



# Sinology

by Andy Rothman

19 June 2014

- \* Exports are an important source of low-wage jobs, but otherwise play only a supporting role in China's economy, which is driven primarily by domestic investment and consumption.
- \* Net exports accounted for only 2.4% of China's GDP last year, with 90% of industrial output consumed domestically.
- \* Despite rapid wage growth and currency appreciation, China's remains competitive, with the Chinese share of total U.S. goods imports rising to 19% last year from 13% in 2004.

.....

**ANDY ROTHMAN** lived and worked in China for more than 20 years, analyzing the country's economic and political environment, before joining Matthews Asia in 2014. As Investment Strategist, he has a leading role in shaping and presenting the firm's thoughts on how China should be viewed at the country, regional and global level.

## CHINA IS NOT EXPORT-DRIVEN

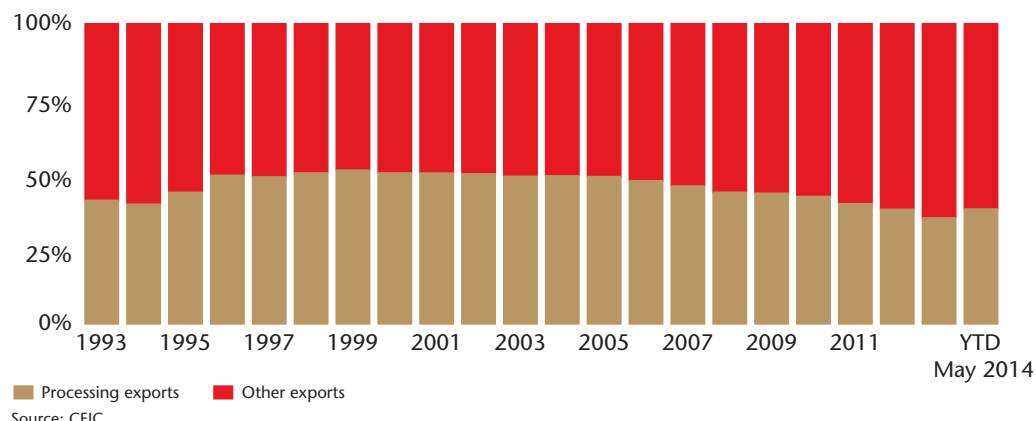
**Yes, nearly everything does come from China. But exports contribute relatively little to its economy**

It is easy to see why most people think China is dependent on exports. After all, almost everything in your neighborhood shop does come from China. But many of those goods are just processed or assembled in China, adding little value and contributing very little to its GDP. Moreover, exports are a small share of output: most of what China makes, China consumes.

### Assembled, not really 'Made in China'

Although the share of China's exports that are just processed or assembled there has been declining, it still accounts for 38% of the total, down from 50% in 2001.

#### STRUCTURE OF CHINA'S EXPORTS



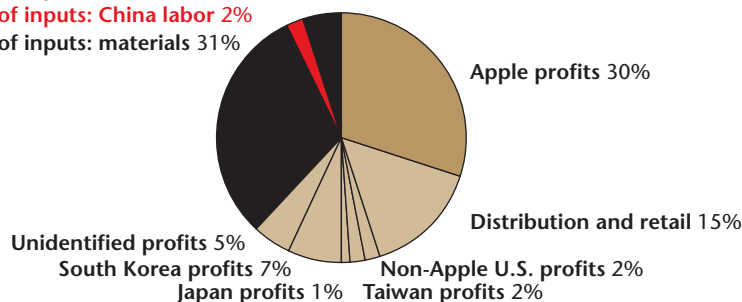
A good example of processed exports is Apple's iPad, which is assembled in China but creates little value there. In 2011, the Personal Computing Industry Center of the University of California, Irvine took apart an iPad and worked out its value chain.

#### DISTRIBUTION OF VALUE FOR APPLE'S IPAD

Cost of inputs: Non-China labor 5%

Cost of inputs: China labor 2%

Cost of inputs: materials 31%



Source: PCIC, UC Irvine



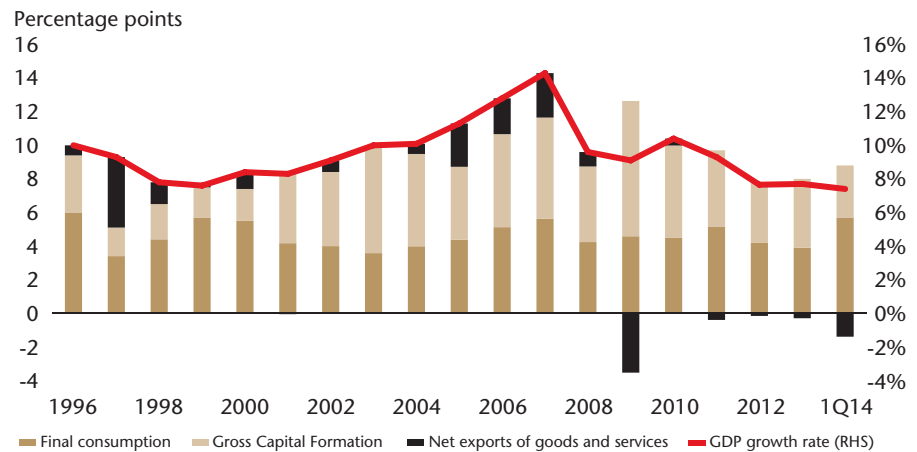
According to the UC Irvine study, “It is a common misconception that China, where the iPad is assembled, receives a large share of money paid for electronics goods. That is not true of any name-brand products from U.S. firms that we’ve studied...There are no known Chinese suppliers to the iPhone or iPad...That means that the main financial benefit to China takes the form of wages paid for the assembly of the product or for manufacturing of some of the inputs. Many components, such as batteries and touchscreens, receive their final processing in China in factories owned by foreign firms. Although hard facts are scarce, we estimate that only US\$10 or less in direct labor wages that go into an iPhone or iPad is paid to China workers. So while each unit sold in the U.S. adds from US\$229 to US\$275 to the U.S.–China trade deficit (the estimated factory costs of an iPhone or iPad), the portion retained in China’s economy is a tiny fraction of that amount...around US\$10.”

### Net vs. Gross Exports

You may remember from Econ 101 that  $GDP = investment + consumption + exports - imports$ . This formula, which applies to all economies, is designed to ensure that GDP excludes, for example, the value of a hard drive that is made in Japan, imported into China and snapped into an iPod, which is then sold overseas. That hard drive cost US\$73 (back in 2005, when Apple still used hard drives) and accounted for half of the factory value of an iPod, but it was not made in China and did not contribute directly to the Chinese economy. The indirect contribution—including the jobs for the assembly and testing of the iPod—added up to US\$3.70 and was counted in the net export calculation.

During the decade prior to the Global Financial Crisis, China averaged about 10% annual GDP growth, with net exports contributing only about 1 percentage point of that growth. Today, China is even less dependent on exports. Last year, net exports actually posed a -4.4% drag on GDP growth, and in the first quarter of this year, net exports left a -19% contribution to growth.

**CONTRIBUTION TO GDP GROWTH BY EXPENDITURE APPROACH**  
Contribution share of the three components of GDP to the growth of GDP

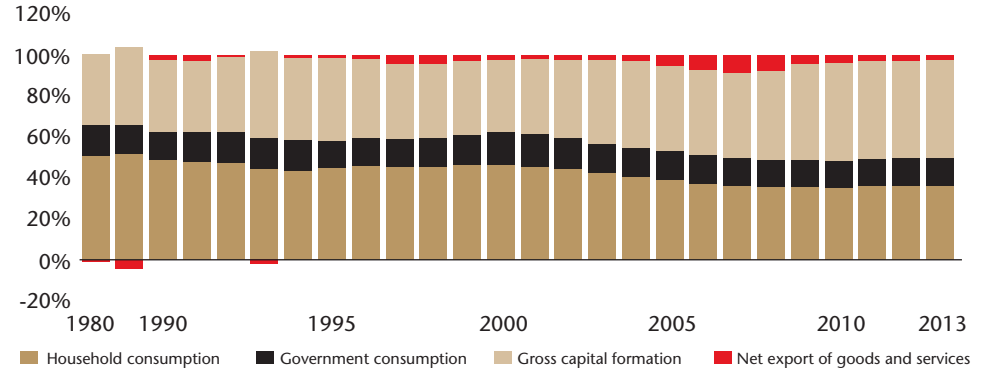


Source: CEIC



From the perspective of GDP, as opposed to GDP growth, net exports also play a relatively small role. In 2007, net exports accounted for 8.8% of China's GDP, but this share fell to only 2.4% in 2013. Additionally, we estimate that only about 10% of China's industrial output is exported, with 90% consumed domestically. (It is also worth noting that last year, 47% of China's exports were produced by foreign firms.)

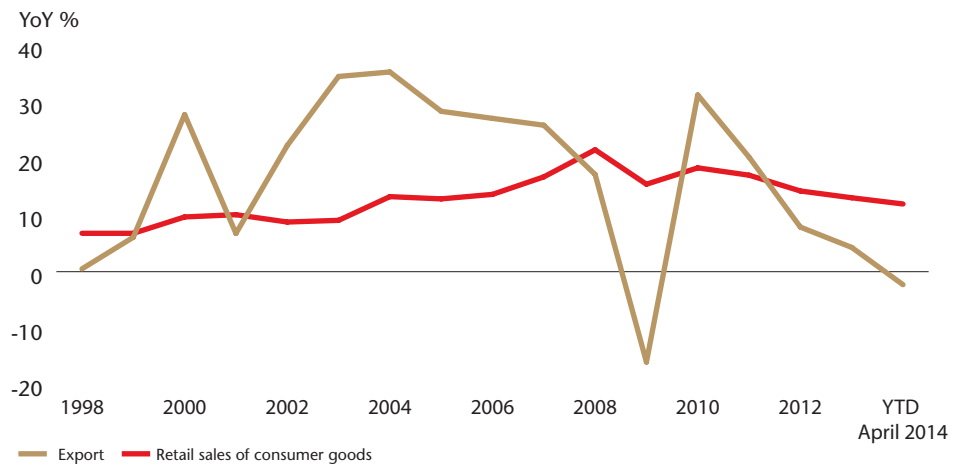
### SHARE STRUCTURE OF CHINA'S NOMINAL GDP BY EXPENDITURE APPROACH



Source: CEIC

The following chart shows that China's consumers also do not pay too much attention to the health of the nation's exports.

### GROWTH RATES OF RETAIL SALES AND TOTAL EXPORTS



Source: CEIC

Our message is not that exports do not matter. They do, especially to the tens of millions of workers assembling iPads and other gadgets. But it is important to understand that China is a continental, domestic investment and domestic consumption-driven economy, where exports play only a supporting role. The overwhelming majority of goods made in China stay in China.

When, in 2009, China undertook the world's largest Keynesian stimulus, it was because as many as 30 million workers lost their jobs as the Global Financial Crisis hit and demand for goods, including Chinese exports, collapsed. Today, however, while the Chinese economy is growing more slowly, the job market remains stable, which is why there has not been significant stimulus.



As of 19 June 2014, accounts managed by Matthews Asia did not hold a position in Apple, Inc.

The views and information discussed in this report are as of the date of publication, are subject to change and may not reflect the writer's current views. The views expressed represent an assessment of market conditions at a specific point in time, are opinions only and should not be relied upon as investment advice regarding a particular investment or markets in general.

The subject matter contained herein has been derived from several sources believed to be reliable and accurate at the time of compilation. Matthews International Capital Management, LLC does not accept any liability for losses either direct or consequential caused by the use of this information.

In Singapore, this document is available to, and intended for Institutional Investors under Section 304 of the SFA, and to Relevant Persons pursuant to section 305 of the SFA, as those terms are used under the relevant law. It should not be circulated or distributed to the retail public in Singapore.

Issued in Hong Kong by Matthews Global Investors (Hong Kong) Ltd. and has not been reviewed by the SFC. You are invited to contact Matthews Global Investors (Hong Kong) Ltd. directly for more information relating to the Funds only if you are categorized as a Professional Investor in Hong Kong.

Issued in the UK by Matthews Global Investors (UK) Limited, which is an appointed representative of Mirabella Financial Services LLP, which is authorized and regulated by the Financial Conduct Authority, FRN 415559.

This document has not been reviewed or approved by any regulatory body. This document is made available to institutional/professional clients only.

## Is China Still Competitive?

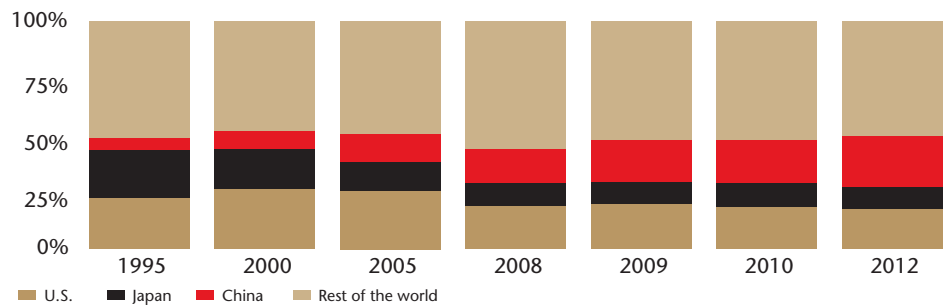
The final topic we want to explore today is the competitiveness of Chinese manufacturing.

Manufacturing wages have risen rapidly in China for many years, and at a faster pace than in most other developing economies. According to the International Labor Organization (ILO), Chinese wages roughly tripled over the last decade, driven in large part by government policy: over the past decade, the minimum wage rose 196% in Shenzhen, and 187% in Shanghai. And as an example of how important China is to Asia, the ILO estimates that in 2011, real wage growth in the region was 5%. But without China, regional wages declined by 0.9%.

What has been the impact on Chinese exports? Since the end of 2004, the renminbi (RMB) has appreciated by 41% in real effective terms, and the minimum wage in Dongguan (a key export-processing center in southern China) rose by 196%. In 2004, Chinese goods accounted for about 13% of all goods imported by the U.S. (while Mexico's share was about 11%). Despite sharp increases in wages and in fuel costs, as well as the benefits of the North American Free Trade Agreement, China remains competitive today, even compared to Mexico. Last year, China's share of U.S. goods imports rose to about 19%, while Mexico's share was about 12%.

U.N. data also shows that China's share of global manufacturing output rose from 5% in 1995 to 8% in 2000, then 12% in 2005 and 19% in 2010 and 22% in 2012.

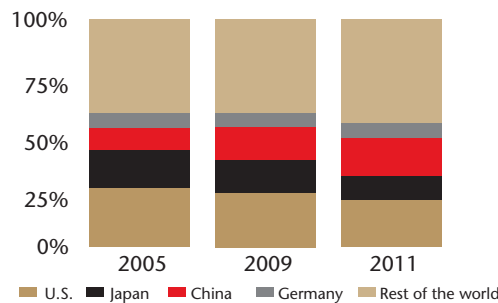
### MANUFACTURING OUTPUT BY COUNTRY



Source: UN National Accounts Database

And China's share of global manufacturing value-added rose from 10% in 2005 to 14% in 2009 and 16% in 2011.

### CONTRIBUTION TO GLOBAL MANUFACTURING VALUE-ADDED



Source: UN Industrial Development Organization

How did Chinese manufacturing remain competitive, despite the rapid wage growth? The answer is that productivity also rose at a very fast pace, in part due to greater investment in advanced equipment. According to the International Federation of Robotics (IFR), China's share of global robot shipments rose from 0.4% in 2000 to 3.7% in 2005 and 13.6% in 2011. The IFR estimates that China will account for almost 17% of global robot shipments this year. Putting this into context, the U.S. share has fallen to 16% last year from 18% in 2005.

**Andy Rothman**  
Investment Strategist  
Matthews Asia