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WTO Accession and the Managerial Challenges for Manufacturing Sectors in China

Godfrey Yeung & Vincent Mok

ABSTRACT

Based on 31 case studies, this study tests the validity of four major managerial hypotheses for manufacturers in China after WTO accession. It is argued that the skills of managers will be severely tested in four specific areas after China accedes to the WTO: (1) preparing for trade disputes with their overseas competitors, (2) developing newer and higher value-added products and diversifying their markets, (3) selecting the appropriate localization strategy, (4) and upgrading manufacturing processes and work practices to comply with international (and regional) standards, as well as being aware of overseas competitors using these standards as non-trade barriers. Managers also have to strike a delicate balance to deal with these interrelated challenges under the constraints of time and available resources.

Keywords: WTO, management, manufacturing, China

Number of words: 7,739 (excluding endnotes, references and table 1)

After the Chinese delegate signed the World Trade Organization (WTO) accord in November 2001, China formally agreed on the accession treaties after 15 years of on-and-off negotiations. It has been widely recognized that China will become the “factory of the world” in the twenty-first century. Most analysts regarded this as a golden opportunity for foreign entrepreneurs to “jump on the bandwagon” by investing in China.

LITERATURE REVIEWS AND RESEARCH HYPOTHESE

Apart from general studies (e.g. Kong, 2000; Woo, 2001), much of the literature about WTO accession by China has focused on three themes. First, some
examined the impact of WTO accession on the vitality of state-owned enterprises (SOEs) in China, e.g. Blumental (1999), Liu and Woo (2001). Second, some studied the implications of WTO accession for foreign direct investment (FDI) and international trade between China and other developed countries (DCs), e.g. Wang (1999), Ianchovichina and Martin (2001). Third, some identified the competitiveness of specific industries in China, e.g., agriculture (Yamamoto, 2000; Thiers, 2002), textile and clothing (Zhong and Yang, 2000; Yeung and Mok, forthcoming), automobiles (Sun, 2000; Harwitt, 2001), pharmaceuticals (Yeung, 2002a), banking and finance (Langlois, 2001; Bottelier, 2002) and the telecommunications sector (Shen, 2000; DeWoskin, 2001), etc. All of the above studies are able to illustrate the impact of WTO accession on the Chinese economy in one way or another.

For the firm management in China, prior research has typically emphasized on the general practices of human resource management (Ng and Warner, 2000; Björkman and Lu, 2000), on the specialized study of employee motivation system in Sino-foreign joint ventures (JVs) (Goodall and Warner, 1997; Braun and Warner, 2002), and on the difficulties in managing transnational corporations (TNCs) in China (Child, 1999, 2000; Tsang, 2001). Other studies examined the characteristics of strategic decision making of Chinese managers of SOEs and privately owned enterprises. As a limited number of managers in China have experience to compete in a market-based economy (Björkman and Lu, 1999), Nolan (2001a, 2001b) argued that the innovativeness of managers have significant implications for the competitiveness of Chinese industry during the transitional period of industrial deregulation. Tan (2001) also found that proactive entrepreneurs (often described as risk takers and innovators) have high chances for survival in an evolving and changing environment. All these studies analyze the managerial problems in Chinese manufacturers in different perspectives. However, there are virtually no published papers on the managerial challenges for Chinese manufacturers with regard to WTO accession.

To fill this gap in the literature, this study investigates the major managerial challenges for manufacturers in China after WTO accession. China being one of the largest global manufacturers, its accession to the WTO has
tremendous implications for the management and development of the manufacturing sectors in China. Based on the WTO accession treaties and the existing nature of Chinese manufacturers (see the main text), we develop four hypotheses on the managerial challenges for manufacturers in China.

WTO accession will eliminate the uncertainty surrounding the annual renewal of Permanent Normal Trade Relations (PNTR) by the US, but it will not reduce the possibility of trade disputes between China and other countries for at least another 14 years, since the US/EU can still use its current anti-dumping methodology, special safeguard and product-specific safeguard mechanisms during this transitional period (see the main text) (Dong et al., 1998; Potter, 2001). Therefore, we would expect that:

*Hypothesis 1: China’s accession to the WTO will drive Chinese manufacturers to develop contingency plans for handling the potential trade disputes with international trading partners.*

Low prices and a quality product are necessary, but no longer sufficient, for success in China during the post-accession era. Intense competition for market share is expected, partly due to the elimination of local content and foreign-exchange balancing requirements for foreign-financed firms, as well as the reduction of import tariffs and the opening up of distribution channels in China (Adhikari and Yang, 2002). Foreign-financed firms in China are no longer constrained by their production contracts and other Customs documentation and thus are able to sell their products locally and at competitive prices. The subsidiaries of TNCs can also expand their retail chains in China and import their brand name products without paying for high tariffs (Yeung and Mok, forthcoming). Furthermore, Sino-foreign JVs in China may have to compete with parallel imports of the same brand products (see the main text). We would therefore expect that:

*Hypothesis 2: China’s accession to the WTO will drive Chinese manufacturers to upgrade the value-added chain of their products and to diversify their markets.*

While Chinese firms are expecting to access to advanced managerial and technical know-how by hiring expatriates, there are three possible drawbacks for
firms top-heavy with expatriates, e.g. the mismatch between expatriates’ generous remuneration packages and their job responsibilities, their less contact with the international market, and cultural conflicts (Li and Kleiner, 2001; Legewie, 2002). Chinese manufacturers may have to accelerate their localization process to address these challenges. We would thus expect that:

Hypothesis 3: China’s accession to the WTO will drive Chinese manufacturers to accelerate the localization of management.

Hypothesis 3a: The mismatch between expatriates’ generous remuneration packages and their job responsibilities will have negative impacts on Chinese manufacturers.

Hypothesis 3b: The less contact with the international market by expatriates will lead to conflicts in Chinese manufacturers.

Hypothesis 3c: The cultural differences between expatriates and locals will have negative impacts on working relationship in Chinese manufacturers.

In international business, it is pivotal for management to consider the compliance with international standards, given that the consumers in importing countries are increasingly concerned with the impact of trade liberalization on the environment and on societies (Martinsons et al., 1997). To improve the competitiveness of their products, international buyers are increasingly requesting their suppliers to comply with international standards (Yeung and Mok, forthcoming). As the WTO accession is expected to nurture further trade liberalization, in order to enhance the competitiveness of their products, Chinese manufacturers have to be aware of the compliance with international standards. Therefore, we would expect that:

Hypothesis 4: China’s accession to the WTO will catalyze Chinese manufacturers to be aware of the need for the compliance with international standards.

METHODOLOGY

To examine these issues, informal interviews with government officials and semi-structured interviews with 36 owners and managers of 31 manufacturing firms located in Guangdong and Zhejiang provinces and in the municipality of Beijing
were conducted by the authors in April-May of 2000 and August of 2001.\textsuperscript{5} The interviews and firm visits were conducted with the facilitation of various institutes in China, especially the Management Commission of the Hangzhou Economic and Technology Development Zone in Zhejiang, the Bureau for Foreign Economic Relations and Trade and the Guangdong Provincial Research Centre for Economic Development in Guangdong. It is a well-known fact that securing the appropriate personal connections is probably the most important precondition for conducting visits to firms in China. This explains why the majority of firms investigated are either located in Guangdong (16 cases) or Zhejiang (13 cases). Unsurprisingly, most of the firms located in Guangdong are financed by Hong Kong-based entrepreneurs, whilst most firms interviewed in Zhejiang are financed by Taiwanese or Japanese (partly due to their locations and historical ties).

Each interview and firm visit lasted for at least an hour and the questions were focused on empirical evidence related to the hypotheses testing of this study, viz., about trade disputes, product and market development, localization, and international standards. The field survey co-ordinators (including several government officials) accompanied the researchers during the interviews and firm visits, but they never intervened in the interviews. On several occasions, interviewees were willing to share their opinions on issues related to WTO accession with us, including criticisms against the government for being secretive and for lacking preparation for WTO accession, in front of the government officials (see the main text).

The sample firms ranged across various investment formats – wholly foreign-owned ventures (WFVs) (ten cases), equity joint ventures (EJVs) (11 cases), processing and assembling (P&As) (six cases) and locally-funded (four cases) firms.\textsuperscript{6} They also ranged across manufacturing sectors: textiles and clothing (15 cases), electrical and power appliances (five cases), beverages and food ingredients (three cases), plastics products (including toys, two cases), telecommunications, automobile components, petrochemicals, medical equipment, electronic products and packaging materials. With the exception of three smaller-size firms (two P&A clothing firms in Guangdong and another locally-funded clothing firm in Zhejiang), all of the other sample textile and clothing firms are
large-scale ones with registered capital of at least several million US dollars and employing several hundreds to thousands of workers. The samples on textile and clothing firms incorporate mainly the subsidiaries of TNCs, major sub-contractors for designer brand clothing or major department stores in the United States (US) and Europe, e.g. Kellwood (US), May Department Store, J.C. Penny, K-mart, etc. Other TNCs in the sample include Motorola, Siemens and Nestlé. The sample size is relatively small but representative of the manufacturing firms in southern and south-eastern China, especially the foreign-financed ones.

Chinese manufacturing and the WTO accession treaties will be reviewed briefly in the next section, before we investigate the major managerial challenges to Chinese manufacturers after WTO accession. The analysis will be based on the testing of four hypotheses outlined earlier: trade disputes, product and market development, localization, and international standards. The major findings of this study will be summarized in the conclusion.

BACKGROUND

Chinese Manufacturing

China has been the second most popular destination for FDI in the last nine consecutive years, behind the US. At the end of 2001, the total FDI in China was US$393.5 billion, averaging US$43.4 billion per annum during 1996-2001 (NBS, 2002). The value of FDI is expected to reach US$50 billion in 2002 (TS, 4 October 2002). With such a large amount of FDI and a large proportion of it invested in manufacturing (66% in 2001), it is not surprising that China ranked fourth as a global manufacturing power by producing US$400 billion of goods in 2000. This is equivalent to 34% of GDP in China. Manufacturing is the second largest employer (81 million workers) in China and it accounts for a significant proportion of the exports (82% in 2001) (NBS, 2002). In terms of output, China ranks first in the world on 80 products in ten manufacturing sectors, e.g. 60% of toys, sporting goods and footwears imported by the US were made in China (TS, 12 April 2002; CEI, 5 August 2002).
**WTO Accession Treaties**

According to the WTO accord signed in November 2001, the major areas of liberalization related to manufacturing sectors are as follows (White House, 2001; MOFTEC, 2001):

- **Export quotas, safeguard mechanism and anti-dumping:**
  - The deal incorporates the Agreement on Textiles and Clothing (ATC), signed in 1995, under which the Multilateral Fibre Agreement (MFA) restrictions (export quotas) on textile and clothing sector will be phased out by 1 January 2005.\(^7\)
  - The special safeguard mechanism to prevent a surge of imports will remain in effect until 31 December 2008. The product-specific safeguard which determines the “market disruption” caused by a specific product will remain in force for 12 years after Chinese accession.
  - Overseas markets maintain their current anti-dumping methodology (treating China as a “non-market economy”) in future anti-dumping and countervailing cases for 15 years after China’s accession.\(^8\)

- **Import tariffs, import quotas and licences:**
  - Tariffs will be reduced from an average of 24.6% in 2001 to an average of 9.4% (7.1% on US priority products) by 1 January 2005.
  - China will reduce the tariffs on automobiles from the current 80-100% to 25%, and automobile parts from an average of 23.4% to 10% by 1 July 2006, respectively.
  - China will participate in the Information Technology Agreement (ITA) and eliminate all tariffs on computers and computer equipment, telecommunications equipment, semi-conductors and other high-technology products by 1 January 2005.
  - Import quotas and other quantitative restrictions will increase from the current trade level of 15% per annum and be phased out no later than 2005.

- **Trading and distribution rights:**
  - Foreign-financed firms will have comprehensive trading and distribution rights in China for the first time, including of goods made in China.
  - The rights will be phased in progressively over three years.

- **TRIPS and TRIMs:**
China will implement the Agreement on Trade-Related Aspect of Intellectual Property Rights (TRIPS) of the Uruguay Round upon accession.  

China will implement the Agreement on Trade-Related Investment Measures (TRIMs). China will eliminate foreign exchange balancing and local content requirements upon accession and not enforce provisions in existing (JV) contracts that impose these requirements.

- **SOEs, taxes and fees:**
  - China will ensure that the sale and purchase of SOEs and state-invested enterprises (SIEs) are based solely on commercial considerations rather than on “government procurement”.
  - The SOEs and SIEs are regulated under the WTO Agreement on Subsidies and Countervailing Measures, e.g. no export subsidies, no soft loans, etc.
  - China will apply uniform taxes and fees to domestic-funded and foreign-financed firms.

**WTO ACCESSION AND MANAGERIAL CHALLENGES**

Based on empirical information collected from the field survey, we shall test the validity of the four hypotheses on the managerial challenges for manufacturers in China.

*Preparation for Trade Disputes*

Due to the potential disputes between the WTO accession treaties and the realities of the transitional economy in China, managers of Chinese manufacturers have to develop contingency plans for handling international trade disputes. This is especially the case when the current anti-dumping methodology treats China as a “non-market economy”, US/EU regulatory authorities can use third country reference prices to determine the existence of state subsidies or of the dumping of Chinese exports. Moreover, the US/EU’s special safeguard and product-specific safeguard mechanisms to prevent a surge of imports will not be phased out until 2008 and 2014, respectively.

The fact that China ranked first in the world on anti-dumping suits filed by her trading partners (about 490 suits covering 4,000 products, involving 30
countries and worth US$15 billion in 2002) exemplifies the urgency for managers to develop contingency measures for trade disputes (CD, 9 July 2002). But managers were not well-informed, as the Chinese central government did not distribute documents related to WTO treaties before their delegates signed the agreement in November 2001. Moreover, most managers in SMEs have limited or no experience in dealing with international trade disputes. This resulted in their reluctance to counter the anti-dumping charges by releasing sensitive cost and pricing information to the relevant authorities (Field survey, 2001). A survey revealed that more than half of the Chinese firms involved in anti-dumping charges had been reluctant to participate in foreign anti-dumping procedures. Subsequently, the Chinese firm was the loser in 80% of the cases (HKEJ, 18 December 2001:21).

It must however be emphasized that potential trade disputes do not just proliferate between China and the DCs, but also between China and less developed countries (LDCs), e.g. India has filed 51 anti-dumping suits against Chinese products (BIDI, 27 September 2002). This is partly because some LDCs relying on the exports of low value-added products are unable to beat the bargain basement prices charged by Chinese firms. For instance, Mexican manufactures make T-shirts for US$1/each and tennis shoes for US$38/pair, while their Chinese counterparts offer more value for money by charging US$0.20/each and US$13/pair, respectively (SCMP, 23 August 2001). Moreover, some LDCs complain of illegal shipments of Chinese goods attempting to evade import tariffs. It is estimated that up to half of all garments sold in Mexico are contraband. Some unscrupulous firms import finished garments into Mexico (but claim in the documents that they are partly finished) and then sell them locally or export them to the US (SCMP, 2 May 2001). In fact, some LDCs may want an extension of export quotas to protect their industries from Chinese imports, e.g. in September 2002, Turkey imposed three-year quotas on imports of Chinese electric fans, spectacles frames and glasses (BIDI, 29 September 2002).

Since the Chinese government may not be well-prepared for WTO accession, managers of Chinese manufacturing firms face an uphill battle in any future trade disputes. China had not established any specific department to deal
with potential trade disputes before November 2001, and the Ministry of Foreign Trade and Economic Co-operation (MOFTEC)’s legal team remains understaffed (SCMP, 2 November 2001; CD, 8 October 2002). The lack of co-ordination within, and between, different bureaux to administer foreign trade policies efficiently, further undermines preparations to counter anti-dumping cases (Potter, 2001:600-601). For instance, there are no Customs officers to follow up the case when the officer in charge is on annual or sick leave. Worse still, it is not uncommon for two or more bureaux in the local government to have their senior officers on annual leave simultaneously (especially during the Chinese New Year). In arbitration cases, managers only meet with a “wall of silence”, receiving advice such as “I don’t deal with this; come back in two weeks when Mr. X is back!” (Field survey, 2001). This can cost Chinese-based firms dearly as managers are unable to deal with trade disputes without the full support of the corresponding government bureau.

Furthermore, some managers simply do not have the resources to counter anti-dumping charges. In fact, the cash flow of small and medium-scale enterprises (SMEs) is so tight that their managers simply cannot wait for the outcome of the arbitration of a trade dispute (Yeung, 2002b). Generally, most managers in large-scale foreign-financed firms know how to navigate through the minefield of anti-dumping allegations (Field survey, 2001). Individual companies can apply for “market economy” treatment from the importing country’s regulatory authorities. But the transaction cost of doing so is very high, as it demands on-site inspection by the regulatory authorities. Thus, only 16 Chinese firms have been granted “market economy” treatment by the European Commission (CD, 11 October 2002). The two recent instances in which Chinese firms successfully countered charges of anti-dumping illustrate the high costs of fighting such disputes. After the Canadian authorities imposed a 57% anti-dumping duty on Fuyao Glass Industry Group’s automotive replacement windscreen in February 2002, the company set up an anti-dumping office and hired US-based lawyers to prepare for the appeal. The Canadian International Trade Tribune eventually rejected the anti-dumping charge, saying that the higher selling price in China was part of the original equipment manufacturer's (OEMs) contract, and their lower selling prices in Canada represented the market price for
the replacement market. Despite the fact that this case was resolved quickly, Fuyao spent more than three million yuan in legal expenses alone (CD, 10 September 2002). The second instance involves the TV manufacturers in China. In 2002, the EU eventually agreed to lift the 44.6% anti-dumping duty on seven major TV makers in China after 15 years of on-and-off investigation. But the Chinese Chamber of Commerce must keep track of exports on a daily basis and submit a fortnightly report to the EU to ensure that the products are selling at the minimum prices and not exceeding the quotas (CEI, 13 September 2002). Without support from the domestic market, it is likely that most of the TV makers will be unable to survive the 15-year-long anti-dumping investigation. No matter how efficient the WTO resolution mechanism is, the involvement of trade disputes will definitely divert a firm’s valuable resources from other priorities, e.g. product and market development. This will obviously tests the skills (in keeping up the morale of the workforce) and patience of managers to their limits.

The above discussions support the hypothesis on trade disputes. Due to the current anti-dumping methodology and the safeguard mechanisms that can be initiated by trading partners, and the lack of proactive preparation by the Chinese government to engage in potential trade disputes, Chinese manufacturers have to develop contingency plans for handling the potential disputes with international trading partners after the accession of WTO.

Product and Market Development

To minimize the effects of trade disputes and to pre-empt the expected increase in non-trade barriers against Chinese exports, Chinese manufacturers are tooling their products to climb up the value-added chain and diversifying their markets. Managers are investing more resources on improving productivity and quality control, developing new products and markets, and so forth. To boost productivity, most managers are introducing some form of incentive package for their staff, e.g. the “production contract” where management teams can earn a bonus if they are able to delivery shipments on time and within the pre-determined costs. Others invest in new equipment to improve the productivity. For instance, the Tianhai Decorative Warpknitted Fabric Co. in Guangdong has imported 30 computerized multi-bar raschel machines for the newly developed 44-inch wide lace fabric, and
became the largest specialized lace manufacturer in China. In cellular phone manufacturing, Motorola’s EJV in Hangzhou went from a complete reliance on imported components to sourcing half of its components locally, reducing costs and facilitating “Just-in-Time” (JIT) production. Most well-funded textile firms in China are focusing their R&D resources on producing higher value-added products, e.g. waterproof and ventilated fibres, dirt-repellent fibres, silk-like fibres, suede-like fibres, etc. (Field survey, 2000, 2001).

In the beverage industry, the Wahaha Group is an example of a firm that is developing new brand names and building its own distribution channels. It was established by three managers from a SOE with 140,000 yuan who built up the brand name through children’s drinks fifteen years ago. A number of EJVs were subsequently formed and the group now has 55 bottling plants (employing 30,000 workers) and accounts for 30% of the Chinese beverage market. The group has diversified into fruit drinks, tea, mineral water, etc. In 1998, it launched the “Special Coke” (Feichang Kele) and it now ranks third in the Coke market in China, achieving a “comparable market share with that of Pepsi Cola” (Coca Cola ranked first) (Field survey, 2001). In the automobile components sector, the privately-funded Qianjian Spring Factory in Hangzhou is an example of a firm developing a niche market by strictly controlling quality and integrating into the supply chain of automobile assemblers. It was established by Mr. Yong-sen Zhang in 1988 with the tiny of 800 yuan. By 1996, the firm was securing OEMs contracts on suspension and engine springs from major automobile assembly plants in China, e.g. Shanghai Volkswagen, Guangzhou Honda, First Automobile, etc. In 2000, the firm was employing 120 workers and recorded sales value of 28 million yuan (Ibid.).

No matter how hard managers try to develop their products, they cannot avoid the fact that there is still a big gap between TNCs and Chinese firms in R&D capabilities. The president of TCL, one of the biggest TV manufacturers in China, frankly admitted that their cost efficiency is still well behind that of the TNCs and many of their products use patents and technology belonging to TNCs (SCMP, 30 October 2001). Moreover, Chinese manufacturers do not have the capital reserves to endure a prolonged period of heavy losses when attempting to
conquer a new market, compared with the deep-pocketed TNCs. These points have already been meticulously documented by Nolan (2001a, 2001b) and Yeung (2002a).

Instead of being constrained by limited R&D capabilities, when trying to persuade decision-makers at a TNC’s headquarters that China is not just a manufacturing base for labour-intensive and low value-added projects, managers of JVs in China are encountering issues of intellectual property rights (IPRs) related to product development. The crux of the issue is with \textbf{which JV(s)} should the TNC invest the capital and technology to develop the new products. Being the minority owner (with 40\% of the equity), Motorola (US) is reluctant to invest capital and transfer the latest manufacturing technology on CDMA phones to the EJV in Hangzhou. Moreover, Motorola worries that its IPRs will be infringed, should it use the EJV as the launch pad for its latest products. As the EJV’s Deputy General Manager commented, “The product can be pirated even before it is launched officially!” (Field survey, 2001). The uncertainty surrounding new product development not only affects the long-term development strategy of the EJV, but also the retention of the managerial and technical staff (\textit{Ibid.}).

The above discussions lend support to the hypothesis on product and market development. To minimize the effects of potential trade disputes and to improve the product competitiveness, Chinese manufacturers are upgrading the value-added chain of their products and to diversify their markets.

In reality, the drive of manufacturers for product development may lead to other managerial issues at firm’s level. The experience of Siemens’ EJV in Hangzhou illustrates what can happen when senior managers differ over product development strategy. Being the majority owner holding 51\% of the equity, Siemens appointed a German engineer as the General Manager when the EJV was established in 1995. The (Chinese) Deputy General Manager realized that there was a golden opportunity for the firm to introduce the GIS high voltage electric circuit-breaker to China. Despite gaining approval from headquarters for the adoption of Siemens’ technological “crown jewel”, the General Manager in Hangzhou refused to adopt the technology. In 2000, Siemens established another EJV in Shanghai using the GIS manufacturing process. The new EJV has already
recorded sales of 150 million yuan in the first nine months of its operation. It is expected the new EJV in Shanghai will soon become the most profitable of Siemens’ 54 JVs in China (*Ibid.*).

As the head of what is currently the most profitable Siemens’ JV in China, with 550 million yuan of sales and 100 million yuan of profits in 2000, it can be argued that the (German) General Manager is behaving relatively “conservatively” by focusing on the cost efficiency of the existing production line (i.e. by regarding China as a low cost manufacturing base for uniform products) rather than by taking the “unnecessary risk” of introducing new products without a strong existing market demand (*Ibid.*). Paradoxically, the “production-oriented” managerial approach undertaken by the General Manager implies that he may be detached from the potentialities of market demand due to the lack of a harmonious and well co-ordinated working relationship with his Chinese colleagues (see below). In stark contrast, the (Chinese) Deputy General Manager understands that the long-term competitiveness of the firm is based on its ability to introduce innovative and higher value-added products to target a niche market. This is especially the case after China’s entry into the WTO, where the firm is facing intense competition locally (including other Siemens’ JVs) and internationally (including the parallel import of Siemens’ products). The bottom line is that he has little to lose but everything to gain, either staying in Siemens or joining other companies, should his plan succeed. Nonetheless, this may not be the case for the General Manager. Despite his international experience and technical expertise, his job opportunities are more limited than those of his Chinese counterparts because of the increasing tendency by foreign firms to localize their management in China (see below).

“Globalized” Vs “Localized” Localization

The localization of management is receiving greater attention from owners and general managers of Chinese manufacturing firms after WTO accession. While expatriates can bring advanced managerial and technical know-how to a firm, there are three possible drawbacks for firms with a high ratio of expatriates on their payrolls.
First, firms have higher ratios of expatriates may have difficulty localizing their senior managers. Expatriate staff in China often enjoy much more favourable remuneration packages than those of their local counterparts with similar qualifications and job responsibilities, e.g. the remuneration package of an American expatriate (US$300,000/year) is six times higher than that of a Chinese executive (Li and Kleiner, 2001:51). The perceived lack of promotion opportunities, “discriminatory” remuneration packages, and the abundance of job opportunities in the market all contribute to the high turnover rates of mid-ranking local managers in JVs (Lasserre and Chin, 1997:94; Goodall and Burgers, 1998). As the average tenure for mid- to high-level Chinese managerial staff was 8-12 months, the lack of continuity of the management team interrupts the firms’ daily production (Field survey, 2001; Chan and Cui, 2002:15). This finding is consistent with the hypothesis 3a.

Second, expatriate managers stationed in China may have less contact with the market. They may not have the incentive or ability to follow the most up-to-date market information, partly because of their “temporary” job assignments in China (Li and Kleiner, 2001:52). Quite often, this leads to conflicts between managers of the marketing department (who are on the front lines of the market) and other operational departments when their information about the (international) market demand differs. This is demonstrated by the refusal of the General Manager in Siemens’ EJV to adopt the advanced manufacturing technology that was mentioned previously (Field survey, 2001). The above evidence supports the hypothesis 3b.

Third, cultural differences and language barriers may contribute to the lack of a harmonious working relationship between expatriates and locals. Some expatriates (including overseas Chinese) may be rather self-centred and even arrogant in dealing with their local counterparts, i.e. in thinking that they need to “teach” their Chinese colleagues everything from day one, and so on. Expatriates also tend to sack workers who either under-perform or violate company rules, on the spot and in front of other workers, whilst the local managers tend to talk to the workers concerned privately (to “save their face”) and either give them a “second chance” or ask them to resign. This is illustrated by the experience of a
European-based TNC’s EJV in China, where the wife of an expatriate “scolded the Chinese workers and threatened to sack them publicly, despite the fact that she is not a staff member of the JV or of the European-based firm” (Ibid.). Due to the cultural conflicts between the expatriates and the locals, six of the seven local engineers quit the US-financed manufacturing firm after they had helped the firm to acquire ISO9002 qualification (Li and Kleiner, 2001:53). This finding validates the hypothesis 3c.

The above discussions provide a *prima facie* case to support the hypothesis on localization: foreign-financed firms are accelerating their localization of management in China, especially after WTO accession.\(^{15}\) It must be emphasized that localization in China is more complicated than simply being a case of replacing expatriates with local talent.\(^{16}\) In practice, localization in China can be generalized into at least two categories, according to the work experience and educational background of managers: “*globalized localization*”, where expatriates are replaced by overseas Chinese or Mainland Chinese with overseas experience, and “*localized localization*”, where expatriates are replaced by mainland Chinese who have worked their way through the ranks but who possess limited or no overseas experience. This complex situation can be illustrated by the experience of two JVs in China.

The experience of the Siemens’ EJV exemplifies the need for “globalized localization”, due to the detached market information of the expatriate General Manager. Partly due to cultural differences, the General Manager questioned the validity of his Deputy (who is a mainland Chinese with extensive overseas experience) because he spent so much time visiting and dining with potential customers all over China. Yet the Deputy General Manager complained that his European superior did not understand the way of doing business in China: “He expected that I only have to cultivate *guanxi* with the people who are in charge and with whom we are doing business, but not with my other ‘old friends’” (Field survey, 2001). In other words, there is a need to cultivate personal connections, *guanxi*, with potential as well as with existing customers. This is vital for the competitiveness for the EJV after WTO accession as “there are few differences in
terms of technicality between the products manufactured by this EJV and other TNCs, so the established customer network can make a difference” (Ibid.).

The experience of a US-financed EJV demonstrates the need for “localized localization” due to the lack of a harmonious working relationship between overseas Chinese and local managers. During our visit to the firm, the (Chinese) Deputy General Manager openly criticized the present trend of recruiting young Chinese with freshly minted overseas MBAs: “Their senior positions and high salaries are based on their university diplomas rather than on their proven job performance” (Ibid.). This phenomenon suggests that the existing trend of recruiting foreign-educated or overseas Chinese without working experience in China may backfire, as this will lead to resentment and infighting rather than cooperation between managers. Freshly minted overseas MBAs or those with years of international experience may have fresh mindsets and ambition, but their lack of practical working experience in China may also lead to direct conflict with the conservative “old guards”, who have risen through the ranks after decades of working. This is especially the case when the localization process is implemented too quickly, as illustrated by the food and beverage processing EJV of Nestlé in Guangdong. After implementing the localization policy in 1997, the new management team took over the firm too quickly, and the lack of trust between the (new) top and (old) mid-ranking managers subsequently resulted in a number of internal wrangles and even allegations of rent seeking, nepotism, etc. (Field survey, 2000). If this phenomenon of infighting is widespread in China, this may have tremendous implications for the recent drive by Chinese firms (including privately and state-owned) to recruit overseas Chinese to improve their competitiveness.

The excess demand for experienced local managers in China is expected to increase after WTO accession. A survey revealed that 40% of JVs in manufacturing, retailing, banking and telecommunications sectors intend to localize their senior executives in China (TST, 20 April 2002). The use of head-hunters to poach experienced managers from competitors has already contributed to wage inflation (specifically, inflation of the remuneration package). With the expected rush among foreign investors to gain a foothold in China, “bidding war”
for experienced and qualified local managers will heat up. If this “bidding war” goes unchecked, it may lead to a vicious circle of “wage inflation and job-hopping”. This would not only partially offset the cost advantages of localization, but also disrupt the long-term development strategies of firms in China. This may also be of importance if the firms have to comply with international standards audits.

**Compliance with International and Regional Standards**

Apart from issues outlined explicitly in the WTO accession treaties, the proliferation of international and regional standards in the global manufacturing sectors has far-reaching implications for the management of Chinese manufacturing firms (Yeung and Mok, forthcoming). In addition to the ISOs, which is normally (though wrongly) regarded as the benchmark for quality and environmental friendliness, managers of Chinese manufacturers also have to be aware of the SA8000 and other regional standards that may be required by importing countries.18

Securing the **ISOs certification** is a challenge for managers. As of 2001, only seven out of 31 interviewed firms were in compliance with ISO9000. All certified firms are either publicly listed companies or subsidiaries of TNCs. Even Motorola’s EJV was only certified as ISO9000 compliant in 1999, three years after its establishment (Field survey, 2000, 2001). This can probably be explained by the fact that the implementation of ISO standards demands a new mindset of managers and workers. Despite the managerial challenges, most managers are willing to train their workforce to achieve ISO9000 certification, partly to fulfil their customers’ requirements and partly to improve quality control processes. The systematic documentation demanded by ISO9000 assists the firms in maintaining the quality of their products at a pre-determined level (*Ibid*).

As with ISO9000, ISO14000 not only demands detailed and systematic documentation but also focuses on environmental management. Many managers are reluctant to implement the ISO14000 standard as it demands tremendous investment in environmentally friendly equipment, and on monitoring and measurement devices to ensure that the emission of pollutants is minimal, etc. The
investment can be prohibitively high for some managers. This is illustrated by the Qianjian Spring Factory mentioned previously. To keep the OEMs contracts, the firm not only has to invest heavily on environmentally friendly equipment, but also has to retrain its workers to document each batch of products systematically. This will however impose tremendous pressure on the cash flow of this SME, in addition to the competitive pressure of the significant reduction in import tariffs for foreign springs. In the case of Motorola’s EJV, it was not yet ISO14000 compliant as of 2001 (but the manager planned to get the certification “soon”) (Ibid.).

Regarding social accountability, SA8000 covers the International Labour Organization’s Conventions on Labour Rights, the Universal Declaration of Human Rights, and the United Nations Convention on the Rights of the Child (SAI, 1997:4-8). Even if the manager is willing to adopt the system wholeheartedly, it is very costly to fully implement the SA8000. To pacify customers and ensure that “scandals” on child labour and “sweatshop” will not be publicized by labour rights groups, a number of major US/EU department stores have insisted that their suppliers and subcontractors to adopt SA8000 or acquire similar certification. For instance, the May Department Store (US) has a special Asia-China Division to scrutinize the working environment of its clothing subcontractors in Asia. The Director of a sub-contractor privately admitted that “it is impossible to fully fulfil all the requirements laid out by the SA8000 certification. The production costs are simply too high to remain competitive while doing so.” (Field survey, 2001). This is especially the case for overtime work, where the standard imposes a limit of 12 hours of overtime per week on top of a maximum 48 hours of regular shifts (SAI, 1997:6). Due to the short product cycle of the clothing, footwear and toys markets, it is very costly for subcontractors to employ and train more workers during the period of peak market demand and sack them during the period of low demand. This explains why overtime work is very common in China in firms producing clothing, toys and shoes, regardless of their size. This is exemplified by the experience of Taiwanese-financed Chung Hoo Shoes Factory in Guangdong, the sub-contractor for Converse and Skechers. The firm was stripped by SAI from its approved lists of certified factories in 2000 after their 3,000 workers were found to have
regularly exceeded the working limit of 60-hour-per-week. The Marketing Manager for C.D. Star, which owns the factory, complained that “being SAI-certified … has made us a target.” (FEER, 10 May 2001:40-41).

Moreover, it is very difficult, if not impossible, for the firm to ensure that there is no child labour in the firm, partly due to the fact that a large number of workers are involved, most of them are migrant workers about whose dates of birth the local Public Security Bureau lacks accurate information. The widespread availability of false identity cards in China further hampers the process of verification. Probably the most difficult item of SA8000 to achieve is the demand faced by certified firms to ensure that their suppliers and sub-contractors are conforming to the same standards of social accountability (SAI, 1997:7). In reality, it is too costly to demand that all suppliers implement SA8000, as there are dozens of major suppliers for a single firm. Managers of large-scale firms may be able to use their market power as leverage on their major suppliers. Managers of SMEs however simply do not have the market power to impose any control over their suppliers, other than on product requirements.

The above discussions support the hypothesis on international standards. In reality, Chinese manufacturers not only have to aware the compliance with international standards, but also have to aware that some importing countries may apply other regional standards, which may impose more stringent requirements. This is especially the case for the so-called “green standards” or even the more broadly defined “Technical Barriers to Trade” (TBT) (WTO, 2002c). In China, only 17 out of 21,000 textile and clothing firms have received the “green certificate”, which allows their products to be exempted from the stringent inspections. Other firms without the relevant certificates may have their products returned, e.g. in December 2001, 300,000 jackets were returned to China from Europe because the metal in the zip did not meet the EU’s safety standards. It is estimated that about 15% of textile and clothing products in China did not fulfil the “green standards” and this affected about US$8 billion of exports (CEI, 14 January 2002; SCMP, 7 January 2002). For those factories without the relevant certificates, the buyers of their products will have to budget for the higher transaction costs of stringent inspections by importing countries. This is
equivalent to the lowering of a firm’s competitiveness. Another challenge for managers is the common existence of counterfeit “green” products. They have to ensure that when purchasing equipment, they will really able to fulfil the stringent requirements outlined by the ISO14000 or other “green” standards. They also have to “fight” counterfeits of their own products, which may sabotage their hard-earned reputation from investment on expensive, environmentally friendly equipment and retraining of workers, e.g. the Chinese government discovered that 90% of 250 products in Shanghai and Guangdong, proclaimed as being environmentally, were counterfeits (SCMP, 7 January 2002).

CONCLUSIONS

While we acknowledge the firm-specific limitations of our study, the empirical evidence presented above can provide a prima facie case to support the four research hypotheses on the managerial challenges for Chinese manufacturing. The tentative conclusions of this study are summarized in Table 1.

[insert Table 1 about here]

The first hypothesis – China’s accession to the WTO will drive Chinese manufacturers to develop contingency plans for handling the potential trade disputes with international trading partners – is verified. WTO accession will not reduce the possibility of trade disputes between China and other countries for at least another 14 years, where importing countries can still use their current anti-dumping methodology (treating China as a “non-market economy”), special safeguards and product-specific safeguard mechanisms during the transitional period. As a number of LDCs are relying on low value-added exports, in which Chinese manufacturers are more competitive, managers will have to develop contingency measures for trade disputes with DCs and LDCs (Table 1). Apart from accepting the hypothesis on trade disputes, this study suggests that managers are likely to encounter an uphill battle in any future trade disputes, since neither they nor the Chinese government is well prepared for the accession. No matter how efficient the WTO resolution mechanism for trade disputes, the reality is that managers are either without the capital to fight allegations of dumping, or will
have to divert valuable resources from product and market development, which will have significant implications for the long-term competitiveness of a firm.

The second hypothesis – *China’s accession to the WTO will drive Chinese manufacturers to upgrade the value-added chain of their products and to diversify their markets* – is supported. Managers are upgrading and localizing the value-added chain of their products and diversifying their markets to minimize the potential effects of trade disputes and improve the firms’ competitiveness from the onslaught of competitive products manufactured or imported directly by TNCs and their subsidiaries. Such threats will arise due to the lowering of import tariffs and the opening up of distribution channels in China (Table 1). In addition to the competition from direct and parallel imports, managers of Sino-foreign JVs will have to persuade their bosses at headquarters to transfer advanced manufacturing technology for the latest products to the JVs, as China is not just a cost-effective manufacturing base for labour-intensive, low value-added products alone. Moreover, they have to guard the transferred technologies from piracy, and thus their competitive advantage over their competitors.

There are support for the third hypothesis: *China’s accession to the WTO will drive Chinese manufacturers to accelerate the localization of management*. In fact, WTO accession not only accelerates the processes of management localization, but also highlights the importance of “getting the strategy right” – to decide on the appropriate localization strategy and the pace of its implementation. For general managers and human resources managers, the goals are to maintain a harmonious working relationship between expatriates and locals, and between overseas Chinese and mainland Chinese, and to retain the motivation and loyalty of the existing mid-ranking managers and prevent them from being headhunted by competitors (Table 1). Due to wage inflation caused by the “bidding war” for experienced local managers, they also have to be aware that localization will not necessarily lead to reductions in executive labour costs.

The fourth hypothesis – *China’s accession to the WTO will catalyze Chinese manufacturers to be aware of the need for the compliance with international standards* – is confirmed. Moreover, this study suggests that managers have to strike a balance between fulfilling international standards and
maintaining a product’s competitiveness (Table 1). This not only involves the retraining of the workforce, but also requires the implementation of corresponding complementary policies by the government, e.g. regulations on migrant workers. Apart from the high costs of implementing international standards (which partially offset the low nominal labour costs), some importing countries may use these standards as non-trade barriers to protect their local industries from “hollowing out” by Chinese products. This is especially the case for the TBT or “green standards”, where each importing country or region can have their own regulations and standards and pursue the “necessary measures” to enforce them. The transaction costs for managers to comply with these national standards are even higher than for the international standards.

All in all, managers of manufacturing firms in China have to strike a delicate balance in dealing with these challenges under the constraints of time and available resources. It must be emphasized that these four categories of challenges are interrelated, and one should not focus on one challenge without paying attention to the possible implications for others. For example, the policy for product development and the policy for localization may not complement each other. The drive for localization demands cutting labour costs, while the drive for R&D demands engineers and product designers with innovative ideas. This is one of the reasons why a number of firms are recruiting overseas Chinese, i.e. “globalized localization”. With their overseas experience, “overseas Chinese” are presumed to be more innovative than local talents, but are also more expensive. Partly because of the “overseas” experience of the newly recruited Chinese engineers, general managers are encountering another potential challenge in the form of trade disputes. Sometimes, a “big-hit” in the international market may invite “tactical” lawsuits filed by competitors. Other foreign competitors may also persuade their countries’ regulatory authorities to adopt a new set of national standards to forbid the import of a newly developed product. Obviously, the managerial skills of managers of manufacturing firms in China will be severely tested after China’s entry into the WTO.

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NOTES

1. For accounts of the historical background to, and the politics surrounding the WTO accession, see Lai (2001) and Fewsmith (2001).
2. In this study, “Chinese firms” or “Chinese manufacturers” is a generic term referring to both foreign-financed and locally-funded manufacturing firms located in mainland China.
3. The PNTR status entails levying the same tariffs on Chinese imports as on the imports of the US’s other major trading partners. The bilateral deals between China and the US are “multi-lateralized” to all WTO members.
4. The bureaucracy associated with production contracts and other import documentation has been discussed by Yeung and Mok (2002).
5. The 36 interviewed manufacturers and their positions are as follows: four owners, three Presidents, one Vice-president, 13 General Managers, three Deputy General Managers, two Financial Managers, nine Factory/Production Managers and one external consultant for a textile firm.
7. China was excluded from the ATC before joining the WTO (Ianchovichina and Martin, 2001:10).
8. The Agreement on Implementation of Article VI of GATT 1994 (The Anti-Dumping Agreement) allows importing countries to take action against dumping (WTO, 2002a).
9. The TRIPS regulates the trading of products with ideas and knowledge involving copyrights, trademarks, patents, undisclosed information (including trade secrets), etc. (WTO, 2002b).
10. Michalopoulos (2001:189) argues that “[t]he WTO agreements have no explicit requirement for member states to be market economies.” If China is admitted into the WTO with the status of a “transitional economy”, the regulatory authorities should compare the production costs locally (or the representative export price of the product to a third country) when determining whether a firm is guilty of dumping (WTO, 2002a).
12. Readers interested on the business development of Coca-Cola in China can refer to Nolan (1995) and Mok, Dai and Yeung (forthcoming).
13. Li and Kleiner (2001:53) suggest that the institutionalized differential power often protects the expatriates even they are less competent than the locals. Braun and Warner (2002:569) reveal that most TNCs in China do not adjust their performance appraisal systems according to Chinese cultural norms.
15. Two recent surveys also revealed that there is a global trend of importing fewer expatriates, and that the sky-high remuneration packages and monetary incentives for expatriates could be coming to an end in China (SCMP, 16 September 2002; TST, 20 April 2002).
16. Conventionally, localization is defined as replacing expatriates with local talent, together with the delegation of decision-making authority to local executives in a planned manner to assure continuity, so as to achieve the firm’s objectives (Wong and Law, 1999).
There is vast amount of literature on the significance of guanxi in doing business in China despite its high transaction costs. Among others, see Yeung (2001) and Davies et al. (2003)(forthcoming).

Developed by the International Organization for Standardization, ISOs are generic management system standards. ISO9000 is concerned with “quality management” (i.e. whether the firm has done everything to ensure that its products conform to the customer’s requirements), while ISO14000 is about the “environmental management system” (i.e. whether the firm has done everything to ensure that a product will have the least harmful impact on the environment during production or disposal) (ISO, 2001). Designed and monitored by the Social Accountability International, Social Accountability 8000 (SA8000) is focused on the “social accountability” of the firm’s activities (SAI, 1997:4).

By law, workers are not allowed to work more than 11 hours/day. However, it is not uncommon for workers in Guangdong to work up to 18 hours/day between July and September to fulfil Christmas orders from McDonald’s, Mattel, Disney, etc. This partly explains the high number of industrial accidents in China (SCMP, 29 October 2001, see also Yeung, 2001:183-188).

“Green standards” is a set of technical standards to protect the importing country’s environment, which should, in principle, be covered by the ISO14000. TBT is a set of technical regulations and standards that importing countries consider appropriate to protect the health and safety of their citizens, animals, plants and the environment, etc. The WTO Agreement on Technical Barriers to Trade aims to ensure that regional technical standards for imports do not create unnecessary obstacles for trade, but it does not prevent member countries from taking “necessary measures” to ensure their standards are met (WTO, 2002c).

The dispute between BYD in Shenzhen (the largest maker of rechargeable batteries in China) and Sanyo Energy (US) (the subsidiary of Sanyo Electric) serves as an example. Sanyo Energy recently filed a patent infringement lawsuit against BYD. Analysts suggest that this actually reflects a desperate bid by Sanyo Energy to halt the defection of its customers to BYD, after the Shenzhen-based firm became the largest supplier of lithium ion batteries to Motorola and then won contracts from Nokia (TS, 26 September 2002).
Table 1
WTO ACCESSION AND MAJOR MANUFACTURIAL CHALLENGES FOR CHINESE MANUFACTURING SECTORS

<table>
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<th>Managerial challenges</th>
<th>Remarks</th>
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| Preparing for trade disputes | • To become familiar with the procedures on dealing with allegations of dumping and other trade disputes with DCs or LDCs under the WTO resolution mechanism  
• To develop contingency measures for trade disputes  
• To maintain cash flow and production while the firm is appealing against dumping duties imposed by importing countries  
• To co-ordinate with local and central governments on investigations and to lobby for their support |
| Developing products and markets | For OEMs or sub-contractors:  
• To upgrade and localize the value-added chain of their products, given limited capital and R&D capability  
• To develop one’s own brand name  
• To develop niche markets, either locally or internationally  
For JVs:  
• To persuade headquarters to transfer advanced technology and the latest products to the JVs  
• To protect the IPRs (manufacturing processes and technologies associated with the new products) from piracy  
• To compete with imported products (from other TNCs), including parallel imports of products of the same brand |
| Choosing the best localization strategy: | • To maintain a harmonious working relationship between expatriates and locals, i.e. to minimize potential conflicts due to differences in culture, language, or management style  
• To maintain the loyalty and motivation of the local mid-ranking managers and the continuity of the management team  
• To decide on the localization strategy (“globalized localization” Vs “localized localization”) and the pace of its implementation (the transitional period between the new and old management teams)  
• To prevent the vicious circle of “wage inflation and job-hopping” |
| Complying with international and regional standards | • To strike a balance between fulfilling international standards and maintaining a product’s competitiveness, including to re-train workers to handle new work practices complying with international standards and yet to keep costs down  
• To secure existing OEMs / sub-contracting deals while preparing for certification  
• To persuade major customers that it may not be possible to fully implement certain international standards (SA8000) without corresponding complementary government policies  
• To aware of and to prepare for contingency measures by importing countries using regional or national standards (e.g. TBT or the “green standard”) as non-trade barriers |

Source: Authors.
REFERENCES

Abbreviations for newspapers and magazines:
FEER: Far Eastern Economic Review
SCMP: South China Morning Post (http://www.scmp.com)
TST: The Straits Times (Singapore)


Ministry of Foreign Trade and Economic Cooperation. (MOFTEC) (2001), Compilation of the Legal Instruments on China’s Accession to the World


World Trade Organization (WTO) (2002c), Technical Barriers to Trade (http://www.wto.org/ctatop_e/tbt_e/tbt_e.htm).


