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Not All Roads Lead to China

By [WAYNE ARNOLD](#)

SINGAPORE, Feb. 27 — From automobiles to semiconductors, China is fast catching up with the rest of the world in manufacturing prowess, making it a formidable competitor for exporters everywhere. But does its rise necessarily spell doom for Southeast Asia's big manufacturing centers?

Not according to Teh Hok Peng, a manager at the Taiwanese electronics maker BenQ's factory in Penang, Malaysia.

Four years ago, as high-tech factory jobs in Malaysia were shifting to China and obituaries were being written for Southeast Asia's electronics industry, Mr. Teh went with the trend: he packed up his wife and two small children and moved to Suzhou to manage BenQ's factory there as it began shifting production out of Penang.

Since then, however, Southeast Asia's big economies have proved the doomsayers wrong. Instead of shutting their factories and relying on raw material exports as many pessimists predicted, the more prosperous countries — Malaysia, Singapore, Indonesia, Thailand and the Philippines — have generated a roughly \$20 billion trade surplus with China in 2004, supplying it with sophisticated electronic components. For the first eight months of 2005, the surplus was \$13.6 billion.

In contrast, the United States trade deficit with China was \$201.6 billion in 2005, while the [European Union's](#) was \$70 billion.

Today, Mr. Teh is back in Penang managing BenQ's factory, convinced that, while China may be closing the technological gap, it still has a long way to go to unseat Southeast Asia as a base for electronics exporters.

"China remains attractive thanks to the size of its market," he said, "but the multinationals will never leave here completely."

While Southeast Asia seems to have staved off the worst, a debate has arisen in the region: can China's southern neighbors remain strong exporters, feeding its appetite for components, or will China inexorably draw those industries inside its own borders?

Trade figures indicate that China is fast gaining self-sufficiency in electronics parts, and that Southeast Asia's trade surplus may have peaked. Yet Southeast Asia's factories are still humming, suggesting that two electronics centers are emerging, somewhat interdependent, but rivals all the same.

"People are suddenly saying, 'We shouldn't be expanding in China at the exclusion of everything else,'" said Dharmo Soejanto, an analyst at Kim Eng Securities in Singapore. "They're taking a more balanced view of the world. China is not going to manufacture everything."

In particular, manufacturers have found unexpected obstacles in China. Rampant technology piracy, resurgent nationalism and — surprisingly in a country of 1.3 billion people — a dire shortage of highly skilled labor are raising costs in China so fast that many manufacturers are looking back to Southeast Asia.

Even as foreign investment continued to flood into China last year, anecdotal evidence suggested the pendulum might be swinging slightly to the south: [Intel](#) has applied to build a \$605 million semiconductor factory in Vietnam. [Infineon Technologies](#) of Germany is building a \$1 billion chip plant near Penang, and the Japanese company Matsushita Electric Industrial is planning a plant in Singapore to assemble [plasma](#)-display televisions.

Others, however, believe China will prove a magnet, with its knockout combination of a huge market and low salaries.

"It's just a reality of the business model," said Mario Morales, an electronics supply chain analyst at the market research firm IDC in San Mateo, Calif. "People are outsourcing a lot more, and China has established a pretty good infrastructure."

That would be consistent with the trend of the last few years. The flood of investment into China since its entry to the [World Trade Organization](#) in 2001 has come largely at Southeast Asia's expense.

Foreign direct investment into Southeast Asia has fallen by one-third since 1996. In 2004, Japan invested twice as much in China as it did in Southeast Asia.

The impact was powerful. The Malaysian government estimates that almost 15 percent of Penang's manufacturing jobs were lost from 2001 to 2003. By 2002, pessimists were talking about a "huge sucking sound" of investment halting Southeast Asia's industrialization.

But then something different happened: Southeast Asia experienced a boom in exports of electronics components to its supposed nemesis. In 2003, Southeast Asia's exports to China jumped by more than 50 percent, led by a 67 percent jump in electronics shipments. Many government officials and industry experts heralded this development as evidence that Southeast Asia was "climbing the high-tech ladder" ahead of China.

But it was not long before Southeast Asia's component manufacturers started heading north too.

"The contract manufacturers, the component manufacturers, the guys that build the boards and the parts, followed their customers along to China," Mr. Soejanto at Kim Eng Securities said.

This migration has created what some economists say is a worrying trend: shipments of electronic components to China are growing more slowly than China's own exports of electronic goods. Economists say that means manufacturers in China are buying more components at home. While some economists say the slowdown in components exports is a temporary product of China's efforts to slow its economy, others say it portends the long, inevitable decline predicted five years ago.

As for Southeast Asia's hope of climbing the high-tech ladder, China may have an edge there, too. China's companies outspend most Southeast Asia companies on R.& D. And Beijing's carrot-and-stick approach to investment ensures that companies hold back only their very latest technology. "China can encourage investment and penalize those who don't import technology," said Xavier Chong, chief executive of the Singapore company Ellipsiz, which services semiconductor makers.

China already accounts for nearly 12 percent of global chip production, according to IDC, and Chinese factories now verge on state of the art, according to Betty Lin, an analyst at IDC in Taipei. While Southeast Asia has failed to create a single major international brand, China is following in the footsteps of Japan and South Korea with brand electronics exporters of its own — TCL in televisions and Haier in home appliances.

The outlook is not entirely negative for Southeast Asia, though. China's rise has hastened efforts by the Association of Southeast Asian Nations to lower tariffs and other barriers to create a common market of its own 544 million consumers.

But a bigger factor in Southeast Asia's nascent revival are the disadvantages manufacturers face in China. China suffers power shortages, for example, while Singapore's top-notch infrastructure continues to draw investment: [3M](#), [ASML](#), [Hewlett-Packard](#) and [I.B.M.](#) are just a few of the big names that have announced plans to build new factories in the island-state.

Anti-Japanese riots last year convinced many Japanese companies, analysts say, that they need to offset their China risk with a presence in Southeast Asia. Some manufacturers have even begun to require that their suppliers in China have sources of supply outside, said Heng Huck Lee, executive director of Globetronics, a semiconductor company based in Penang.

Weak intellectual-property protections are another problem, and many companies fear that competitors will steal their best product designs.

But the most common frustration foreign investors face in China — and one of the biggest surprises — is the spiraling cost of increasingly scarce skilled labor, which on China's eastern seaboard can roughly approximate salaries in some of its Southeast Asian rivals. Indeed, executives say hiring an engineer in Guangdong already costs more than hiring one in Malaysia. The result, they say, is rampant job-hopping among highly skilled and factory-floor Chinese workers.

At BenQ's factory in Suzhou, Mr. Teh said, four of every five employees were poached each year. Engineers are so highly prized that BenQ has to offer them interest-free housing loans.

"I don't see a compelling reason to build there," said Mr. Chong at Ellipsiz. When Ellipsiz decided to build its own chip equipment plant in 2004, it chose Vietnam.

Globetronics built two plants in China, and has been disappointed. While it plans to keep one of its China factories, Globetronics sold its chip-testing plant in Shanghai last year. Mr. Heng, Globetronics' executive director, commented: "Cost-wise, it's terrible. We didn't make anything back from the investment."