CHINESE COMPETITION: LEARNING FROM JAPAN

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BRIDGETTE



Cheap goods from a foreign competitor threaten our industries; have we been here before? What can the west learn from the way it handled phenomenal Japanese growth, and does it apply to China?

N THE 1970S AND 1980S THERE WAS a widespread fear in the west of Japanese economic superiority. Unprecedented growth in its gross domestic product (GDP), exports and outward foreign direct investment suggested an alternative model of market capitalism that was out-performing the United States and European economies. Highprofile articles and books fed this fear and research efforts tried to identify what was different about Japan and how such differences might convey sustained competitive advantages.

As China's growth rate exceeds that of Japan in its heyday, we are witnessing the same reaction. However, there are important differences between the two countries, their growth paths, and the

implications. Some key differences stem from the combination of China's size, its current rate of growth and its openness relative to Japan. It is far more integrated into, as well as integral to, the global economy than Japan was during its rise.

The scale, scope and speed of China's economic growth all exceed that in the industrial development phases of Europe, the US or Japan. Chinese firms are on the same learning trajectory as Japanese firms before them. However, in today's globally integrated economy, they are able to take advantage of more opportunities to learn faster.

Ironically, multinational companies in their own domestic market are the source of some of these opportunities, bringing technologies and management practices to firms that may well evolve into their future competitors. As a consequence the Chinese economy overall appears to be developing competitive advantages faster and over a broader range of industries cars, consumer electronics, telecoms and software - than any country before.

Despite the rise of Japan, the US and European economies remained intact and continued to grow - but they had to adapt. The global car and consumer electronics industries changed significantly, with new winners and losers at the corporate and national levels. A key question is whether there is enough time to adapt to the rise of China.

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SCALE, SCOPE AND SPEED

The scale, scope and speed of China's economic growth all set it apart from the Japanese model. Each of these represents a different set of challenges for western firms and governments.

In the 1950s China's economy was the size of Sudan's. The political reforms that began in 1978, liberalising the economy and opening-up to trade and foreign direct investment, kick-started one of the world's economic success stories. By 1990 it was equal to India in GDP, as that country's own reforms began. It is now the fourth biggest economy in the world – twice the size of India – and by 2015 is predicted to be the second largest after the US. Official figures show that GDP has grown on average by nine percent per year over the past 25 years, exceeding Japan's rate of growth in its 1970s and early 1980s heyday.

These effects are reflected in its growing presence in the global economy through international trade and foreign direct investment. All given a further boost by China's entry into the World Trade Organization (WTO) in 2001. By 2005 China had surpassed Japan to become the third-largest trading nation after the US and Germany. In 2006, China's trade surplus more than tripled to boost foreign currency reserves past those of Japan, becoming the world's largest.

Exports are an indication of competitive advantage. Despite its large and growing domestic market, China exports more products from a wider range of industries than Japan did during its rapid growth phase. Whilst Japan enjoyed export success in a few core sectors: consumer electronics, cars and engineering, China is managing to succeed in low-technology industries, including textiles, clothing and footwear, toys, furniture and plastic products. At the same time Organisation for Economic Co-operation and Development figures show it has overtaken the US as the top exporter of high-technology products, particularly information and communication technology goods. Note, however, that more than half of China's exports are from multinational firms based there.

In terms of Britain's trade with China, overall trade in goods and services reached \$33 billion in 2005. The main exports to China were iron and steel, electrical and mechanical equipment, precision instruments, plastics, chemicals and pharmaceuticals. The main imports from China are information technology products, clothing and footwear, toys and furniture and plastics.

China is arguably moving up the economic development hierarchy faster than any country in history. This is taking it rapidly from being a developing country with an economic reliance on agricultural and commodity industries, raw

materials and cheap labour, to an industrialised superpower with its own capacity to innovate in high-end manufacturing and services.

Again, trade and foreign direct investment figures provide indications of this learning process. In 1985 just 2.6 percent of Chinese exports were categorised as high-technology, whilst almost half were primary products or manufactured products based on natural resources. Twenty years later, a quarter of exports are high-technology and less than ten percent are from the previously dominant categories.

The initial boost in higher-value exports came from multinational firms using China as a base for their products. However, high-technology, high-value products are increasingly exported by local Chinese firms that are moving rapidly up the learning curve.

Combining scale, scope and speed, we can compare China's progress with other economies that have gone through this kind of transformation. Japan, like most western economies, developed in a stage-wide pattern, specialising sequentially in a series of industrial sectors. The Asian Tiger economies did the same, but more quickly. So, it took Toyota and Sony thirty to thirty-five years to evolve into leading firms in their industries whilst Samsung from South Korea and Taiwa-based Acer took ten years less. If we look at firms like WIPRO, Infosys and TCS, which lead the Indian software industry, they have achieved superior competitive positions in fifteen to twenty years.

Chinese firms appear to be moving even faster, developing innovation capabilities that will enable them to compete head-to-head with western companies much sooner. Not only is China achieving faster export success, it is succeeding across a wider range of industries in parallel, rather than following the sequential route taken by Japan.

This leaves two important questions: what is driving this accelerated learning process in China and what are the implications for the rest of us?

FAST LEARNERS

A number of factors, most of which differ from Japan's experience, are helping Chinese firms learn faster. Foreign direct investment, bringing multinational firms and associated technologies, capabilities, brands and management practices into China is one factor, as is the advantage of the latecomer learning at others' expense. Another is the degree to which China is connected to the rest of the global economy, through trade links, the internet, other communication technologies and the media.

The sheer volume of inflows into over the past twenty years illustrates the scale of investment by multinational firms. In 2005 China recorded over \$72 billion of foreign direct investment inflows compared to less than \$3 billion for Japan, which has always attracted relatively small amounts of direct investment. China's total stock of foreign direct investment is more than three-times that for Japan, again despite its relatively recent economic liberalisation.

Chinese firms are able to learn via sub-contracting relationships and joint-ventures with these inward-investors. In this sense multinational firms are, to a certain extent, breeding their future competitors through technology and capability transfer. Chinese companies are developing the ability to produce better products in better ways, improving quality as well as costefficiency. This is termed cumulative learning and it is enhanced by another factor that sets the Chinese model apart from Japan's; a high rate of labour mobility.

Experienced managers, engineers and other employees are in great demand across China's booming east coast. They frequently move between foreign and local firms taking with them the knowledge and expertise to improve local operations. This contrasts with the Japanese system of lifetime employment where obligation and loyalty tied firms and employees together long-term.

TRANSFERS AND THEFT

This contrasts with what are termed 'discrete' transfers, referring to the legal licensing or purchase, or illegal theft or imitation, of brands, designs, patents or other forms of intellectual property rights. These tend to provide more temporary advantages in that the recipient firm has not developed the ability to create new brands, products or processes, it is just exploiting those created elsewhere until something new comes along.

Illegal transfers of this kind are rife in China. One estimate suggests that over half of the more than a hundred million counterfeit articles entering Europe in 2004 originated in China. Examples include fake medications, food, cigarettes and even Rolls Royce aircraft engine parts, as well as pirated music and films. General Motors, Honda, Lacoste Moet Hennessy and Starbucks have all been involved in trademark suits in China.

China is the source of seventy percent of

the world's pirated goods and US companies claim they lose up to \$250 billion a year to piracy. Once again, there is a stark contrast with Japan, the political and legal system in China fails to enforce regulations on patent and licensing rights.

CATCHING UP

For some Chinese firms catching-up with the west means moving up particular industry value chains, away from a reliance on cheap labour, by learning how to innovate. The Chinese vehicle industry provides a good illustration. China became a net exporter of cars for the first time in 2005, with a major proportion going to other developing markets. First Automotive Works (FAW) is now the largest producer and has partnerships with Mazda and Toyota, in addition to its main ally, VW. Another dominant player, Shanghai Automotive Industry Corporation (SAIC), also had partnerships with VW and GM. These allowed local firms to complement cheap labour and land advantages with capabilities in design, engineering, manufacturing, marketing and management to drive their process and product innovation.

Other Chinese firms in other industries have the opportunity to leapfrog western competitors, which are locked into older technologies and mature markets. High levels of education and a strong local science and technology infrastructure have supported a growing range of high-technology industries, including mobile telecoms, aerospace, biotechnology and software.

China spends more than double the amount Britain does on research and development and this is growing at nine percent per year in line with its GDP growth. The country hosts over three hundred foreign research and development centres, has more than seventeen million students in higher education and more than sixty industrial parks are dedicated to returning graduates who have started up over four thousand new businesses.

GOVERNMENT SUPPORT

China has a powerful combination of cheap and well-educated labour, good infrastructure, a growing domestic market and massive inflows of capital and technology. These are helping its firms develop a range of advantages in relation to its western competitors, which in turn promotes their international expansion.



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Chinese firms are internationalising faster, and across a broader range of industries than was the case for Japanese companies, often with the strong backing of government funding. Outward foreign direct investment from China has grown significantly, partly because of the strong government push for the 'going global' strategy.

While the Japanese government worked behind the scenes to help firms export and become established in foreign markets, the government-business relationship in China is much more overt. 2004 saw a marked rise in Chinese company investments abroad, of which ninety percent was by state-owned firms.

THREE PATHS

Chinese firms follow three main paths of international expansion: organic expansion; partnerships or joint ventures; and acquisitions. The white goods producer Haier is probably the best-known example of a Chinese company that has internationalised organically, through a gradual growth in exports, first to the US then Japan in the early 1990s. Today it is one of the most international and successful Chinese firms. Only this approach characterised Japanese firms' early expansion.

Partnerships or joint ventures combines the cost advantages of Chinese companies with the brand and distribution assets of a foreign firm. Galanz is a good example. Originating in Guangdong Province, it failed to export under its own name and began to manufacture microwave ovens for foreign concerns. It is now the world's largest such manufacturer and has recently invested in a research and development centre in Seattle, to

improve its technological capabilities and is building its own brand reputation to decrease its dependence on western firms.

We should expect more mergers and acquisitions by Chinese firms to gain access to western markets, technologies and brands. Chinese television producer TCL bought the television operations of the French company Thomson for these reasons. SAIC and Nanjing Motor acquired divisions of MG Rover to gain plant equipment, manufacturing technology and vehicle designs to produce their own cars in China. But perhaps the best-known example is the

acquisition by Lenovo of IBM's personal computer division and the ThinkPad trademark in December 2004, which came with laptop production lines, product development capabilities and distribution networks. Fifty-seven percent of Lenovo is government-owned, showing that this and most similar deals are underwritten by state funds.

THREATS AND OPPORTUNITIES

The evidence indicates that, not only is China larger in almost every respect, it is rising faster, across a broader range of industries than was the case for Japan. The adaptability challenge is that much more significant for western firms and governments than it was for Britain in relation to Japan as it moved more firmly towards a focus on services.

The threats and opportunities, and the timescale over which they are evolving, are specific to each industry sector.

For manufacturing firms where cheap labour provides a clear advantage, such as cars, clothing, toys, white goods, furniture, low-end electronics and consumer products, there are obvious benefits to setting up operations in China. Western companies have followed this logic and benefited by producing cheaper products for their own home markets and selling into the growing domestic Chinese market.

For higher-technology firms, the Chinese science and technology infrastructure offers advantages from investments and collaboration in areas such as mobile telecoms, aerospace, biotechnology and software. Finally, as the regulations on foreign investors are eased, there are significant opportunities, particularly for British firms in financial services and the creative industries, to tap into growing demand in China

But across all these sectors there are associated risks of theft, loss of key assets, technologies or brands and the longer-term challenge of Chinese competitors. These are moving away from cheap manufacturing to focus on design, product-development, brand building and research and development. Western firms need to understand how their industry-specific value chains will change as a result and plan where they need to position themselves in five years' time.

This challenge connects with a more general call for western governments to identify the business sectors on which their economies rely, assess how the China challenge will affect these, and encourage the necessary change.

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