not. And given the amount of high technology production in his state, McCain should certainly have known better. The fact that he didn't does make you wonder about what, if anything, they know in the U.S. Senate. But quick, let me ask you where these iconic Apple products really are made.

If you said China (and I know most of you did), you were wrong, and thereby hang a number of tales.

Those concerned about the demise of American manufacturing have long pointed to the iPhone as an example of how the practice of off-shoring has moved what used to be U.S.-based production and jobs to China. According to this tale, off-shoring of iPhone production is **adding about \$2 billion** annually to the U.S. trade deficit and costing 20-40,000 American jobs.

Supporters of free trade, on the other hand, have told a very different tale. They have argued that out of the roughly \$500 retail price of an iPhone, only about \$180 is accounted for by the manufacturing and assembly processes done in China. The other \$320 results from the design, software development, marketing, shipping, and selling done in the United States. So, of the total value added, nearly twice as much is done in America as in China. Moreover, the low cost of manufacturing in China provides low prices for U.S. consumers who are thus able to buy more phones and thereby create more U.S. based jobs.

Of course, this tale still leaves the United States with a big trade deficit that does cost jobs but that, according to the free trade tale, should be balanced by doubling American exports in other products like commercial aircraft in which the United States has a comparative advantage.

Recently, a new tale has been told by the Asian Development Bank Institute (ADBI) which **dissected the supply chain** of the iPhone. The study found that China is actually not doing much of the manufacturing. In fact, it is mainly assembling the various parts of the iPhone into the final product and then shipping that to the United States.

Because of the way trade statistics work, U.S. customs attributes the entire manufacturing value of the iPhone to China, the point of shipment of the final product. This results in the \$2 billion U.S. iPhone trade deficit with China. In actuality, says the

ADBI, China's assembly of the iPhone parts accounts for only about 3 percent, or \$6, of the final value and because China actually imports some of the more expensive parts from the United States, it actually has a deficit on iPhone trade with America.

The ADBI study is quite good and true as far as it goes. The bulk of the manufacturing of the iPhone is not done in China (although that is changing rapidly) or in any other low-cost labor country. The battery chargers, camera lenses, and timing crystals all come from Taiwan. The screen is from Japan, the video processing chip from South Korea, and many of the other chips Taiwan's Taiwan Semiconductor Manufacturing Company. In all, over nine countries produce the parts and components that all head to final assembly in China. So, it is indeed, quite possible that the United States has a trade surplus with China qua China on the iPhone.

But that begs the bigger question of the U.S. iPhone trade deficit. With the bulk of the parts in the iPhone being made elsewhere in Asia and being shipped from China to the U.S. market, the United States still has a big trade deficit on iPhones. It just happens to be with all of Asia instead of just with China. (Yes, there are also parts from the U.S. and Europe, but the bulk of them are from Asia.) So, in a way, the U.S. deficit with China is a proxy for what is really a deficit with Asia.

That raises more interesting questions. The other Asian countries -- particularly Japan, but also Korea and Taiwan -- do not have low labor costs. Indeed, Japan and Korea are members of the Organization for Economic Development (OECD), the long time rich nations club. Furthermore, the parts they supply for the iPhone -- semiconductor chips, displays, lenses, etc. are not labor intensive. They are capital and, above all, technology intensive. Exactly the kind of products in which the United States is supposed to be the leader. So if America actually did produce the stuff it says it is good at producing, it

wouldn't have a trade deficit with Asia for which China is the proxy at all. It would have a trade surplus and 20-40,000 more jobs than it has.

Why then, doesn't America make the stuff it says it ought to be good at making? For the answer stay tuned.