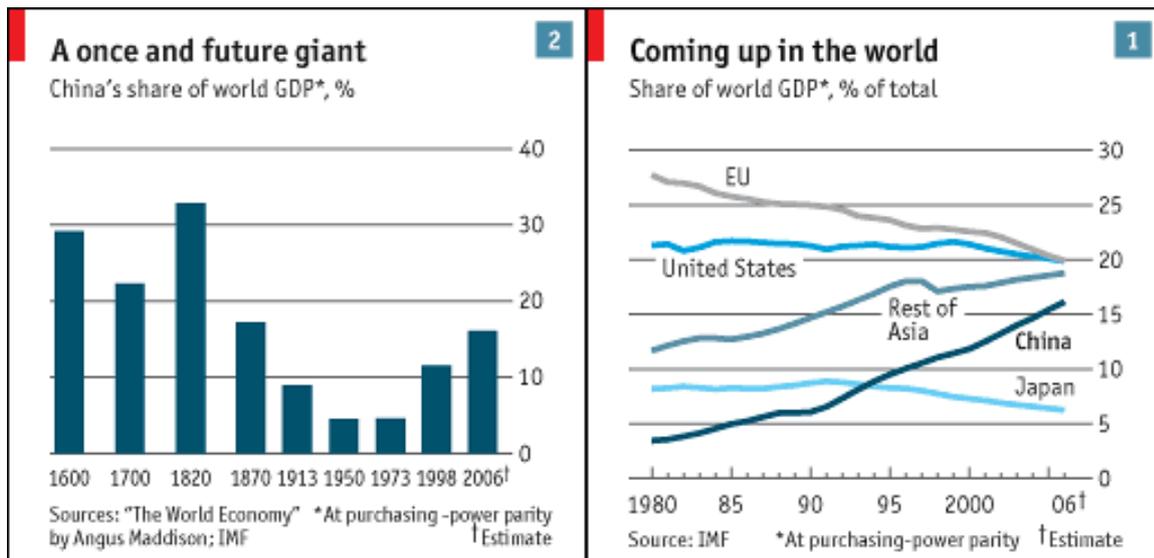


## China's Place in the Global Economy



Anyone who wants to understand world economic history must study China, the most precocious and long the most successful developer of all. Here is a country with some 7 percent of the earth's land area that supports some 21 percent of the world's population. Some two thousand years ago, perhaps 60 million people crowded what was to become the northern edge of China – a huge number for a small territory. This number more or less held over the next millennium, but then, from about the 10<sup>th</sup> to the beginning of the 13<sup>th</sup> century, almost doubled, to around 120 million. At that point came a setback, due largely to the pandemics also scourging Europe and the Middle East.; and then, from a through of 65-80 million in 1650, 200-250 million in 1750, over 300 million by the end of the 18<sup>th</sup> century, around 400 million in 1850, 650 million in 1950, and today 1.2 billion, or more than a one fifth of the world total.<sup>1</sup>

### China's Superior Self-understanding: Loss and Reclaim

It is difficult for entrepreneurs as well as for politicians to grasp who is actually faced when dealing with China and Chinese if one does not understand China's historical and cultural development over the last two thousand and more years. Chinese national and private entrepreneurial strategies all reflect like small parts of a mosaic, what sums up to a big picture if observed from some distance, the Chinese striving to reclaim its innate position as Middle Kingdom, i.e. centre of the world.

Confucianism is one of the key elements in this understanding. Confucianism had always made universal claims: the ruler was the Son of Heaven and he ruled All-Under-Heaven. True, there were 'barbarians' at the fringes of the civilized world who did not obey the Son of Heaven, but this was the result of their not yet having received the transformative influence of Chinese culture, not the consequence of anything inherent in them as race. To put this another way, China was superior to all its neighbours, but that was because Chinese culture was superior, not because the Chinese, as a race, were physically or biologically better. Until 1700 China's material culture had been unrivalled; its standard of living was among the best in the world, and inventions flowed more commonly from east to west than vice versa.

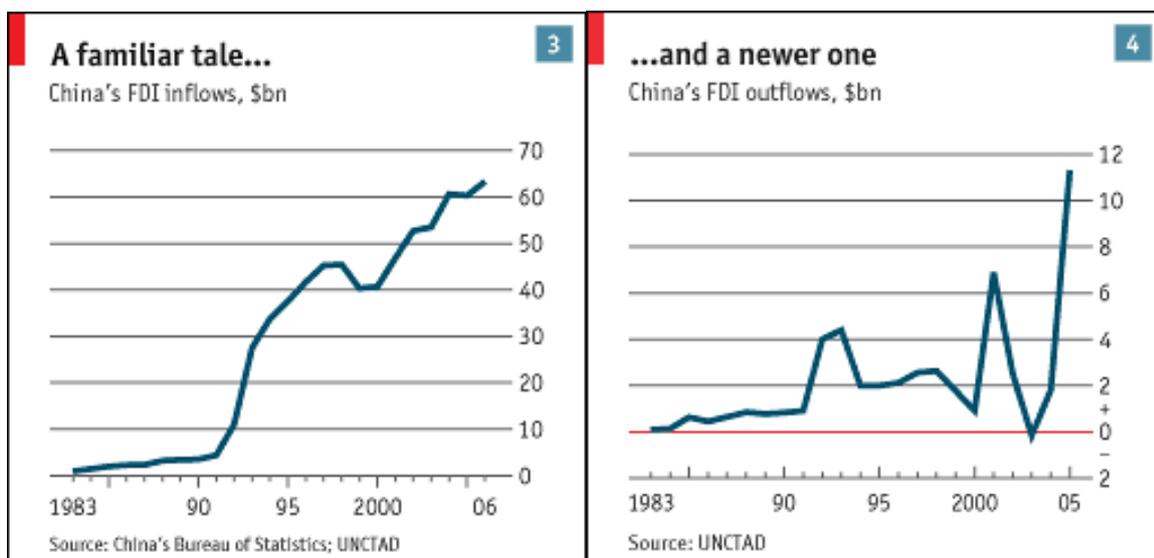
This Confucian self-understanding of Chinese as prime culture was severely damaged as the balance of world power slowly shifted in the 18<sup>th</sup> century without the Chinese taking much notice. Europeans, including the Spanish, Portuguese and Dutch, had arrived to trade at Chinese ports from the late Ming (late 1500, early 1600). From the 18<sup>th</sup> century on the British

<sup>1</sup> David S. Landes: The Wealth and Poverty of Nations; W.W. Norton & Company 1999

East India Company dominated commerce with China, and the British as the major world military power demanded a change in the way it traded with China, which eventually led to the Opium War 1840 – 1842. After the British occupied several coastal cities, including Shanghai in 1841 and besieged Nanjing, the Chinese were forced to sue for peace. The Treaty of Nanjing imposed on the Chinese to open five treaty ports to foreign trade (Guangzhou, Xiamen, Fuzhou, Ningbo and Shanghai), to abolish the government run Co-Hong trade monopoly, to fix tariffs at five percent and to pay an indemnity of 21 million ounces of silver.

By the 19<sup>th</sup> century, China found itself outmatched in material and technological resources by western nations and had practically been turned into a semi-colonial country. The defeat against the British also invited other national powers like the Japanese, French, Russian and German to seize their chunks of a wounded and falling apart kingdom. The military victory of western nations was underlined by a shift in attitudes towards Chinese cultural superiority. Europeans, including the philosophers Montesquieu, Rousseau and Hegel, were describing China as inferior to Europe because neither liberty nor progress was valued there. They contrasted China's antiquity with the modernity of Europe. A comparison that currently gains in popularity – although under opposite signs.<sup>2</sup>

### The Chinese Patent System as an Indicator of Change



The Chinese Patent System reflects in a dramatic way how China re-emerges as a dominant global player. Within not even thirty years international standards of intellectual property were adopted and are now already used as a tool to forge its economy into the powerhouse that it once was.

China established its Patent Office 1980 and promulgated its first Patent Law, which was essentially a copy of the German Patent Law, in 1985. Since then there have been two amendments due to international requirements and standardization. The first amendment was made 1992 after China's accession to the Patent Cooperation Treaty, the second in 2000 as preparation to China's WTO accession and hitherto acceptance of TRIPS standards. China has thus established a modern legal framework for the protection of technical intellectual property.

The World Intellectual Property Organization (WIPO) is often asked by political leaders of developing nations, how they can add value to their national economies by applying IP policy.

<sup>2</sup> Patricia Buckley Ebrey: The Cambridge Illustrated History of China; Cambridge University Press 2003

WIPO representatives refer to an IP Policy Guideline that contains four pillars for a successful national IP policy: 1) IP legislation in accordance with international standards 2) effective IP enforcement 3) increasing public awareness and respect of IPRs 4) National IP Strategy including public subsidies for entrepreneurs to register and apply for IPR. Many developing nations have succeeded in legislative, administrative and awareness matters, but have failed to formulate a national IP strategy and implement it. A functioning national IP strategy therefore marks a clear difference between developing and developed nations.

The Chinese government has formulated a national IP strategy in its 11<sup>th</sup> Five Year Programme 2006-2010. Although Chapter 7 titles 'Implementing the Strategy of Developing China through Science and Education and Implementing the Strategy of Strengthening China through Tapping Human Resources' there are essential innovation policy measures contained in the document. The programme outline speaks of promoting independent innovation, enhancing the capability building of independent innovation, strengthening the role of enterprises as main entities of technological innovation, intensifying IPR protection and deepening the institutional reform of the sci-tec system. These policy goals have to be read in combination with the Chinese historical and cultural background and in the awareness of the Chinese system of governance that is based on Confucian ethics.

**CHAPTER 7** Implementing the Strategy of Developing China through Science and Education and the Strategy of Strengthening China through Tapping Human Resources

Taking science and technology advancement and innovation as a major driving force of economic and social development, giving more strategic importance to developing education and fostering high-quality talents endowed with capability and integrity, deepening institutional reforms, increasing input, accelerating the development of science, technology and education, endeavoring to build an innovative nation with more intensified human capital

**Promoting sci-tech innovation and advancement**

- Promoting independent innovation
- Enhancing capability building of independent innovation
- Strengthening the role of enterprises as main entities of technological innovation
- Intensifying IPR protection
- Deepening the institutional reform of the sci-tec system

Implementing the national medium and long-term science and technology development plan, speeding up the building of the national innovation system by following the guidelines of carrying out independent innovation, making breakthroughs in priority areas, underpinning development and guiding the future, further enhancing the innovation capability of enterprises, promoting closer integration of science and technology with economy and education and improving the overall strength of science and technology as well as industrial technologies

**Priority Programs and Infrastructure of Science and Technology**

- Core Electronic Device, High-End General Chip and Infrastructure Software
- Manufacturing Technology and Process of Ultra Large-Scale Integrated Circuit
- New Generation Broadband Wireless Mobile Communication
- Top-Grade CNC Machine and Basic Manufacturing Technologies
- Development of Large-Scale Oil and Gas Fields and Coal-Bed Methane
- Nuclear Power Plant with Large-Scale Advanced Pressurized Water Reactor and High Temperature Gas-Cooled Reactor
- Water Pollution Control and Treatment
- R&D of New Transgenic lines
- R&D of Key Innovated Medicine
- Prevention and Control of Major Communicable Diseases such as AIDS and Viral Hepatitis
- Large Airplanes
- High-Resolution Earth Observing System
- Manned Space Flight and Lunar Exploration Program
- Key Infrastructure for Science and Technology

In the Chinese system of governance, statements by the leadership shape national and local policies to a degree not seen in other major trading nations. There is a singularity of purpose in China rarely found in Western governments. The pronouncements of China's top leaders have been accompanied by an amazing array of detailed policy measures at all levels of government. China already is well into a process of industrializing. Beijing has decided "to move China from an imitation to an innovative stage of production ... from 'made in China' to 'made by China.'"<sup>3</sup> When China's premier Wen Jiabao announced in June 2004 "...future competition in the world is IP competition..." and Minister of Commerce Bo Xilai in 2006 "...country's top leadership is committed to building China into an "innovation nation" in 15 years..."", then western nations have to understand that those are messages to the Chinese citizens as well as foreign countries, that China is about to reclaim its once superior position.

<sup>3</sup> Alan Wim Wolff: China's Drive Toward Innovation; Issues in Science & Technology page 54; 1 April 2007

- The third amendment of the Chinese Patent Law, which is currently being drafted and scheduled for promulgation in 2008, will for the first time not represent a reaction to international demands, but serve as a vehicle to implement the national IP strategy.
- Well organized awareness events and entrepreneurial IP training for SME executed by East Linden Science and Technology Ltd<sup>4</sup> in public mandate has been well underway since at least two years, making Austrian activities since 2006 look like feeble attempts of a developing nation.
- Intensive public funding by city governments, provincial and national authorities supports private entrepreneurs in building an IP portfolio in China and abroad.<sup>5</sup>
- The Chinese SME definition of 2500 employees does not apply for these subsidies. Even international giants like Huawei are supported with public money. European competition legislation that does not allow public subsidies for companies exceeding 250 employees seems grotesque on an international level – in spite of its justification to promote competition and a liberal economy.

### **Time to react: A call for a European patent strategy**

For a Chinese entrepreneur it is possible to apply for a patent in China for less than 500 EUR – a patent that is valid in all of China. His European counterpart can do the same for roughly 5000 EUR including translation. The core issue for Europe in a long term view though will not be that foreigners have to pay more to get a patent in China. China is not the home market for Europeans. But soon European entrepreneurs, small and large will have to compete against Chinese who built a solid IP portfolio at home and now head to foreign markets with still some financial resources to go. European companies especially SMEs might not make it that far, because they are already exhausted with applying for patents in Europe: There is still no European patent, neither a formal one nor one that can be obtained at reasonable expenses. National patents have still to be applied for even if the European Patent Office handles the international phase of registration. A patent valid in all European Patent Treaty Member States exceeds EUR 100.000.-, average expenses for seven to eight national patents sum up to EUR 40.000.-.

European innovation policy needs urgent changes. A better understanding of China as a global competitor possibly provides the necessary impetus for European decision makers to move faster.

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<sup>4</sup> 东方灵盾科技有限公司: [www.eastlinden.com](http://www.eastlinden.com)

<sup>5</sup> See 2007-03-30 AWS Master Memo

# Geschichte und Zukunft des chinesischen Patentwesens

Patentanmeldungen  
1996 - 2006

