Contemporary Chinese Political Economy and Strategic Relations: An International Journal Vol. 7, No. 3, Dec. 2021, pp. 1703-1733

The Distinctiveness of Chinese Multinational Enterprises – Chinese Technology Enterprises in Malaysia as Case Studies

Ren Yu*
University of Malaya, Malaysia

Cheong Kee Cheok**
University of Malaya, Malaysia

Wang Qianyi***
Shandong Technology and Business University, China

Abstract

Since President Xi Jinping proposed the Belt and Road Initiative, China's investment in Southeast Asia has grown rapidly, with its role as a leading technology exporter giving any host country a significant boost. As a host country, Malaysia's experience has yet to be explored. This study investigates the advantages of Chinese enterprises locating in Malaysia, and explores the links between Chinese enterprises and Malaysian firms. A qualitative study involving structured interviews were conducted with 30 participants selected from different departments in three of China's technological firms. Responses addressed the nature of their business including Malaysian government-related companies, employment of Chinese school graduates, technology transfer and industry linkages. These results show that Chinese enterprises' localization in Malaysia has advantages despite some costs. Nevertheless, Malaysia needs to strengthen its human capital to benefit from Chinese enterprises' localization.

Keywords: *corporate internationalization, localization, technology transfer, governance, human capital*

1. Introduction

As much as the Chinese economy has been the victim of stereotyping, an extreme example being the autocratic system's unsustainability, its enterprises have also been little understood, with the bulk of extant research being on developed capitalist systems. Of the limited research on Chinese enterprises, a good proportion has tended to stereotype Chinese corporate behavior. For instance. Chinese corporate culture had been described in Jiang (2011), *The Economist* (4th June 2020), Shen (2006), *Financial Times* (17th January 2019) in a host of "how to" manuals. Recognising that Chinese enterprises are not all the same, efforts have also been made to separately characterize them (Tsui *et al.*, 2006). A large body of work has characterized Chinese work culture as:

- Ethnocentric vs. polycentric
- Built on trust and moral standards of local managers
- Respect for authority
- Limited positive feedback
- Working long hours, including after office hours
- Frequent meetings

Nevertheless, the variety of Chinese enterprises has produced work cultures more varied than the above suggested. There is therefore a strong case for further testing through case studies.

Another characteristic of Chinese enterprises relates to technology transfer, it being assumed that Chinese enterprises are invariably at the receiving end and therefore beneficiaries of (superior) Western technology (Branstetter, 2019; *The American Prospect*, 26th June 2019; O'Connor, 2019). Others, realizing that some areas of Chinese technology, have caught up with that of the West, might do as much harm as good if passed to the wrong hands, ignoring the fact that advanced countries have no better mechanism for technology transfer. Since some Chinese enterprises have caught up technologically with their Western counterparts, the question to ask is how ready is China to transfer its technology, as it canvassed it was (*Global Times*, 29th December 2020). How different are the attitudes of Chinese enterprises in the transfer of their home-grown technology?

A third commonly held perception is that Chinese enterprises employ mainly Chinese workers, as argued by van Staden *et al.* (2020). Such a perception is also pervasive in other host countries with Chinese investments (*Forbes*, 21st March 2019). As with other perceptions, the truth, even for Africa, is much more nuanced. Tang (2016: 107) opined that "the reality of Chinese companies' employment practices in Africa… reveals the diversity of employment patterns and the reasons behind these patterns." Equally dismissive of the naysayers are Brautigam (2015) and *Knowledge@Wharton* (2016) which aired the views of Africa scholars. Quite aside from the issue of those directly employed in Chinese projects is that from forward and backward linkages created by Chinese FDI.

A final perception of ethnocentrism is that Chinese enterprises tend to source their inputs from Chinese firms rather than from host countries

(*Forbes*, 7th July 2016). This would rob host countries of a major benefit of Chinese OFDI.

In relation of the above enterprise characteristics, this paper discusses the behavior of selected Chinese enterprises that have opted to establish local branches in a host country situation that, in addition to generic advantages bestows specific benefits to Chinese enterprises locating there. This country is Malaysia, which has had a longstanding cultural link with nearly a quarter of its population of Chinese ancestry and, especially in recent times, enjoyed cordial relations with China, being heavily dependent on Chinese OFDI (Gomez *et al.*, 2020). The rationale for the choice of this country is elaborated in the next section.

This paper reports on research on the corporate practices of three Chinese technology enterprises that established branch offices in Malaysia in the context of a new state-business relationship to be briefly described. For each enterprise, 10 managerial and/or technical staff, of whom 5 were Chinese and 5 local Malaysians, were interviewed to ascertain their perceptions of how well local employees fit in well in Chinese enterprises and get along with Chinese staff, i.e. the Chinese enterprises' organizational culture, their willingness to transfer enterprise technology, the enterprises' readiness to employ local staff in various positions, and the degree of linkages between Chinese enterprises and the Malaysian economy. In the next section, the choice of Malaysia as the localization venue for Chinese enterprises is explained. The sections following describes the enterprises that are the case studies. This is followed by a discussion on a new model of state-business relations under which these enterprises operate. What then follows are the reality of the alleged characteristics of Chinese enterprises. The final section draws implications from the enterprises' experiences in Malaysia.

2. Malaysia as Host Country

This paper has chosen Malaysia as the host country for localization of Chinese enterprises. The reasons for this choice are several.

First, Malaysia enjoys good bilateral relations with China. It was the first country in ASEAN to establish diplomatic relations with China in 1974. But it took until 1990 for relations to be normalized with all trade restrictions removed. Since then, diplomatic relations had been cordial while economic relations have progressively expanded to the point where China became Malaysia's top trading partner by 2009. And with foreign direct investment (FDI) from other countries stagnating, Malaysia has become increasingly dependent on Chinese FDI.

Second, while the history of Chinese businesses in Malaysia is not a long one, Malaysia is no stranger to Chinese businesses localizing there. A recent survey found 92 state and private enterprises having businesses operating here (Gomez *et al.*, 2020). These enterprises were involved in diverse sectors – industrial, manufacturing, services, property development and agriculture sectors, though a majority of these investments were channelled to infrastructure and construction-based projects. These Chinese enterprises functioned in joint ventures, are registered as Malaysian companies, or are branches of parent enterprises in China. Several are listed on the Malaysian stock exchange (Bursa Malaysia). While some enterprises are small, some of the world's largest are also operating here.

Third, Malaysia is one of the countries with no fear of alleged electronic espionage by China's electronics companies and already hosted branch offices of China's electronics giants Huawei and ZTE, as well as Longji, the world's largest solar panel maker. In fact, Huawei's signing of an agreement to provide 5G equipment to Maxis, a leading Malaysian telecommunications company, was witnessed by prime minister Mahathir (*Nikkei Asia*, 3rd October 2019). Similarly, ZTE had also provided telecommunications equipment to Malaysia's telecommunications companies Digi and U Mobile (*Malaysian Wireless*, 9th August 2020).

Fourth, Malaysia is a founder member of ASEAN. In 2015, member countries formed the ASEAN Economic Community. One of its key pillars is the establishment of a single market and production base, with "greater opportunities to trade and do business within the region, with reduced trade costs and improved investment regimes that make ASEAN a more attractive investment destination for both international and domestic investors." (ASEAN Secretariat, 2015; 5) This is a benefit all enterprises located in Malaysia can take advantage of.

Overall, then, Malaysia as a host country is attractive to Chinese FDI. It is particularly welcoming of such investment with no hang-ups about intellectual property theft that bother primarily Western countries. In fact, Chinese state enterprises, with government backing, secure financing and superior technology, may prove to be especially attractive to Malaysia's government-linked companies (GLCs). Chinese enterprises also have accumulated considerable experience operating in Malaysia. And they would enjoy the fruits of regional integration through the ASEAN Economic Community.

3. The Selected Enterprises

Three enterprises, both state and non-state, have been chosen for analysis. These are Huawei (华为), ZTE (中兴), and Fiberhome (烽火), all technological enterprises. For each enterprise, 10 managerial and technical staff including the CEO, 5 Chinese and the other Malaysian, mostly ethnic Chinese, were interviewed, making a total of 30 interviews.

Huawei, established in Shenzhen in 1987 set up its subsidiary in Kuala Lumpur Malaysia in 2001. Its decision to localize is consistent with its internationalization strategy to first penetrate emerging markets and developing economies before moving on to developed country markets. This strategy has its rewards in that the enterprise faces less severe competition from established multinationals but also come with challenges like distinctive cultural, economic and institutional settings, information asymmetry, and market imperfections. that required substantial product customization and hence localization than developed country markets. These call for product adaptability, customer focus and service, qualities the enterprise strived to achieve from the beginning.

Huawei's choice of Malaysia is predicated upon the country's solid record of growth and infrastructural investment needs to become a "knowledge economy" and a developed nation by 2020. It also has a long history of foreign direct investment (FDI), promoted through investment-friendly policies . Malaysia also ranks highly in the World Bank's Ease of Doing Business Index. And, as a founding member of ASEAN the country is well located to be a regional hub for ASEAN. Its office in Kuala Lumpur now oversees sales and operations for Malaysia, Singapore, Brunei, Indonesia, the Philippines, Australia, Papua New Guinea, and New Zealand.

Huawei's Malaysian office has 2,300 staff, 75 % of whom are locally recruited. The employment website *www.glassdoor.ca* in an 27th August 2015 posting (*https://www.glassdoor.ca/Salary/Huawei-Technologies-Malaysia-Salaries-EI_IE9304.0,19_IL.20,28_IN170.htm*) showed most jobs for technical staff (engineers and architects). Another website *www.payscale.com* reported male employees outnumbered female employees slightly (53% vs. 47%) with little gender disparity in salaries. While the Chief Executive Officer is Chinese, a number of local appointments at the managerial level have been reported. Indeed, local managers were among the staff interviewed.

Like Huawei but far slower, ZTE's localization efforts were part of its internationalization drive. ZTE's internationalization strategy parallels that of Huawei, i.e., to target emerging and/or developing economies, but was far more cautious reflecting the fact that as a state enterprise, it enjoys lucrative domestic contracts. ZTE entered the Malaysian market through establishing a subsidiary company, ZTE Malaysia Sdn. Bhd., in 2004. The motivation for entering Malaysia mirrors that given by Huawei. ZTE was in Malaysia to offer technology that the country needed, and training to upgrade Malaysia's human capital (Li and Cheong, 2017).

Under the Malaysian government's management of competition with Huawei and others, ZTE works with government-favored telecommunications companies. Secondly, it can also leverage off its explicit support of the Chinese government by virtue of its being a state-controlled enterprise. Thirdly, its policy of workforce localization, explicitly stated in its global website (*http://wwwen.zte.com.cn/pub/en/about/corporate_citizenship/human_resources/equal_employment_opportunities/*) should be attractive to Malaysia both in terms of employment creation and skill upgrading, should benefit Malaysia through employment creation and human capital deepening.

Founded in Wuhan in 1999, Fiberhome Telecommunications Technologies Co. Ltd., which is an information and communication network products and solutions provider (*http://www.fiberhome.com/en/about/Default.aspx*), established its branch office in Malaysia in June 2008. This office is staffed by about 100 employees, about 50% Chinese nationals, 20% Malaysian Chinese and 30% Malaysian non-Chinese. Its marketing strategy, like for other Malaysian market entrants, is to leverage a strong relationship with the Malaysian government to capture business with major government-linked companies as important clients.

4. A New Type of State-Business Relations

Chinese enterprises have particular advantages locating in Malaysia that may not be apparent or available to other investors. The first among these is the nature of Chinese and Malaysian enterprises – a new form of business relationship. Chinese enterprises are well represented by those from the state sector. Despite their declining numbers and shares of industrial output and exports, (state) enterprises have remained major players in the (Chinese) economy." Indeed, China's non-state enterprises count many which were privatized during successive rounds of reform, and which maintained close relationships with Chinese state enterprises. Although starting from a different political economy background from China, Malaysia's state enterprises (referred to as "government linked companies" (GLCs) are arguably as "widespread and pervasive" as their Chinese counterparts (Menon, 2017: 2). Given the significant presence of Malaysian GLCs, a Chinese enterprise, whether state or non-state, has a good chance of doing business with one of them. Should this be the case, it would represent a novel form of business, with state enterprises or state-linked enterprises from the host country as business counterparts to the Chinese enterprise. Should the Chinese enterprise also be a state enterprise, business would take place between two state enterprises. Even if the Chinese enterprise is a non-state entity, it would still consult the state before making any strategic decisions.

This business model presents both advantages and drawbacks for the Chinese enterprise. On the plus side is the relative ease with which the enterprise is able to navigate host government policies, licensing and other regulations. These can represent major economies in terms of time and resources. Another advantage is the ability to access the established market of the GLC. Given the latter's advantage as a GLC, this gives the Chinese enterprise access to the host government's market, thus minimizing search time for customers. It also minimizes the need to compete with other companies for customers. Further, the GLC should have preferential access to financing on favorable terms, with the backing of the host country government, that the foreign enterprise can tap into.

But there are also disadvantages, the chief of which is susceptibility to governance lapses and rent-seeking by the GLC which the Chinese enterprise, given the Chinese government's policy of non-interference with host country affairs, is unable to prevent even were the malpractices known. The power wielded by substantial GLCs would ensure minimal governance oversight by regulatory agencies. And to the extent that a Chinese state enterprise does business with a Malaysian GLC, the dealings are entirely between two states, with no private sector or civil society scrutiny of economic/financial feasibility or social desirability. Worse, mismanagement by the GLC in terms of rent-seeking would also affect the reputation of the Chinese enterprise. Further, reliance on GLC-favored clients may impact the Chinese enterprise's efforts to broaden its client base.

Since its establishment in Malaysia in 2014, Huawei has wasted no time in cementing links with Malaysian government ministries and GLCs. And in the 25th International Conference on the Future of Asia in Tokyo on May 30, 2019, the enterprise received Malaysian Prime Minister's endorsement that "Malaysia will make use of Huawei's technology as much as possible" (*Nikkei Asia*, 30th May 2019). Since then, Huawei has continued to sign partnership agreements with, among others, Malaysia Airports (Huawei, 3rd July 2020), Telekom Malaysia (2020) and MDEC (2020). In the meantime, avoiding direct competition with Huawei, ZTE had been in discussions with other Malaysia telcos. It also signed a contract with Malaysian telco U Mobile to develop 5G services (ZTE, 20th March 2019). Much less known in Malaysia, Fiberhome also have contracts with Malaysian GLCs like TM and the National Electricity Board (Tenaga Nasional Berhad / TNB) as well as all leading telcos (Fiberhome, 17th July 2018).

These businesses testify to the importance of Malaysian government-linked or endorsed companies as clients of Chinese enterprises. The low shares of the enterprises' government clients (see Table 4 later in Subsection 4.3) most likely underestimate their dealings with Malaysian government-approved companies. Also, the use of local marketers is to cement relationships with government leaders or ministry heads.

4.1. Corporate Culture

Among the 10 employees interviewed for each enterprise, about half were local employees. who volunteered what they knew about their enterprises. Further details of their employment history are shown in Table 1. Local employees of Chinese descent had not only been to China but had learned about their respective enterprises before joining them.

The ability to communicate in Chinese stands local staff in good stead. They are not only able to speak Chinese but also use it in their interaction with their Chinese colleagues and managers and in communications with their head offices. Local non-ethnic staff speak no Chinese but their views are in-sync with local ethnic Chinese staff.

That there exists a pool of local Malaysians fluent in Mandarin Chinese likely accounts for the employment of a large proportion of local staff. Although Malaysia has a national school system with free primary and secondary education and heavily subsidized tertiary education, a parallel vernacular school system exists that allows parents to send their children to Chinese language education all the way up to university (*Malay Mail*, 3rd July 2017). Private universities are strictly not part of the Chinese school system. But they offer high school graduates of Chine vernacular schools a pathway to tertiary education bypassing the government system. Later, the establishment of the Universiti Tunku Abdul Rahman (UTAR) which caters to graduates from Chinese vernacular schools and of Xiamen University's branch campus just outside Kuala Lumpur offer these students even more direct access to tertiary education. Indeed, "Malaysia is the only country outside China and Taiwan with a comprehensive and complete Chinese education system" (Ang, 2017). Thus, Malaysian Chinese can begin their schooling with Mandarin instruction in primary school ("national type Chinese primary schools" (SJKC)) and continue their secondary education in Mandarin medium "independent Chinese schools". Those who pass their Unified Examination Certificate (UEC) can enrol in private tertiary institutions to complete their education.

Whatever the actual causes, one perception of Chinese enterprises being ethnocentric can be dispelled. As Table 1 shows, although the CEO of the enterprise is typically Chinese, all enterprises employ significant proportions of local employees even at the managerial level. Also, many local staff are hired for their technical expertise. A related question is whether Chinese employees are favored over local hires. Interview responses reveal the absence of favoritism among all employees of Huawei, but some favoritism among the other firm. But when it came to treatment by management, all employees concluded that such treatment of Chinese and locals had been even-handed. As a consequence, local and Chinese enjoy cordial relations. These findings reveal the absence of ethnocentrism among these enterprises.

Table 1 Chinese and Local Malaysian Employees in Chinese Enterprises in Malaysia

Corporate Characteristics	***Huawei***	***ZTE***	***Fiberhome***
% of local employees out of employees interviewed	**6/10**	**6/10**	**5/10**
Local employees been to China?	**Yes (except 1)**	**Yes**	**Yes (except for MM)**
Studied company before joining	**Yes**	**Yes**	**Yes**
Top management positions filled by Chinese?	**CEO Chinese; some local managers**	**CEO Chinese; local managers**	**CEO Chinese; some positions for local staff**
Local employees speak Chinese?	**Yes – MCN**	**Yes – MCN**	**Yes – MCN; No – MM**
Chinese language useful?	**Yes – CN, MCN internal communications, culture**	**Yes – many CN staff; communications with bosses**	**Yes – MCN+MM**
Use of Chinese at work?	**For internal correspondence, with HQ**	**Work, correspondence**	**Yes – MCN**
CN enterprise an attraction?	**Yes – CN; No, – MCN technology**	**Yes – CN; No (yes minority) – MCN technology**	**No – MCN+MM**
CN employees favored?	**No – CN, MCN**	**Yes – MCN; No – CN**	**No – CN; Yes – MCN+MM**
Management treats CN & locals equally?	**Yes – all**	**Yes**	**Yes – MCN+MM**
CN-MAL relations	**Cordial**	**Cordial**	**Cordial**

Employee classification: CN – Chinese national; MCN – Malaysian Chinese; MM – Malaysian non-Chinese.
Source: Interview questionnaires.

One other question pertinent to ethnocentricity relates to the extent to which diaspora have sentimental attachment to enterprises of their country of origin, especially with the dramatic rise of the latter. When asked whether being Chinese enterprises was an attraction, most Malaysian Chinese responded that it was the technology these enterprises embodied that attracted them rather than the enterprises' nationality. A minority replied yes to both questions in that pride in Chinese technology attracted them to the enterprises.

Beyond these indicators, what is the extent to which the selected Chinese enterprises conform to the stereotyped corporate culture as described in *The Economist* (4th June 2020) and Shen (2006)? Its characteristics are characterised there as:

- Trust and moral standards of local managers
- Respect for authority
- Limited positive feedback
- Working long hours, including after office hours, the so-called 996 system
- Frequent meetings

Table 2 presents interview responses from the three enterprises that address these traits. Given that these are local branches, these enterprises do not necessarily display fully the above-listed traits. Their corporate operations conform only partially to the above practices. Meetings are indeed frequent, especially for Huawei, where its founder Ren Zhengfei, was known for his hard-driving work culture (Jiang, 2011) while overtime and weekend work is expected of employees in two out of three establishments. One enterprise however has a stated policy of not meeting after hours or during weekends. But in contrast to meetings functioning only to pass on information, two of the three enterprises use the frequent meetings to discuss operational and other issues. As to trust and the moral standing of managers, all enterprises' employees seem to have faith in their managers, with whom they discuss their problems at work and whose advice they respect. As to the stereotype of scant praise or encouragement, respondents, irrespective of Chinese or local, have found praise and encouragement from management quite common.

Table 2 Chinese Enterprises in Malaysia: Corporate Practices and Employee Responses

Corporate Trait	*Huawei*	*ZTE*	*Fiberhome*
Top management positions filled by Chinese?	**CEO Chinese; some local managers**	**CEO Chinese; some local managers**	**CEO Chinese; some managerial positions reserved for locals**
% of local employees	**70**	**60**	**50**
Frequency of meetings	**Daily, or twice weekly**	**Every 2 days**	**Weekly**
Purpose of meetings	**Discuss issues, pass information**	**Pass information**	**Both – CN; progress report – MCN+MM**
Management feedback & appreciation	**Yes, verbal praise, sometimes written**	**Yes, verbal praise**	**Various methods, including in private, public**
Meetings after hours/weekends	**Yes**	**No**	**Yes, CN staff work overtime**
Functions after hours frequent?	**Yes**	**No**	**Yes**

Sources: Interview questionnaires.

Blending the results from Tables 1 and 2, local Malaysian workers have fitted in with Chinese enterprises' work culture, have generally been treated equally with, and cooperated without much friction with their Chinese counterparts. Thus, what was revealed was a hybrid work culture not quite as rigid as the stereotype would suggest but still distinguishable from its Western counterpart. Perhaps what was recorded was a local variant of Asian work culture with which both the Chinese and local staff can find common ground.

The next question to ask is the extent to which these local employees can adapt to the Chinese corporate culture.

4.2. Adaptation and Technology Transfer

Unlike their Western MNC counterparts, and in sharp contrast to the stereotype, Chinese enterprises have been relatively generous with technology transfer and adaptation of Chinese technology. In two Malaysian case studies, Chinese enterprises – Alliance Steel and D&Y Textiles – were reported to be willing to transfer the use of their technology to Malaysian industry counterparts through training in the use of Chinese equipment.

Chinese-owned D&Y Textile (Malaysia) Sdn. Bhd., part of the diversified Daiyun Group (Gomez *et al.*, 2020: 52), is a high-tech textile manufacturing facility that utilizes advanced manufacturing equipment sourced from China High-Tech, China's top spinning equipment manufacturer and far advanced compared to Malaysian textile firms. The enterprise has offered to train Malaysians to use its equipment.

As with China's textile FDI, one objective of Alliance Steel (M) Sdn. Bhd. a joint venture of a Chinese state enterprise (Guangxi Beibu Gulf Port International Group Co. Ltd.) with a non-state enterprise (Guangxi Shengdong Metalurgical Co. Ltd.), the leading project in the Malaysia-China Kuantan Industrial Park (MCKIP), is to transfer its steel technology as part of the state's investment strategy to Malaysia (*ibid.*: 67). It uses an advanced alternative current electric arc furnace not available in Malaysia and which can potentially upgrade Malaysian steel technology. On the successful transfer of this technology – but only in the sense of the steel plant commencing production in Malaysia and not necessarily seeing Malaysians mastering the technology in the short term – an important outcome would be to not only signal the possible start of a new steel supply chain but more importantly lock the Malaysian steel industry into China's steel production ecosystem.

Thus, China's technology transfer serves the purpose of locking in Malaysia's key industry sectors into the Chinese industrial eco-system, the gulf between the Malaysian and Chinese technological capability so wide that technological transfer is extremely challenging for Malaysia.

More directly pertinent is Huawei's experience in Africa based on the fieldwork of Tugendhat (*ibid.*: 3). In documenting Huawei's efforts to accomplish knowledge transfer without compromising its hold on intellectual property by keeping production of its equipment in China, it nevertheless achieved knowledge transfer to the local economy that facilitates the rise of new business opportunities that potentially competes with or complement Huawei's operations.

The same is true with China's electronics enterprises operating in Malaysia. In a separate case study (Li and Cheong, 2019) it was noted that Huawei and ZTE have advantages over their Western competitors in their willingness to adapt their technologies to graft onto existing equipment, saving considerable costs. In fact, this willingness is more than a matter of technological capability but also state policy in which the Digital Silk Road Initiative launched in 2015 provides technological assistance to BRI countries (*The Diplomat*, 17th December 2020; *Global Times*, 29th December 2020).

Table 3 Technology Transfer and Adaptation: Staff Perceptions among Chinese Enterprises in Malaysia

Corporate Trait	*Huawei*	*ZTE*	*Fiberhome*
Technology adaptation?	**Yes 100%**	**Yes 100%**	**Yes, 90-100%**
Adaptation process	**Propose to HQ, HQ usually open to adaptation**	**Evaluation by tech team, then discuss with HQ**	**Meet local needs, tests & certification, discuss with management**
Local ideas acceptable?	**Yes**	**Yes**	**Yes (see above)**
Requests from firms accepted?	**Yes, except to competitor**	**Yes, except to competitor**	**Yes, from clients**
Should technology be transferred?	**Yes**	**Yes**	**Yes**
Transfer process	**Put in contract**	**Put in contract**	**Put in contract**
Chinese government policy	**No strategic technology**	**Strategic, confidential technology protected**	**Core technology retained, market-related technology transferred**
Transfer benefits	**Income for enterprise**	**Income for enterprise**	**Cost savings, income, helps localization**

Sources: Interview questionnaires.

This willingness to implement technology transfer and adaptation is also apparent among responses in the interviews of staff in Chinese enterprises in Malaysia (Table 3). All employees expressed their support for transfer or adaptation of their enterprises' technology, subject to retention of "core technology" under the custody of their respective HQs. Local suggestions on technology are also accepted for discussion by management. It therefore appears that technology transfer and adaptation is not only policy but also part of the corporate culture of Chinese technology enterprises.

Thus, viewed solely from the perspective of technology, China's state strategy to promote technology transfer runs counter to Western MNCs' obsession to protect their intellectual property, but in the long run, it reaps the benefit of locking in developing countries' industrial sectors into China's industrial eco-system. In addition, as shown by the case studies above, while Chinese enterprises provide training in the operation of the advanced equipment that facilitates industry-wide adoption, the gulf between China's and local technology would have been so wide that the former's innovations are difficult to duplicate.

In addition to the above advantages, Chinese enterprises can enlist the support of state-owned Chinese financial institutions in Malaysia which stand ready to assist with financing and other needs. Indeed, institutions like the Industrial and Commercial Bank of China (ICBC), China Construction Bank (CCB) and Bank of China (BOC) already have a major presence In Malaysia with supporting Chinese enterprises one of their stated mandates. Also, Xiamen University, one of China's top universities, has established its first overseas campus just outside Kuala Lumpur. Although officially English is the medium of instruction, the mixing of Chinese and Malaysian Chinese students provides an additional environment in which a mixture of languages is used for learning. Xiamen graduates provide an additional source from which Chinese technological enterprises can draw.

4.3. Links with the Local Economy

A final perception that can be tested using enterprise information is the alleged reliance on Chinese suppliers and distributors leaving few linkages – with input suppliers or output distributors in the host country.

Table 4 Chinese Enterprises' Linkages with Suppliers and Distributors

Corporate Trait	*Huawei*	*ZTE*	*Fiberhome*
Entities most helpful	**HQ, no agreement about other firms**	**CN govt, HQ, Msian firms, CN firms**	**HQ, Msian firms**
Supplies & suppliers **Works closely with**	**CN FIs, CN edu, no agreement about other firms**	**CN FI, no agreement about other firms**	**Msian FIs, Msian firms**
Sources of supplies	**CN parts, Msians install**	**CN parts, Msians install**	**CN parts, Msians install**
Supplies – CN vs. local **Services – CN vs. local**	**CN better, Malaysian firms lack technology; Malaysians trained to install, provide services**	**CN better; services also from China, recognize Chinese service providers also need to go abroad**	
Marketing **Marketing – CN vs local**	**80-100% local**	**70-100% local**	**45%CN; 45% local; 10% international**
Marketing outsourced?	**Yes**	**Yes**	**Yes. About half.**
Using firms	**For marketing – local firms; for technology – CN firms**	**For marketing – local firms; for technology – CN firms**	**Local – knowledge, service speed; CN technology**
Hiring marketing staff	**Local staff – local knowledge, industry relationships; CN staff – no. reserved**	**Local staff – local knowledge, industry relationships**	**Local – experience, knowledge**
Marketing support	**HQ role 20%; local 80%**	**CN govt**	**Msian govt**
Marketing to whom	**Msian govt 10%; private 90%**	**Msian govt 30%; private 70%**	**Msia 50%; SE Asia 50% (Msian govt 30%)**
Marketing strategies	**Not much to govt Telekom; policy vs business focus**	**Telecom for govt; business record for business**	**Pricing in Msia; commercial terms in region; discount vouchers to private; lower price for govt**
Marketing role	**HQ role, but branch decides**	**HQ role for country & region; branch familiar with country situation**	**HQ role but local office decides**

Source: Interviews.

For sourcing supplies, all the enterprises rely on their headquarters in China (Table 4). It is therefore no surprise that supplies are procured from Chinese enterprises. For input supplies, both Huawei and ZTE work most closely with Chinese financial institutions, with no agreement as to what other entities – Chinese educational institutions and firms, or Malaysian education institutions and firms – are next most important. Fiberhome, however worked most closely with Malaysian firms. But once supplies are sourced from China, installation is outsourced to Malaysian entities. The unanimous reason cited by interviewees was that Chinese supplies were unquestionably better in terms of product and service quality. Malaysian firms do not have the technology to produce the parts to satisfy the Chinese enterprises' quality standards. But the telecoms services that Huawei needs are purchased from Malaysia. Huawei would train locals in the technology. For ZTE and Fiberhome, those interviewed revealed that the telecoms materials as well as the services both come from China, as much out of the desire to help Chinese service providers' desire to also go abroad as out of quality differences.

For marketing, Huawei's HQ plays a minor role, with the local office playing the leading role. Because ZTE is a state enterprise, the Chinese state plays a significant though not dominant role. Much of the marketing effort goes to local firms because most of the clients (70 – 90%) were local. However, for technological support, reliance was placed on Chinese firms, presumably because of their technological capability. In terms of hiring of marketing staff, preference was expressed for local Malaysian staff on account of local knowledge and ties with local clients. Given that both Huawei and ZTE both served government and private sector clients, their marketing strategies differed between clients. With government clients, both Huawei and ZTE focused on policy compliance, but with their private sector clients, they would have stressed their technological prowess and business record. Fiberhome has 30% of its business with the Malaysian government, according to one interviewee, to keep good relations.

In terms of backward and forward linkages, there is a tendency for Chinese enterprises to source from China, but only partly because of the quality of inputs. Other reasons are reliance on the headquarters as well as the desire to offer opportunities to Chinese suppliers to internationalize to source supplies. There is thus a degree of ethnocentricity in the sourcing of supplies and intermediate inputs. For marketing or distributing of products, the enterprises' choice is far narrower, being local market driven.

5. Conclusion and Policy Implications

Several perceptions can be dispelled from these findings. First, In the context of the Chinese enterprises reviewed, they differ significantly from the stereotyped characteristics of these enterprises. These enterprises differ in the working environment – number of hours worked, frequencies of meetings, what transpires at meetings and the incidences of positive feedback on tasks performed. Chinese enterprises are likely to be able to adapt to local work cultures when needed. However, that these are branch offices make it hard to conclude that Chinese enterprises contradict the earlier mentioned stereotypes. Nevertheless, given the variety of contexts Chinese enterprises function under, these findings do reveal the risks of stereotyping.

Second, these enterprises, employing at least 50% local staff all the way up to the managerial level, cannot be said to be ethnocentric in their hiring practices, although Malaysia's education system that produces Chinese language graduates undoubtedly facilitated local hiring.

Third, from a national perspective, all employees empathize with their enterprises' (and Chinese state) policy of knowledge (if not full technology) transfer from Chinese to host country enterprises with the proviso that "core technology" is to be retained. No one interviewed seemed to be concerned about intellectual property theft, the gulf between Chinese enterprise and host country firms' technological capability so wide that such risk was remote. Adaptation of Chinese technological standards is also permitted. A likely consequence would be, through adoption, the emergence of a Chinese technological eco-system in the host country, a win-win for the host country which will see technology upgrade and for China with an expanded market.

Fourth, local companies could have been the source of supplies and services, affording them, likely SMEs, the opportunity to work with Chinese multinationals and also to upgrade their technology through learning by doing. But a combination of lack of competitiveness and Chinese enterprise ethnocentricity have denied Malaysian suppliers the opportunity to subcontract for the Chinese enterprises and thus expand their reach. This lack of technological capability speaks to Malaysia's human capital deficit attributable to deficiencies in its education system while its service quality could be blamed on the country's lack of emphasis on its TVET. Malaysian firms, especially SMEs, were they competitive as service providers, would have contributed to the development of a vibrant service industry. That this did not occur is a missed opportunity Malaysia can ill afford.

Finally, with the bulk of benefits allegedly accruing to Chinese enterprises and China, what can the host country, in this case Malaysia, gain from Chinese enterprises' localization there? The interviews reveal this in several ways. First, from the perspective of local employees, it cannot be said that they were unaware of what their employers were about, many having been to Shenzhen, two enterprises' headquarters.

Second, cultural affinity together with Chinese language education facilitated the employment of local ethnic Chinese by Chinese enterprises. Although there was a perception Chinese were treated better, several admitted that their Chinese counterparts worked longer hours. Third, there was broad agreement managements were not stingy with acknowledgement of local staff contributions which contradicted what was alleged to characterize Chinese corporate culture. Overall, these employees adapted to other traits of Chinese corporate culture relatively smoothly. Still, while a number of local employees were attracted by their being Chinese enterprises, most were more attracted by the enterprises' technological reputation.

On marketing, the importance of marketing to the Malaysian government is stressed. However, clients in the private sector also have government links. Thus, the role of the Malaysian government remains important, and it pays for Chinese enterprises to maintain good relations with government. That said, the recent experience with the change of government can exact a heavy toll on carefully cultivated ties. Chinese enterprises should learn lessons of political vigilance when operating in the country. At the same time, a multitude of ethnic trade associations exists which Chinese enterprises, in their eagerness to cultivate government business, have largely ignored. While less important than government-sponsored or endorsed chambers of commerce, they are nevertheless important sources of information that official sources often miss.

A final question may be asked if local ethnic businesses might not have benefitted from the Chinese enterprises' presence. Given the state-to-state model, Chinese enterprises have direct access to the Malaysian government and do not need local ethnic businesses as intermediaries. As to local ethnic Chinese as business partners, the chances of that occurring is likewise slim. Thanks to the Malaysian government's affirmative action, most of the firms linked to government projects are Malay-owned firms. The only role local ethnic Chinese can play is as major players in trade and clan associations, mentioned earlier.

Acknowledgement

This work was supported by the Shandong Technology and Business University Grant no. 2019ZBHZ008 and no. BS 201928; MOE (Ministry of Education in China) Project of Humanities and Social Sciences (Project No.21YJC790116).

Notes

* Ren Yu （任玉） is a Ph.D. candidate the Asia-Europe Institute (AEI), University of Malaya, Kuala Lumpur, Malaysia. she specializes in technology transfer and political economy. She is a reviewer of *Sustainable Production and Consumption*. *<Email: 799700645ry@gmail.com>*

** Dr Cheong Kee Cheok (張淇綽) is currently a Senior Advisor at the Asia-Europe Institute (AEI), University of Malaya, Kuala Lumpur, Malaysia. A graduate of the University of Malaya, he obtained his Ph.D. at the London School of Economics. Upon his return, he joined the Faculty of Economics and Administration, University of Malaya (FEA, UM), and was appointed first as Deputy Dean, then Dean of Faculty. After a decade at UM, he spent 16 years overseas at the World Bank in the capacity of Economist and subsequently Senior Economist. At the Bank, he was Coordinator for China and Vietnam in the Economic Development Institute, now the World Bank Institute. After returning to Malaysia in 2000, he continued to work as consultant for the Bank and UN agencies. His work has taken him to China, Vietnam, Cambodia, Laos, Mongolia and North Korea and other Asian countries. Back with UM since 2010, his research interests include economic development, transition economies, employment and poverty and international economic relations. *<Email: cheongkeecheok@um.edu.my, keecheok1@yahoo.com>*

*** Dr Wang Qianyi (王倩怡) (corresponding author), received her Ph.D. from the Faculty of Economics and Administration, University of Malaya, and now serves as a Lecturer at Shandong Technology and Business University, Yantai, Shandong Province, China. Her research interests include development studies and rural studies with particular reference to China. She has published in international journals such as *Cities* and *Habitat International*. She has actively participated in various research projects related to development studies, such as "Capturing A Living Heritage Village: Safeguarding Kampung Hakka of Mantin, Negeri Sembilan". *<Email: wangqianyi@sdtbu.edu.cn>*

References

Ang, Ming Chee (published online 26th October 2017). Chinese education in Malaysia. In: *Oxford Research Encyclopedia of Education*. *<https://oxfordre.com/education/view/10.1093/acrefore/9780190264093.001.0001/acrefore-9780190264093-e-220>*

ASEAN Secretariat (2015). *ASEAN Investment Report*. Jakarta: ASEAN Secretariat.

Branstetter, Lee G. (2019). How to stop China's technology heist. *Milken Institute Review*, 26th April 2019. Santa Monica, CA: Milken Institute. *<https://www.milkenreview.org/articles/how-to-stop-chinas-technology-heist#>*

Brautigam, Deborah (2015). *Will Africa feed China?* Oxford and New York: Oxford University Press.

Dang, Linjing and Jingfeng Zhao (2020). Cultural risk and management strategy for Chinese enterprises' overseas investment. *China Economic Review*, Vol. 61, June 2020, article number 101433.

Devadason, Evelyn S. (2017). Malaysia's growing reliance on China: A good thing? *The Asia Dialogue* (blog), 14th September 2017. Nottingham: Asia Research Institute, University of Nottingham. <*https://theasiadialogue.com/2017/09/14/malaysias-growing-reliance-on-china-a-good-thing/*>

Fiberhome (17th July 2018). The journey to boundless connectivity 1018 Fiberhome global tour was perfectly held in Malaysia. <*https://www.fiberhome.com/en/special/132.aspx*>

Forbes (7th July 2016). China's new worry: Outsourcing. (By Harold L. (Hal) Sirkin.) <*https://www.forbes.com/sites/haroldsirkin/2016/07/07/chinas-new-worry-outsourcing/?sh=74f6a8df6c20*>

Forbes (21st March 2019). Filipinos are beginning to see the ugly side of Chinese investments. (By Panos Mourdoukoutas.) <*https://www.forbes.com/sites/panosmourdoukoutas/2019/03/21/filipinos-are-beginning-to-see-the-ugly-side-of-chinese-investments/?sh=2e17557354f0*>

Financial Times (17th January 2019). Overdoing it: The cost of China's long-hours culture. <*https://www.ft.com/content/d5f01f68-9cbc-11e8-88de-49c908b1f264*>

Fitch Solutions (n.d.). *Malaysia and Investment Risk Report*. <*https://www.fitchsolutions*>

Free Malaysia Today (*FMT*) (31st October 2016). China a true friend and strategic partner, says Najib. <*https://www.freemalaysiatoday.com/category/nation/2016/10/31/china-a-true-friend-and-strategic-partner-says-najib/*>

Global Times (29th December 2020). China shares digital economy and other creative poverty reduction methods with developing nations. <*https://www.globaltimes.cn/page/202012/1211372.shtml/*>

Gomez, Edmund Terence, Siew Yean Tham, Ran Li and Kee Cheok Cheong (2020). *China in Malaysia: State-business relations and the new order of investment flows*. Singapore: Palgrave Macmillan.

Huawei (3rd July 2020). TM inks agreement with Huawei; set to become the only Malaysian-Owned end-to-end cloud AI infrastructure service provider. *<https://www.huawei.com/my/news/my/2020/tm-inks-agreement-with-huawei-end-to-end-cloud-ai-infrastructure>*

Jiang, Ren (2011). China's hard-work culture: Today an advantage, tomorrow a weakness. *Harvard Business Review*, 7th December 2011. *<https://hbr.org/2011/12/chinas-hard-work-culture-todayhttps://hbr.org/2011/12/chinas-hard-work-culture-today>*

Kittilaksanawong, Wiboon, Xudong Chen and Shanshan Xie (2014). Acquisition versus greenfield: The strategy of Chinese privately owned investors in developing countries. In: T.S. Chan and Geng Cui (eds.), *The rise of Asian firms*. London: Palgrave Macmillan.

Knowledge@Wharton (19th January 2016). China's investments in Africa: What's the real story? (Philadelphia, PA: Wharton School of the University of Pennsylvania.) *<https://knowledge.wharton.upenn.edu/article/chinas-investments-in-africa-whats-the-real-story/>*

Li, Ran and Kee-Cheok Cheong (2017). Huawei and ZTE in Malaysia: The localisation of Chinese transnational enterprises. *Journal of Contemporary Asia*, Vol. 47, Issue 5 (Special Issue: *Malaysia and China in a changing region: Essays in honour of Professor Lee Poh Ping*), pp. 752-773.

Li, Ran and Kee Cheok Cheong (2019). *China's state enterprises: Changing role in a rapidly transforming economy*. Singapore: Palgrave Macmillan.

Malay Mail (3rd July 2017). What you should know about Chinese schools in Malaysia. *<https://www.malaymail.com/news/malaysia/2017/07/03/what-you-should-know-about-chinese-schools-in-malaysia/1412233>*

Malaysia Gazette (15th April 2019). Huawei Malaysian Global Training Centre. *<https://malaysiagazette.com/2019/04/15/huawei-malaysian-global-training-centre/>*

Malaysian Wireless (9th August 2020). ZTE talks about 5G in Malaysia, create 40,000 new jobs. <*https://www.malaysianwireless.com/2020/08/zte-malaysia-5g-new-jobs/*>

Menon, Jayant (2017). Government-linked companies: Impacts on the Malaysian economy. *Policy IDEAS* (policy paper) No. 45 (December 2017). Kuala Lumpur: IDEAS Policy Research Berhad.

Nikkei Asia (30th May 2019) Malaysia will use Huawei tech 'as much as possible,' says Mahathir. <*https://asia.nikkei.com/Spotlight/The-Future-of-Asia-2019/Malaysia-will-use-Huawei-tech-as-much-as-possible-says-Mahathir*>

Nikkei Asia (3rd October 2019). Huawei officially lands role in Malaysia's 5G rollout. <*https://asia.nikkei.com/Spotlight/5G-networks/Huawei-officially-lands-role-in-Malaysia-s-5G-rollout*>

O'Connor, Sean (2019). How Chinese companies facilitate technology transfer from the United States. *Staff Research Report*, 6th May 2019. Washington, DC: United States-China Economic and Security Review Commission (USCC). <*https://www.uscc.gov/research/how-chinese-companies-facilitate-technology-transfer-united-states*>

Ouyang, Can (May 2017). Dragons in the West: Localization strategies of Chinese multinationals in developed economies. (Master of Science thesis. Ithaca, NY: Cornell University.) <*https://ecommons.cornell.edu/bitstream/handle/1813/51618/Ouyang_cornell_0058O_10066.pdf?sequence=1&isAllowed=y*>

Sautman, Barry and Hairong Yan (2015). Localizing Chinese enterprises in Africa: from myths to policies. *HKUST IEMS Thought Leadership Brief Series* 2015-05, Hong Kong: Institute for Emerging Market Studies, Hong Kong University of Science and Technology.

Shen, Jie (2006). Factors affecting international staffing in Chinese multinationals (MNEs). *The International Journal of Human Resource*

Management, Vol. 17, No. 2, pp. 295-315.

Tang Xiaoyang (2016). Does Chinese employment benefit Africans? Investigating Chinese enterprises and their operations in Africa. *African Studies Quarterly*, Vol. 16, Issue 3-4 (December 2016), pp. 107-128.

The American Prospect (26th June 2019). Coerced tech transfer: The heart of the China problem. <*https://prospect.org/world/coerced-tech-transfer-heart-china-problem/*>

The Diplomat (17th December 2020). China's Digital Silk Road initiative: A boon for developing countries or a danger to freedom? (By Joshua Kurlantzick.) <*https://thediplomat.com/2020/12/chinas-digital-silk-road-initiative-a-boon-for-developing-countries-or-a-danger-to-freedom/*>

The Economist June 6th 2020 edition (4th June 2020). A guide for foreign workers at Chinese firms. <*https://www.economist.com/business/2020/06/04/a-guide-for-foreign-workers-at-chinese-firms*>

Thillainathan Ramasamy and Kee-cheok Cheong (2016). Malaysia's New Economic Policy, growth and distribution: revisiting the debate. *Malaysian Journal of Economic Studies*, Vol. 53, No. 1, pp. 51-68.

Tsui, Anne S., Hui Wang and Katherine R. Xin (2006). Organizational culture in China: An analysis of culture dimensions and culture types. *Management and Organization Review*, Vol. 2, Issue 3 (November 2006), pp. 345-376.

Tugendhat, Henry (2020). How Huawei succeeds in Africa: Training and knowledge transfers in Kenya and Nigeria. *Policy Brief*, No. 41/2020. Washington, DC: China Africa Research Initiative (CARI), School of Advanced International Studies (SAIS), Johns Hopkins University.

van Staden, Cobus, Chris Alden and Yu-Shan Wu (2020). Outlining African agency against the background of the Belt and Road Initiative. *African Studies Quarterly*, Vol. 19, Issues 3-4 (October 2020), pp. 115-134.

Wang, Hongying (2016). A deeper look at China's "going out" policy. *Commentary*, March 2016. Waterloo, Ontario: Centre for International

Governance Innovation (CIGI). *<https://www.cigionline.org/sites/default/files/hongying_wang_mar2016_web.pdf>*

ZTE (20th March 2019). U Mobile and ZTE sign MOU to conduct 5G live tests as part of wider joint program. *<https://ztedevices.com.my/index.php/2019/04/08/u-mobile-and-zte-sign-mou-to-conduct-5g-live-tests-as-part-of-wider-joint-program/>*