Asian Firms Gaining on U.S. in Innovation

[This is an article, together with my introductory comments, forwarded to friends on April 18, 2010. —S.H.]

Hi everybody,

The article below was reprinted in today's *San Francisco Chronicle* under the title "Asian firms gaining on U.S. in innovation". It's an important article which shows a major trend in the world today—the trend toward not just the further shifting of *production* to China, India and other Asian countries, but also the gradual shifting of the center of technological development and innovation, and even (to a lesser degree so far) of basic scientific discovery, to China and Asia. And this does not simply mean to the research and development labs in Asia which are owned and operated by Western corporations, but also a gradual trend for this research and development itself to be done more by Chinese and other Asian corporations *rather than by* American and other western companies, even if they do have some of their labs in China.

What is happening in part is that the strategy of American and other "Western" (including Japanese) corporations in shifting production to China because of much lower wages there, is actually backfiring on them over the long run. Their initial idea was to shift only the production of low tech goods and parts to China. Then they began to shift the production of more finished products and high tech goods (including electronic gear, automobiles, etc.) to China. And more recently they've begun to set up their own research and development labs in China, India, etc. But all along, the deeper notion of these Western companies is that they would still be in charge, that they would still be the primary beneficiaries of all this production and development in China and other Asian countries.

But what these Western corporations failed to understand is that Chinese capitalism as a whole is far more vibrant than in the West. And that scientific and technological education in China is growing by leaps and bounds while it is stagnating or declining in the West (especially in the U.S.). The authors of the article below state that the single most important factor in the growth of innovation within a country is the education and technological training of the workers in that country. Plus, the government in China is far more supportive of development and innovation than are governments in the West, and naturally strongly favors Chinese-owned companies in this regard.

Thus Chinese capitalist companies are gradually triumphing over Western capitalist companies even if those Western capitalist companies do have large parts of their own production and even development in China too.

One of the reasons why Western capitalists never imagined that this strong trend toward their own economic displacement could ever develop is that they still have considerable racism in their thinking. While they always recognized that there was a lot of cheap labor in China, India, etc., they didn't fully recognize that this meant that there is also a lot of cheap brain-power and innovative capacity there!

Chinese capitalism, like all capitalism, has major problems and will have much greater problems in the future. The developing world overproduction crisis will also break out there in a major way before too long. And as part of that, there will be financial crises, such as the one looming because of the absurdly ballooning real estate bubble at the present time. And eventually this will lead to serious political instability there too.

Nevertheless, capitalism in China (and India, and to a lesser extent in other Asian countries) is rapidly expanding at the expense of Western capitalist corporations, and this will continue for a long time. This, in turn, will aggravate and intensify the growing economic crisis in the U.S. and other Western capitalist countries.

The dreams of Western capitalists and financiers of being perpetually able to control the world economy because of their supposed superior ability to generate and control intellectual property are doomed. And that is an important fact about the world today.

Scott

From: <u>http://www.businessweek.com/magazine/content/10_17/b4175034779697.htm</u> (See also the 11 minute video on this topic on that website.)



The 50 Most Innovative Companies

For the first time since *Bloomberg BusinessWeek* began its annual Most Innovative Companies ranking in 2005, the majority of corporations in the Top 25 are based outside the U.S. The reason: the new global leaders coming out of Asia

By Michael Arndt and Bruce Einhorn

In the past decade, as the U.S. was losing an estimated 2.4 million factory jobs to China, the Economic Policy Institute and other research organizations identified an alarming trend—alarming to Westerners, at least. The factories of South Korea, Taiwan, and China were making their way up the global value chain, from the sneakers, toys, and T-shirts they had produced in earlier years to personal computers, consumer electronics gear, household appliances, and even

cars. For the West, the silver lining was this: Asia's high-tech products were still generally regarded as inferior knockoffs of items designed in the U.S. and other so-called knowledge economies. China may have been the biggest worry, but as author Ted C. Fishman argued in his 2005 book, *China Inc.*, it possessed a factory culture—it could imitate but not innovate.

If Asia ever did figure out how to design cutting-edge products comparable to those dreamed up in the West, however, the one-two punch of high-value research and development and low-cost manufacturing would make it almost unbeatable in the battle for global economic supremacy.

The battle is on. In the 2010 *Bloomberg BusinessWeek* annual rankings of Most Innovative Companies, 15 of the Top 50 are Asian—up from just five in 2006. In fact, for the first time since the rankings began in 2005, the majority of corporations in the Top 25 are based outside the U.S. Asia's newfound confidence is turning up everywhere you look, from wind turbines to high-speed bullet trains, just two of the technologies China is trying to export to the U.S. "We are the most advanced in many fields," Zheng Jian, director of high-speed rail at China's railway ministry, told *The New York Times* in April. "And we are willing to share with the U.S." The U.S., of course, still has its innovators. Apple remains No. 1, followed by perennial first runner-up Google. But just ahead of General Electric in seventh and eighth places are newcomers LG Electronics of South Korea and BYD, with Korea's Hyundai Motor claiming a spot at 22.

The extended Top 50 list is dominated by companies from Europe, Asia, and, in another first, South America (Petrobrás of Brazil at No. 41). China's rise is biggest. A year ago its only representative was PC-maker Lenovo Group, at 46. This year Greater China is tied with Asia's postwar powerhouse, Japan, thanks to showings by BYD, Haier Electronics (27), Lenovo (29), China Mobile (44), and Taiwan-based HTC (47). The age of Asian innovation has begun.

To make room for these newcomers to the Top 25, which also include Intel and Ford Motor from the U.S. and Virgin Group from Britain, past winners Honda Motor, Reliance Industries, McDonald's, Walt Disney, and Vodafone all got pushed to lower slots on the Top 50, while AT&T dropped off entirely.

"We're starting to see the beginning of a new world order," says James P. Andrew, a senior partner at Boston Consulting Group and head of its global innovation practice. "The developed world's hammerlock on innovation leadership is starting to break a little bit."

HTC is typical of Asia's ascendancy. Founded in 1997 as a contract manufacturer, the company has long been the world's top maker of mobile handsets using Microsoft's Windows Mobile operating system. It produced unbranded devices that bear the logos of such wireless giants as Verizon, T-Mobile, Sprint Nextel, and Japan's NTT DoCoMo.

As it became more sophisticated, HTC built the first phone powered by Google's Android operating system, for T-Mobile, in 2008. It followed up with the Nexus One for Google, which was launched in January. Today, HTC is making and selling its own line of smartphones around the world, and roughly a quarter of the company's 8,000-person workforce hold engineering-related jobs. HTC Chief Executive Peter Chou "looks at what's possible and then puts [in] the resources," says Paul E. Jacobs, CEO of Qualcomm, a mobile-phone chipmaker and HTC

partner. "He's willing to take the risk." Says Chou: "Innovation is not a one-time job—innovation is a journey."

These new innovators can provide substantial payoffs for investors. In 2008 a subsidiary of Warren Buffett's Berkshire Hathaway paid \$230 million for a 10% interest in BYD, one of China's biggest producers of batteries for cell phones and a fast-growing maker of green cars and solar panels. BYD's Hong Kong-listed stock more than quintupled in 2009, as its profit tripled to \$555.5 million. Buffett's stake was worth \$2 billion at the end of last year.

Though BYD makes conventional gas-powered cars, with prices starting at just \$8,800, the 15year-old company is branching out to alternative-powered vehicles. BYD, which stands for Build Your Dreams, began selling a \$24,900 hybrid car in China this month—the car can be recharged by plugging it into a standard home outlet. It also teamed up with Germany's Daimler in March to build all-electric cars for China. BYD will begin selling electric cars in the U.S. this year and both hybrids and electrics in Europe by 2011.

With millions of Chinese choking on some of the world's most polluted air, the Chinese government is eager to promote more eco-friendly cars, providing an opening for BYD, says Michael Clendenin, managing director of RedTech Advisors, a consulting firm in Shanghai. "If BYD can truly punch something out, they've got a wide-open market in China," Clendenin says. "The Chinese government will come behind them and help them with the charging infrastructure to make electric cars in China viable."

The Chinese government is also trying to encourage more companies to be innovators. Beijing has implemented new procurement policies to promote what it calls "indigenous innovation" by requiring locally made technology in certain government purchases. U.S. and other foreign companies have cried foul, alleging that China's new rules favoring locals amount to trade barriers in sectors from environmental technology to telecom (<u>BW—Apr. 5</u>).

China's indigenous initiative isn't the main driver of innovation there, according to Boston Consulting's annual survey of top executives, which provides the raw data for our list. The survey suggests the crucial factor is a mindset—a belief that innovation matters. In China, 95% of executives said innovation was the key to economic growth, while 90% and 89% of respondents in South America and India, respectively, agreed. In the U.S., only 72% said innovation was important.

Similarly, 88% of executives in China said they were raising their innovation budgets this year, followed by 82% in South America and 73% in India. The rate fell to 48% in the U.S., ahead of only Japan, where just 34% of executives said their companies planned to increase innovation spending. All of which suggests the U.S. may not be dominating the list again soon.

Even in the U.S., barely half of respondents (53%) said they think U.S. companies will be the most innovative over the next five years. "We're moving to a place where innovation leadership is going to be more dispersed than in just the U.S., Western Europe, and Japan," says Boston Consulting's Andrew.

The shift is more apparent when this year's class is compared with the first ranking in 2005. Back then, only six of the Top 20 were headquartered outside the U.S., vs. 13 of 25 this year. In addition a third of 2005's American champs—such names as 3M, Starbucks, and eBay—no longer make the Top 50.

As specific Asian companies charge ahead in the global ranking, many analysts and executives complain that overall, businesses in China, Korea, and India aren't all that innovative. Their domestic economies are growing so quickly—and there are so many opportunities to launch tried-and-true business models—that these companies don't need to come up with the Next Big Thing. Sticking with the Same Old Thing suits many companies and investors just fine.

"You need something revolutionary to come along in the U.S. to really make an outsize return," says William Bao Bean, a Shanghai-based partner with Softbank China & India Holdings, a \$105 million venture fund backed by Cisco Systems and Softbank. In Asia's big two countries, "you don't need to make a revolution," he says. "There's low-hanging fruit to be had."

The huge home market is helping China Mobile grow bigger and, the company hopes, more advanced. The world's largest cellular operator agreed last month to buy 20% of Shanghai Pudong Development Bank for \$5.8 billion. The investment should help China Mobile provide wireless banking services to its 527 million customers, helping to solve a chronic problem plaguing the e-commerce industry in China, where use of credit cards is not widespread.

For many companies, though, relying on the easy pickings in China and Taiwan is no longer an option. HTC is feeling pressure from Chinese rivals such as ZTE Corp. and Huawei Technologies, which are taking advantage of Google's open-platform Android operating system to get into the smartphone business, too. "Android has become the great equalizer," says Aloysius Choong, an analyst in Singapore with researcher IDC. Because Android takes a lot of the innovation burden off of the hardware companies, it lowers the entry barrier for newcomers. That's one reason analysts think HTC may make an offer for Palm, the U.S.-based smartphone maker that has put itself up for sale, according to people familiar with the situation. The battle is notable, of course, because it is an innovation-driven skirmish between Chinese and Taiwanese players—something that simply didn't happen a decade ago.

Chou, HTC's chief, acknowledges that competition is intensifying. "We never underestimate the potential competition coming from elsewhere, either from top-tier premium brand companies or companies from China or Taiwan. What is important for HTC, we need to continue to provide a unique and differentiated value to our customer."

Apple also wants to take HTC down a peg. In March, the iPhone-maker filed a complaint with the U.S. Federal Trade Commission and a lawsuit in U.S. District Court alleging HTC's smartphones infringed on Apple patents. HTC denies the claims. "HTC has been innovative from the beginning," says Chou. "We were working on this for a long time before the iPhone came out."

Bloomberg BusinessWeek's Most Innovative Companies special report is based on data from longtime partner Boston Consulting Group (BCG). Last December the consultancy e-mailed a

21-question poll to senior executives around the globe. The 1,590 respondents, who answered anonymously, were asked to name the most innovative companies from outside their own industry in 2009. BCG then factored in the financial performance of the top vote-getters. The final list weights the survey results 80%, stock returns 10%, and three-year revenue and margin growth 5% each.

For the 2010 report, BCG changed the survey's distribution so that responses better reflected each country's share in the world economy. That meant fewer questionnaires to India, Italy, Spain, and the U.S. and more to Germany, Japan, and other countries in Asia. To improve the response rate, BCG also translated the poll into Japanese and Chinese. BCG found that the recalibrated sample may have altered the rankings of individual companies by a few places, but it did not account for the tilt away from the U.S. and toward the rest of the world. Performance and reputation did.

With Tim Culpan in Taipei