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Can China compete with American manufacturing?

Posted by MICHAEL SCHUMAN Thursday, March 10, 2011 at 11:33 pm

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No, the headline is not a mistake. I know we're usually worried about the opposite – whether or not U.S. manufacturers can compete with a rising China. But today I'm turning that question around. What doesn't get enough attention in today's discussions about America's economic competitiveness is that the U.S. remains a robust manufacturing power, despite what is going on in China. And it has some clear competitive advantages over its emerging-market rival. So not only is American manufacturing alive, but kicking pretty aggressively as well.

Just take a quick look at the numbers. According to United Nations data, the U.S. is still the largest manufacturing country in the world. In 2009, American manufacturing output (in real terms) was nearly \$2.2 trillion. That's about 45% larger than China's, at just under \$1.5 trillion. (For statistical reasons, I chose to use figures that include mining and utilities as part of manufacturing.) Though China, of course, is growing very quickly, the U.S. has also maintained its global share of manufacturing, at 20% in 2009 compared to just over 22% in 1980. What's more, American manufacturing is becoming more productive. In 2009, productivity in U.S. manufacturing increased by 7.7%, more than any other country followed by the Bureau of Labor Statistics.

So why do so many Americans think the U.S. doesn't make anything anymore? Part of the reason is that we're deceived by what we see everyday. Shopping through your local Target, you're going to see a lot of "Made in China" labels on things like clothing or electronics. The U.S. tends to make stuff that requires more technology and engineering know-how, like planes, semiconductors and machinery. Basic economics tells us that is exactly how things should be. Since China has so many, low-wage laborers, there is no way high-wage America can possibly compete in products that require teams of workers to manufacture, like toys, apparel, consumer electronics, and a lot of other stuff you'll find on Wal-Mart shelves. Making such products in the U.S. would simply be too expensive; companies that did so would not be able to compete with cheaper imports made in lower-cost economies. But the U.S. still is very competitive in the types of products that demand a high level of technology, engineering and capital to produce. In such industries, wages don't matter quite as much, and the U.S. can capitalize on its clear advantage over emerging markets like China in expertise, technology and innovation. That's why the U.S. sells Boeing aircraft to China, and the Chinese sell blue jeans to Americans.

And it is here where we find the big challenge for China as a manufacturer going forward. China has so far gobbled up the low-hanging fruit of the global manufacturing sector – the low-end, labor-intensive goods in which China has a clear advantage. A big part of Chinese manufacturing is the simple assembly of products designed elsewhere with components produced elsewhere, which means China in some cases is not adding very much value to the

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products it produces in factories. But China wants to make the cars, planes and chips that Americans manufacture – in other words, China intends to move “up the value chain,” into heavier industries or tech-based manufacturing that require the kind of skill and experience Americans already have. That's not an easy leap to make. Though there are some Chinese companies that are able to successfully compete in these more complicated industries – telecom equipment maker Huawei, for example, which has gone head-to-head with European makers – but generally speaking Chinese manufacturing is lagging in technology, quality control, managerial and engineering expertise, and other very important aspects of high-end manufacturing. That's why you don't see Chinese cars on American roads, for example. Despite the great growth of Chinese automobile manufacturing, the product they're churning out simply isn't good enough to compete in major markets. That's also why China's leadership is always talking about the need to upgrade Chinese industry and improve R&D capabilities.

Making that leap isn't just good business, it's absolutely crucial. As Chinese wages increase, China will become less and less competitive in many low-end products, like toys, apparel and footwear. That process is already underway. Some factories for such goods are already opening up in lower-cost environments, like Vietnam, instead of China. And rising wages are inevitable, not only because the country is becoming wealthier, but also because improving the welfare of the average Chinese worker has become a policy priority for the government in its **latest five-year plan**. So in order for China's manufacturing miracle to continue, Chinese industry will have to become more competitive in the types of manufacturing in which the U.S. still holds a clear edge.

Can China do it? History tells us the answer is yes. Back in the 1950s, Japan was the China of the world, making a bunch of cheap stuff with cheap workers, but in a relatively short period of time, Japan was selling Sony high-tech gadgets, Honda motorcycles and Toyota cars in the U.S. There is no reason to believe China can't follow in Japan's footsteps. The challenge for the U.S. is to stay one step ahead, to continue to innovative, become more productive and improve quality. There is reason for hope. What American manufacturing needs to do to remain competitive plays into America's strengths.

That's especially because of the **direction in which manufacturing is headed**. I had an interesting email exchange with Robert Judge, a professor at the College of Business Administration at San Diego State University. He's the expert who got me thinking about this subject and this post (thanks, Dr. Judge). His view is that manufacturing is going to become more and more technology-driven over time. Here's what he wrote:

Inexpensive manufacturing labor will not be a factor for long with the acceleration of technology in manufacturing processes. Our manufacturing is moving to a technology driven operation rather than a labor one. The skills required by manufacturing are changing. It won't be long until IBM's Watson will be directing the manufacturing with robots doing the work.

In other words, manufacturing competitiveness will increasingly be based on American, not Chinese, advantages.

That, however, has serious implications for the American workforce. Many Americans equate manufacturing with **jobs**, but as industry progresses, that link will become more and more tenuous. As manufacturing becomes more high-tech and automated, it will become a smaller source of new employment. In other words, even if American manufacturing can maintain its competitiveness versus China, it could very well be the case that fewer and fewer people will be working in factories anyway. That would especially be the case with poorly skilled workers, as manufacturing will increasingly depend on a higher level of training and engineering and IT knowledge.

So America's manufacturing future will depend on continued innovation, and the future of the American manufacturing worker will depend on improved education to support that innovation. Such advancement is imperative. China won't be far behind.

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1

Thanks, Michael, including the caution about our reliance upon manufacturing jobs. That aside, we still have close to 16% real-world unemployment (the real U-6 rate, not the fake U-3 rate still quoted here, by most media ...and the BLS. Remember that any govt. administration, Republican or Democratic, wants to quote better-looking #'s, but the high unemployment still exists. If our factories won't rehire, then who will? No, this is NOT a rhetorical question.

Also, it's interesting to bring up Japan ...and condolences to everyone there after the earthquake. Don't forget that part of Japan's manufacturing rise, especially electronics, can be traced to *one* event... the invention of the transistor ...by AT+T's Bell Labs. Yes, we invented the transistor but Akito Morita – Sony – moved faster than many other companies, including ours (remember vacuum tubes?). Do Chinese manufacturers have a similar technological singular leap? I doubt it, but we need to start to hiring big time again to put *all* of our collective brain power to work, literally. Thoughts, Michael? Thanks.

deconstructiva

March 11, 2011

at 2:50 am

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2

you say your comparison is in "real terms" yet you use dollar value as a yardstick...how about using REAL TERMS, where a buick made in USA would be compared to a buick made in china?

geaugallumina...

March 11, 2011

at 6:32 am

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3

the problem with this approach is that it is a zero sum game society wise.

Yes you can build robot factories that don't pay much in wages.

But the un- and semiskilled people you lay off will still be there. So what you save in wages you add to the tax load in order to pay for more social security. And, poorer people mean less consumer demand and therefore less factory output too.

The overall productivity of a society is impaired if you have an underutilized workforce.

The way to go is to have a highly educated workforce, able to do what robot's can't. Which is exactly what you *won't* get if you piss off the teachers. Wages and benefits down for teachers, way to go, America!

On the other hand, maybe in 20 years time, you people will be producing jeans for china.

volkerh

March 11, 2011

at 10:03 am

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4

It might be interesting to discuss why we even should care whether China's manufacturing competes with ours, or vice versa.

Is it that we want to export more? If so, why? We don't need to import dollars; the federal government, being Monetarily Sovereign, has the unlimited ability to create dollars.

Is it that we want to take jobs from China? Really? "Jobs" is just a euphemism for "money," and again, the U.S. has the unlimited ability to create money. Simply cut business taxes and eliminate FICA, and we'd have all the money and jobs we want.

Is it for national defense? Puleeze! We have enough bombs, rockets, guns, planes, ships and generals to destroy earth and maybe Mars, too.

Is it just a matter of national pride? Well, let's just train some ping-pong players.

Other than that, I'm not sure why we care about who outproduces whom.

Rodger Malcolm Mitchell

Rodger Malcolm...

March 11, 2011

at 10:24 am

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5

Wow, Michael, whatever mind altering substance you're taking please tell me where to find it!!! I need to forget reality as absolutely positively as you have...

dug77

March 11, 2011

at 4:34 pm

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AN EXCERPT of President Obama's prepared remarks, made public through the White House; he plans to ask Congress on Monday to rewrite the No Child Left Behind law by fall, escalating the urgency of his campaign for an overhaul of public education

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