

The \$6.50 Trade War

What Apple's iPhone tells us about U.S. trade with China

No sooner has a new Congress arrived in Washington than the anti-China-trade rhetoric has started anew. Senator Charles Schumer, whose Democrats still control his chamber, has said he plans to re-introduce legislation to punish China for its "currency manipulation." Tim Murphy, a Pennsylvania Republican, may push similar legislation he co-sponsored in the past, Reuters reports.

Legislative efforts face an uphill climb. Republican leaders, including Speaker John Boehner, have voted against China currency bills in the past. But that doesn't make the anti-China fervor in Washington irrelevant. To the extent that protectionists present Chinese exporters as a threat to U.S. prosperity despite the more pressing problems America faces, the argument over China's exchange-rate policy is a distraction the economy can't afford.

How much of a distraction is suggested by a paper out last month from the Asian Development Bank Institute. Economists Yuqing Xing and Neal Detert examined the supply chain of the iPhone to reach a surprising conclusion: Technically, the iPhone contributes to America's trade deficit with China.

The basic explanation is that data on bilateral trade are calculated assuming that the entire value of a traded good is created in the exporting country. If that ever made sense, it certainly doesn't in a global economy marked by increasingly complex supply chains.

In the case of the iPhone, Messrs. Xing and Detert note that the device was invented in America by an American company, Apple. The components are manufactured, either inside or out of China, by companies based in several other countries. The only part of the process that is unambiguously "Chinese" is the final assembly—a process that, in the estimation of Messrs. Xing and Detert, adds only \$6.50 to the \$178.96 wholesale value of an iPhone.



Yet that entire \$178.96 value ends up attributed to China in official trade statistics. As a consequence, the iPhone contributed nearly \$1 billion to China's bilateral trade surplus with America in 2008, and nearly \$2 billion in 2009, the authors conclude. If the trade data had been based solely on the \$6.50 cost of assembling each unit, the iPhone would have added only \$34 million and \$73 million in those years to China's surplus.

The ADBI study ought to be required reading on Capitol Hill. Most importantly, it raises the question of how much anyone really knows about what America's trade with China is. Critics of trade data, including us, have long argued that **bilateral statistics are misleading**. As the bilateral deficit with China grew, deficits with South Korea, Taiwan and Singapore declined, confirming that China's comparative advantage lies in the assembly into finished products of components manufactured around the region, due to its low-wage, low-skilled labor.

The report's main potential flaw is that Messrs. Xing and Detert may not have been able to account for the source of some of the inputs. While many companies that supply iPhone components are American, Japanese, Korean or German, those companies may manufacture some of the components in China.

Yet even so, those companies would have their own mix of intellectual property developed outside China. It may be impossible ever to say precisely how much value China adds to the iPhone or any product. Lawmakers should think twice about basing important policy decisions on such incomplete data.

Crucially, the trade data also miss the broader economic impact of "imports" like the iPhone. The benefits are clear and large, though hard to quantify precisely. First there are the gains to Apple itself. The ADBI study examines only the composition of the \$178.96 manufacturing cost of the iPhone. The handsets typically retail for as much as 50% to

100% more than that. The difference consists of the value of Apple's intellectual property in having invented the iPhone, and the value of marketing in persuading consumers to buy the hot new thing.

The ADBI study doesn't break down that figure, but others have performed similar research. Economists at the Personal Computing Industry Center attempted in 2007 to estimate who profits from the iPod and how. They estimated that for an iPod retailing for \$299, retailer and distributor margins account for \$75 and Apple's own margin accounted for \$80. In other words, more than half the retail price accrued to U.S. companies—and employees and shareholders—in some form.

None of these studies accounts for the way such ***imports drive growth by spurring innovative new businesses***. Telecom companies like AT&T and, now, Verizon have profited by being able ***to offer data services*** to iPhone-toting consumers. Countless programmers are now devising applications for the iPhone and iPad, offering businesses a convenient new way to reach potential customers.

All of which illustrates the basic truth that trade has always benefited the U.S. economy. So rather than launching a trade war with China over \$6.50, here's a better agenda for the 112th Congress: Focus on policies that will help Americans and ***U.S. companies better capitalize on a global economy***. That includes tax policies to reward investment and entrepreneurship; environmental regulation that doesn't discourage manufacturing in America; health-care policies that don't deter hiring; and ***free trade to let Americans import goods like iPhones that will spur new growth***.