

## **Chinese Competitiveness and Growth Sustainability**

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### **Abstract**

*In 2009, China's growth rate declined for the first time in more than a decade. Although the main reason for this fall was believed to be the 2008 recession, the Chinese economy has in fact reached a competitive crossroads where it must decide between remaining an underdog and becoming a world leader. In order to take the next step in its development, the Chinese Government and firms will have to adopt bold and innovative strategies. This paper discusses the global competition facing china and the ways in which the Chinese government and businesses can respond to this challenge in the presence of foreign firms in the local market.*

**Keywords:** Innovation, Technology, Strategy, Competitiveness.

### **1. Introduction**

China's emergence as an economic power has been one of the most important changes in the recent history of world economy. Its consistent average growth rate of 10 percent for three decades and rapid recovery from the recent global financial crisis are evidence of its stable macroeconomic foundations and strong internal economic structure. In 2008, Chinese export volume reached \$1.435 trillion, third highest in the world. In the same year China attracted \$758.9 billion foreign direct investment, seventh largest in world. IMD's World Competitiveness Yearbook (WCY) ranked China at 17 in 2008 and 20 in 2009, where the decline was caused primarily by adverse effects of the global recession on Chinese exports. China's economic history and recent global events raise important questions. Will China capitalize on the global crisis while all other advance economies are striving for recovery? Or, will it choose status quo and keep relying on investments and exports? It is worth nothing here that sticking to the status quo might not be sustainable. Crises provide opportunities for firms to innovate and enhance productivity, and the Chinese government has in its hands just such an opportunity that can improve its global standing.

It is inevitable that the developed economies will initiate a new phase of restructuring and technological innovation as soon they come of the crisis, giving severe competition to Chinese firms. Chinese firms have for a long time reaped the comparative advantages in low labor costs and control on the local market. However, the scenario has changed after China's WTO membership and foreign firms can now enter the Chinese markets and benefit from the same advantages. The Chinese firms need a winning strategy under the new world economic regime. China is continuously criticized, especially by the advanced economies, for manipulating the currency RMB, increasing growth without increasing labor wages, etc. The country is also facing such challenges as surplus labor, increasing liberalization, foreign competition, a low price regime and a culture of replication. Environmental concerns also loom large. These challenges will be crucial in near future. It is imperative for the Chinese Government and firms to innovate and sustain their uniqueness and differentiation. Only an innovation driven economy and a sound micro and macro-economic environment will sustain China's historical growth. This paper attempts to lay out the role of firms and government in this scenario and argues that they must develop innovative managerial and technological solutions if they want to sustain their growth and compete in the world market.

### **2. Theoretical Aspect of Competitiveness**

The future of China's technology and innovation will be largely determined by international competitiveness of its enterprises.

Technology is a strategic instrument in achieving economic targets and creating wealth and prosperity in developing countries, and an important profit-generating vehicle in the developed countries. Technology is defined as the use of human understanding of natural laws and phenomena to make things that fulfill our needs and desires or perform certain functions [1]. Technology represents the human need to perform tasks with greater ease, efficiency and economy. In the current flat world, competition is getting severe every day, thereby increasing demand for scarce energy resources and random human capital and putting pressure on environment in order to achieve or sustain growth. In this context technological advancement has a crucial role to play. "Technology can be adopted from abroad through technology transfer in different ways. Firstly, a multinational firm may invest in a country and introduce the advanced technology into the economy. Secondly, technology can be imported directly as capital goods or consumer products, such as advanced telecommunication technology and home computer. Thirdly, technology can be licensed from a patent holder for use in the licensee's country. Fourthly, technology can be engineered by the adopting country and suitably modified by local engineers for domestic production. Finally, technology can be secured through the establishment of international joint venture companies" [2].

Competitiveness has become a central preoccupation of both the developed and the developing countries in an increasingly open and integrated world economy. Despite its acknowledged importance, the concept of competitiveness is often controversial and misunderstood. There is no accepted definition of competitiveness and no generally accepted theory to explain it. According to one perspective, competitiveness is the fundamental determinant of the level of prosperity a country can sustain (Porter, 2005). From another perspective, competitiveness means a low unit cost of labor adjusted for exchange rates. For firms, competitiveness means the ability to compete in world markets with a global strategy (Porter, 1998a, b). The central focus of public policy must be competitiveness, despite the constant tug on the courses and opportunities to engineer spurts of success in the short term. Similarly national leaders must maintain a commitment to competitiveness even in difficult times instead of undermining it for short-term gain. At the enterprise level, competitiveness is the ability of an organization to win consistently over the long term in a competitive period. Competitive advantage requires five qualities: superiority, inimitability, durability, non-substitutability and appropriability. Core competences are combinations of resources and capabilities that are unique to a specific organization and generate competitive advantage by creating unique customer value. In order to be a source of sustained superior performance, a core competence must be distinctive, complex, difficult to imitate, durable and adaptable (Stonehouse and Pemberton, 1999).

### ***3. Steps towards Technological Capacity Building***

The government of China has for long been striving for technological capacity building. A national high-tech research and development program was launched in 1986, namely the 863 Program. Similarly, another national basic research program called 973 Program was launched in 1988. In 1994, the ministry of education formally launched the 211 Project to help the Chinese universities collaborate with high-ranking universities in the U.S. and Europe and to create comparable universities at home.

According to Narayanan (2001), a technology strategy can have four different forms: technology leadership, niche, technology follower and technology rationalizer. Moreover, inter-industry and inter-firm collaboration in technology is essential. This trend is getting more common with the passage of time as the outcome of technology strategy as well as the firm's desire to avoid daily operational competition. Take the example of Shanghai Automobiles and Volkswagen, who jointly brought the company among the top 500 in the world. Technology strategy is instrumental for sustainable competitive advantage (Li Hua, 2007). The Chinese-German technological collaboration has generated positive results, especially in developing Maglev Railway in Shanghai.

With sound policies and keen attention to the country's economy, the Chinese government is providing a sound base for the domestic market, implementing institutional reforms in connection with economic openness. The sustained economic growth produced by this liberalization is a healthy sign for future competitiveness. However, there is still a strong need for reallocating capital and labor, and fortunately the government is already addressing this issue. A further positive factor is the government's apparent commitment to decentralization which will eventually uphold good governance. Indeed, the present Chinese economy seems to be driven by a reformist political economy and a consensus on growth as a priority.

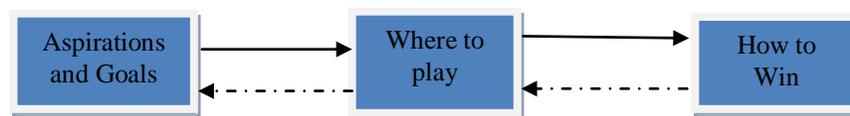
During the current global recession, the Chinese government announced a stimulus package of \$586 billions to upgrade infrastructure and increase employment opportunities in the market. This amount will boost the market and help offset the falling exports. Now the question arises as to what kind of technological base should China follow? Should it be the leader or the follower? This question will gravely influence China's future competitiveness and technological building capacity and trends.

#### 4. Philosophy and Strategy

This paper foresees the development of strong competitive environment at the national and international levels. In this regard there is an urgent need to establish research centers and international associations. It will help to determine the strategic framework and methodology and define the competitiveness of firms in China. It will also help to examine the operation and performance of Chinese industries and innovation systems. Moreover, it would aid the industry and firms to keep up with the fast moving pace of technological change and business environment. In other words it would work as a strong monitoring check on capacity building and competitive advantage. The research strategy should involve reinforcement and combination of the resources of China Association for Management of Technology (CAMOT) and its collaborators, which include a large number of research centers in China and abroad. With the help of hard and soft data, the research should aim to analyze and rank Chinese firms in terms of competitiveness.

#### 5. Transforming Firm Competition.

Success in competition lies in the distinctness of not following the others. Bold strategies are required to yield results at the micro and macro level. One such strategy can be seen as three closely interrelated sets of choices mentioned in Martin and Porter (2000).



**Figure 1. Key choices in a competitive strategy (Martin and Porter, 2000).**

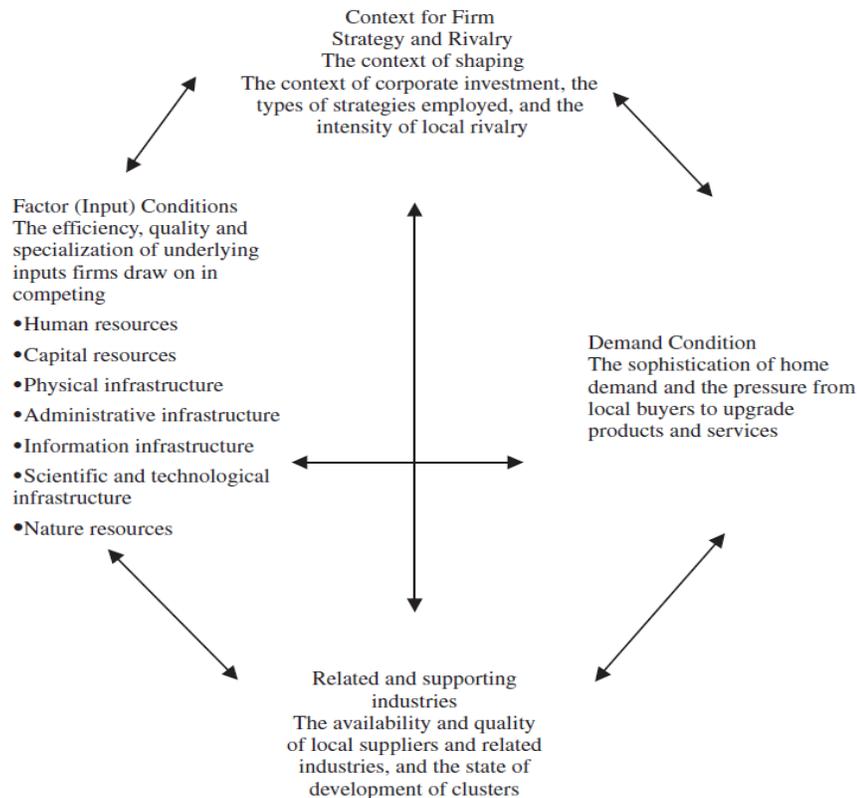
“The choices constrain and reinforce each other, for example if a firm sets its aspiration as dominating its home market that is likely to constrain its choice playing only in the home market, it would be unable to choose to win, for example, on the basis of global scale advantage in research and development. In contrast, if its foreign competitor sets its aspiration as gaining leading global market share, that would reinforce its choices of competing in market across the globe and of winning on the basis of global scale advantage in research and development and/or production” (Martin and Porter, 2000). Firms can not achieve desired results if their choices are inconsistent with each another. For example, an aspiration to be the lowest cost producer in the world will be undermined by a choice of competing only in the home market if advantages are available on a global scale.

In commodity industries, Chinese firms must develop unique processes or evolve their positions for differentiated segments in their industries. In addition, they must think of exporting their technological and managerial expertise rather than simply exporting the commodities themselves. The commodity firms must internalize the reality that they are not going to win on the basis of buying low cost raw materials and realizing all profits in the purchase price. They cannot count on inexorably rising new commodity prices to skate them on side.

The non-commodity sector, in which firms leverage uniqueness in both products and processes, must grow in relative size and importance in the Chinese economy. Progress in this sector will be critical to growth in the economy and standard of living. Progress will require a changed attitude on the part of many Chinese firms towards their strategies and their business environment. With respect to strategy, they must relentlessly seek distinctive advantage and continuously upgrade their sources of advantage. They must migrate from a set of choices that are incompatible with competitiveness to one that is supportive of competitiveness. A critical aspect of this will be to compete on a more sophisticated basis of advantage rather than one on the basis of low cost raw material or labor. On this front, Chinese firms must improve dramatically on their rating which is compatible with rising prosperity.

The quality of the microeconomic business environment is a function of four interrelated features captured in the ‘Diamond Model’ shown in **Figure 2**.

The Diamond theory is fundamentally a model of pressure and upgrading - a context that creates pressure on the firms to continuously upgrade the source and sophistication of their advantage and at the same time supports the upgrading process in a favorable microeconomic context.



**Figure 2. Diamond theory (Porter, 2005)**

The upgrading pressure is supplied by the demand condition featuring sophisticated and demanding customers, whose demand spur the local firms to innovate in order to upgrade their product/ service offerings. Particularly valuable is pressure from local customers that anticipate the nature of demand elsewhere in the world. Beneficial pressure is also supplied by a context for firm strategy and rivalry that causes local competitor to feel the need to continuously seek unique ways to better understand the needs of customers. Such a context typically requires a number of firms competing in the same jurisdiction.

## 6. Conclusion

It is not easy to compete with giant economies like the U.S., Japan and Germany that have had a strong political and economical history, but China can cope with global competition with forward and aggressive thinking. Chinese firms were protected for a long time through regional protectionism but the situation is now changing with foreign firms penetrating the local market. This scenario requires the development of national markets. Chinese firms must come out of competing locally and must compete globally through unique products and processes. No doubt this path is not easy but Chinese firms have to face this crucial time and have to be bold enough to defy the global competitive challenge. Chinese government - federal, provincial and municipal - must not rely on others but have to follow the bold and innovative strategies to provide the leading macro economic and favorable micro economic environment for business. It is necessary that both the government and the businesses accept the challenge of innovation to keep China competitive and prosperous in near future.

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