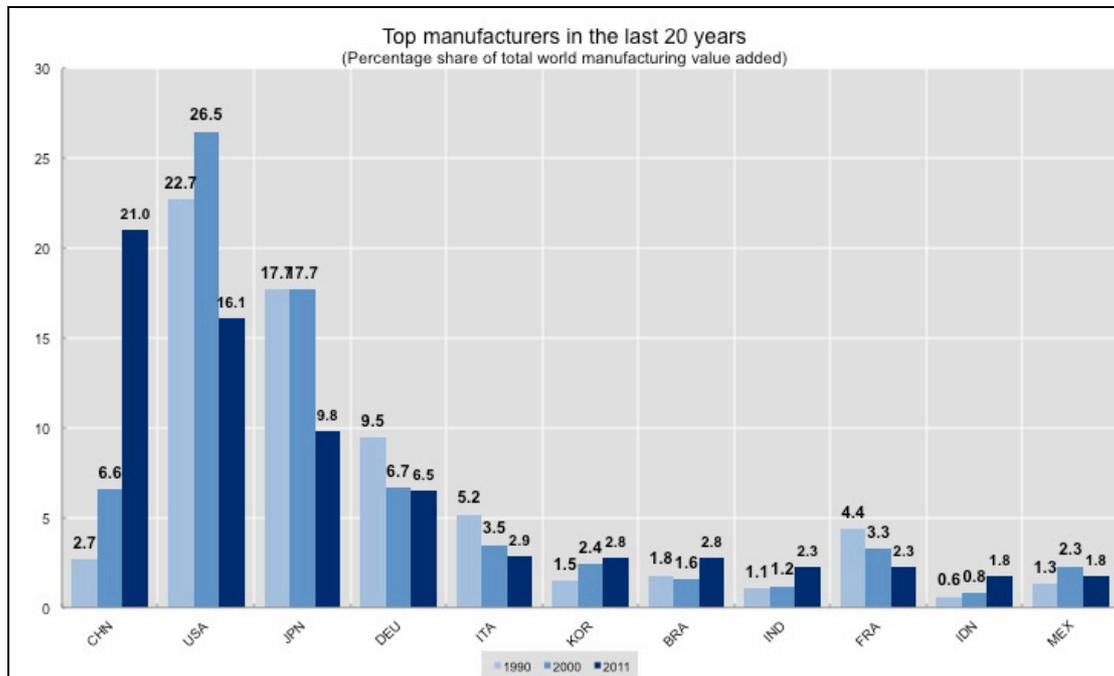


# The Geography of Global Manufacturing

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By all accounts the geography of global manufacturing has changed with [China in particular](#) and developing countries in general accounting for a high share of global manufacturing production and exports. This has given rise to the view that the ‘old’ international economic order that prevailed since the first industrial revolution to the 1980s, in which developing countries were dominantly producers and exporters of primary products and the developed the providers of modern, technologically advanced manufactured goods, has given way to one in which developing countries increasingly dominate the manufacturing landscape.

Implicit in that view is an idea, not all wrong, that there has been a change in the balance of global economic power reflected in this change in economic geography. That view is also corroborated by the facts that South Korea, an erstwhile developing county, is now included in the developed, and China is seen as the most likely challenger of American economic hegemony. But a few countries, such as these, don’t make the whole of the global South, necessitating a closer look at the evidence on the change in manufacturing geography and its implications. Such evidence has been collated in the OECD’s periodic publication, [Science, Technology and Industry Scoreboard](#) for 2013.

Consider, for example, the years of intensive globalisation since 1990, when the geographical shift in global manufacturing production reportedly occurred. In 1990 the five countries (United States, Japan, Germany, Italy and France in that order) that were on top of the league table of country-shares in global manufacturing valued added accounted for 57.8 per cent of the total. Within that group the spread in terms of individual shares was large, with the US notching up 22.7 per cent and France just 4.4 per cent. China accounted for a small 2.7 per cent. By 2000 the aggregate figure of global value added share of the top five had risen to 61 per cent with China (6.6 per

cent as compared to 26.5 per cent for the US) now having joined the leaders at rank four and Italy now standing fifth. France had dropped out of the top five.

The real change occurred between 2000 and 2011, though even in the latter year the aggregate share of the five countries was, at 56.3 per cent, close to its 1990 level. However, now China topped the league table, with a 21 per cent share. Between 1990 and 2011 the other four toppers had lost share with China being the gainer. Outside of the five, over this period, South Korea's percentage share rose from 1.5 to just 2.8, Brazil's from 1.8 to 2.8, India's from 1.1 to 2.3, Indonesia's from 0.6 to 1.8, Mexico's from 1.3 to 1.8 and Thailand's from 0.4 to 1.0.

To summarise, the changing manufacturing landscape had four aspects to it. First, an element of continuity in the form of the continued dominance of a few countries over global manufacturing, though with some change in the relative ranks held by them. Second, a noticeable reduction in the shares of leading OECD-member countries in global manufacturing value added between 1990 and 2011. Third, corresponding dramatic increases in China's share, especially after 2000. And, finally, small share increases in other so-called emerging markets, leading to wider geographical dispersion of global manufacturing.

The picture with regard to global manufacturing exports is not very different, though here the shift in ranks is more generalised and the geographical spread of manufacturing presence to emerging markets other than China is greater. The top 5 in terms of shares in global exports of manufactures (consisting of USA, Germany, Japan, France and Italy, in that order) accounted for 42.5 per cent of the total in 1995 with the US garnering 12.4 per cent and Italy 5.5 per cent. China, on the other hand accounted for just 2.8 per cent of the total. However, by 2009, China had become the leading exporter of manufactures with a 12.9 per cent share, followed by Germany (10.3 per cent) and the US (10.1 per cent). The top five exporters (which included Japan and France) now accounted for 43.8 per cent. Outside of China, among developing countries, South Korea registered an increase in manufactured export share from 3 to 3.7 per cent, Mexico from 1.6 to 2.1 per cent, India from 0.7 to 1.6 per cent, Thailand from 1.2 to 1.6 per cent and Brazil from 1.1 to 1.2 per cent.

Thus, if seen in terms of national shares in global manufacturing value added and exports, the factor contributing overwhelmingly to the emergence of a new international division of labour seems to be the remarkable surge of China as a manufacturing power rather than the transformation of developing countries as a group into manufacturing hubs. This possibly explains the fact that the threat to the North is not seen as a threat from the South, but a threat from China in particular, epitomised by the large trade deficit that the US runs with China. According to the Bureau of Economic Analysis of the US Ministry of Commerce, the United States exported \$152 billion worth of goods and services to China, and imported \$478 billion worth, to run a trade deficit of \$326 billion. That difference has shaped the debate.

However, not that entire deficit is on account of production shifting to China. China imports a range of capital goods, components, intermediates and raw materials from other countries, so that the domestic value added content of exports is much less than the aggregate export figure suggests. The foreign value added content in Chinese exports has, according to the OECD Secretariat, increased from 11.9 per cent of gross

export value in 1995 to 32.6 per cent in 2009. Of the foreign valued added content, close to 60 per cent is on account of inputs from OECD countries. So China is substantially the final processing platform for a range of manufactured exports from across the world.

An August 2011 study by Galina Hale and Bart Hobbjinn of the Federal Reserve Bank of San Francisco titled [The US Content of “Made in China”](#) is quite revealing. It shows that imports from China account for only 2.5 per cent of US GDP and total imports 16 per cent. Further, Chinese good accounted for only 2.7 per cent of US consumption spending, which was about one-quarter of a 11.5 per cent foreign share of American personal consumption expenditures. Moreover of the 2.7 per cent of US consumer spending on goods labelled “Made in China”, only 1.2 per cent reflects the cost of imported goods, because “on average, of every dollar spent on an item labelled “Made in China,” 55 cents go for services produced in the United States. In other words, the U.S. content of “Made in China” is about 55%.”

It is true that the US does not import from abroad only the final goods that enter the former’s consumption basket. There are many consumption goods produced and sold in the United States that use intermediates imported from abroad. Taking that into account, Gale and Hobbjinn calculate that 13.9 per cent of US personal consumption expenditure (PCE) is directly or indirectly on imported goods. The figure for PCE diverted to Chinese goods is 1.9 per cent, which is just 0.7 of a percentage point higher than the share of Chinese-produced final consumption goods in US personal consumption spending. Finally, the aggregate import content of PCE has fluctuated within a narrow range of 11.7 per cent and 14.2 per cent, with the share having peaked in 2008 when oil prices were ruling high. In sum, while China is indeed an important source of imports into the US, China’s advance on this front was not so much at the expense of US production, as it was at the expense of other exporters to the US.

But this is not all. Even imports from China are not necessarily from Chinese firms as it is from US firms. As one analyst (Baizhu Chen, [“Buying from China is in fact buying American”](#), on Forbes.com) puts it, America is “importing from China lots of Apple iPhones, Dell computers, Gap shirts, Hasbro toys, Mattel dolls and Nike shoes.” That is, American companies choosing to locate production facilities or source from China account for a significant share of US imports from that country. The result is what has been found in the case of a number of commodities, and illustrated by the iPhone example: “In 2009, iPhones contributed about \$2 billion, equivalent to 0.8% of the Sino-U.S. bilateral trade deficit. One iPhone 3GS was sold for about \$600. These phones were exclusively manufactured by Foxconn, a factory in a Southern Chinese city called Shenzhen. To produce them, Foxconn had to import \$10.75 worth of parts from American companies. The rest of its \$172.46 components came from Korea, Japan, Germany, and elsewhere. Out of a \$600 iPhone, how much does China get? A puny \$6.50, or 1% of the value.” Apple and other American companies together received close to 70% of the imported iPhone’s value, making the contribution of Chinese value added to America’s trade deficit against China much smaller than \$2 billion.

This implies that even when geography of manufacturing production changes, the power relations that underlie the international division of labour shift much more slowly. America may be losing out, however slowly. But American companies lose

far less and even more slowly. If American power is measured in terms of the strength of American firms and American capital, hegemony is still with the US. The strident cries on the looming threat from China, or even the BRICs, seems just propaganda to pre-empt any challenge to existing imperial power. In the peculiar transformation of the geography of global manufacturing, production may have shifted across borders, but there is a lag in any shift in the distribution of economic power. The only reason for the US to fear is that one nation, China, has seen a dramatic movement of some variables in its favour.

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