

# Apple core of capitalism

By KEVIN RAFFERTY  
Special to The Japan Times

HONG KONG — For a few hours this month Apple, once regarded as a maverick upstart company, became the world's biggest company by stock market capitalization, until Exxon Mobil again seized the title.

Some bullish analysts predict that if stock markets recover their confidence Apple could become a trillion dollar company since it has sales growth ten times the normal company and sits on a pile of \$76 billion in cash and investments.

But the rise and rise of Apple also raises important questions about the role of markets and the shaping of modern capitalism, particularly in the hitherto most powerful economy of the world. Such is the special status of Apple that its major products, not just its computers but its iPod, iPhone and iPad, have become ubiquitous globally, and the iPod has become the subject of academic study into how the device is an exemplar of trends in globalization.

Three Americans, Greg Linden, Jason Dedrick and Kenneth L. Kraemer, all associated with the Personal Computing Industry Center of the University of California, Irvine, writing in the Journal of International Commerce and Economics, use the iPod to examine the view of skeptics of globalization that the benefits of lower consumer prices are offset by job losses, lower earnings for American workers and a potential loss of technology to foreign rivals.

Their conclusion is that analysis of the manufacturing of the iPod "provides evidence that innovation by an American company at the head of a global value chain can benefit both the company and American workers."

Closer examination of the findings reveals that there are major challenges for U.S. society as well as employment and industry. The authors show that in spite of a dramatic outflow from the U.S. of manufacturing in computers and peripherals, American companies continue to be leaders in personal computers, printers, networking equipment as well as in newer categories such as portable music players, tablets and smartphones.

In the specific case of Apple's iPod, they say that making the device creates 41,170 jobs, of which 13,920 are in the United States and the rest scattered overseas, principally in China and the Asia-Pacific region. Much of the mainstream manufacturing has migrated from the U.S.

Hard drives for the iPod are made in China and the Philippines, and their inputs come from China, the Philippines, Japan, Thailand and Singapore; flash

memories come from Korea and China; display panels and modules are made in Japan; the printed circuit board assembly and testing is done in China; and the final iPod assembly is done in China with small amounts in Taiwan.

Key jobs remain in the U.S., principally the 700 engineers, all American-based, plus almost all the 5,200 managers and professional staff, apart from 150, half of them in Singapore. Retail jobs are scattered throughout the world, but with a majority in the U.S.

Altogether, the authors calculate that in 2006 workers received more than \$1 billion in earnings from iPod-related jobs, about \$25 per unit sold. Of this total, almost \$750 million went to U.S. workers, and \$320 million to people outside America. Japan earned almost 30 percent (\$102 million) of the non-U.S. money, Korea 12 percent and China only 7.4 percent (\$23.6 million), even though China had 12,270 iPod jobs, and Japan had only 1,840.

The reason why U.S. workers take home most of the money from iPod production is that Apple's highly paid engineers and managers remain in the U.S. Higher earnings for special skills also explain why Japan and Korea earn more than China. It has to be said that there is a shortcoming in the authors' work: They have not had access to Apple's wage bill, but have made educated calculations based on wage rates. This shows when they estimate "that nearly \$50 million went to administrative jobs at Apple for which we used the national average wage of \$38,000 a year; actual Silicon Valley wages were probably even higher."

In a study a few years back, the same authors had shown how global the iPod is, and how flawed are international trade statistics that give China \$150 in export earnings for every iPod sold. In reality, they claimed, the final assembly done in China added only \$4 to the value of the device. On the other hand, \$163 of the \$299 retail value of the iPod goes to American companies, of which Apple earns \$80. Japan contributes about \$26 of the value added, mainly through the Toshiba hard drive, though the Japanese company makes most of its hard drives in the Philippines and China.

The two papers raise many questions that politicians and business leaders should be alive to. One major distraction is that markets' valuations are made in the blink of an eye or a computer calculation, and often seem to be based on whims and fantasies — witness the way that rumors about the health of Steve Jobs have caused Apple's stock price to gyrate — yet the decisions on the long-term well-being of the company are measured in years if not decades with development and marketing of new products. Apple's case raises questions about major issues of trade and economic development.

Is it wise of China to depend on an export-led growth strategy that has such a low value-added contribution to the economy, unless of course China then moves up the value chain by luring the managers and engineers to China or invests its \$3.3 trillion surpluses in buying Apple?

Then there is the question of corporate loyalty, highly relevant when more than \$40 billion of Apple's reserves are held offshore because they would attract higher taxes if repatriated to the U.S.

Corporate loyalty is also important in Japan where companies are reeling from the higher yen and tempted to move more and more jobs offshore.

What is the responsibility of a multinational company to create jobs in the country in which it is based?

The other leading problem is that politicians' time horizons, including China, are framed by elections or government changes that are rarely more than two years away, yet the societal changes that decide whether a country will grasp economic challenges or dissolve into rioting take between a 12-to-20-year education and a lifetime to create.

Kevin Rafferty is editor in chief of PlainWords Media.

The Japan Times: Monday, Aug. 22, 2011

(C) All rights reserved

[Go back to The Japan Times Online](#)

[Close window](#)