

# Canadian Technology Joint Ventures in China

## *Assessing the Risks*

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# Foreword

The China Institute at the University of Alberta (CIUA) is pleased to publish Margaret McCuaig-Johnston's report "Canadian Technology Joint Ventures: Assessing the Risks".

Technology firms, as outlined in this Occasional Paper, face special challenges in the China market. Far better for small and medium-sized Canadian companies to be aware of these risks before venturing into the Chinese market.

The size and complexity of the Chinese economic landscape is daunting, and many Canadian firms may not be well prepared for entry into one of the most competitive places to do business, and where Chinese domestic enterprises have inherent advantages over foreign firms.

Margaret McCuaig-Johnston has a strong background in Science and Technology policy from her own career within the Government of Canada, but combines that perspective with extensive work on China. McCuaig-Johnston has already written two previous Occasional Papers for the China Institute on S&T themes.

I wish to thank the "blind reviewers" who agreed to read the manuscript and who provided helpful commentary.

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**Gordon Houlden**  
Director, China Institute  
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Canadian company BQE at its joint venture facility with Jiangxi Copper Company to build and operate water treatment plants using BQE Water Technologies at the Dexing copper mine in China.

Source: BQE

# Executive Summary

Since the 1980s, equity joint ventures (JVs) have been one model for companies from other countries to establish themselves in China. However, since 2015, it has been China's preferred arrangement for western technology firms operating in China. Since then, company concerns have mounted regarding onerous conditions increasingly being demanded in these JVs. This report describes the experience of Canadian technology companies in their joint ventures, and highlights frequent terms of negotiations, issues that may arise, and best practices in order to help Canadian companies better prepare for joint venture negotiations.

## Chinese Policies of Importance to Canadian Companies

**Indigenous Innovation Policy:** The report begins by describing the key policies that impact the way western firms in China operate. China's focus on requiring JVs comes from its *Indigenous Innovation Policy* which sets out ways of integrating western technology into Chinese products. The Policy has a target of reducing China's dependence on western technology to below 30% of the Chinese market by 2025.

**S&T Program Reform and Expenditures:** In 2014, President Xi began massive S&T governance and program reform across the entire government. The new suite of programs, along with massive R&D expenditures of US\$291.58B in 2018, up 11.1% from the year before, have boosted Mainland China's standing in the Global Innovation Index from 29th to 14th in just four years, passing Canada in 2017.

**Intellectual Property and Data:** China's intellectual property (IP) regime has undergone reforms,

increasing IP protection and creating new punishments for infringements and counterfeiting. New IP courts have created, and "IPR Protection Centers" were established in competitive industrial clusters. But many patent and copyright issues are continuing and new measures are severely restricting the export of both IP and data, including those developed with western partners.

**The Negative List:** The *Special Management Measures for Foreign Investment Access* includes the so-called *Negative List* which prohibits foreign ownership in some sectors and restricts it to Chinese majority joint ventures in others. As will be seen, JVs have been established in sectors that are not even on the Negative List, under pressures from Chinese officials and consultants.

**Corporate Social Credit System:** A new requirement facing all firms in China is a new *Corporate Social Credit System* that give scores to companies based on how well the company behaves as a good corporate citizen. Companies must provide comprehensive data on more than 300 factors, and win benefits or punishments based on their score.

**Policy for the Integration of Military and Civilian Technology Development:** A government policy highlighted in the 2016 *Strategy of Innovation-Driven Development* is the integration of military and civilian technology development. Companies and academics are being compelled to work with counterparts in military businesses, universities and research institutes to identify technologies in fields such as artificial intelligence, biotechnology and advanced materials that can be adapted to serve military purposes. This policy means that joint ventures with Chinese partners may be serving China's military development.

## Issues Affecting Canadian Technology Joint Ventures

1. **The Ratio of Ownership:** Joint ventures in China, are not usually based on an equal partnership. Instead, ownership by the Canadian partner can be as low as 10% even if the technology involved is 100% Canadian. Aggressive negotiation is something for which the Canadian firm can prepare.
2. **Pressures for the Canadian Firm to give up more of its Ownership over Time:** Over time, the Canadian firm is often pressured into a reduction of its share. In some cases, the Chinese partner will buy the Canadian firm out, and continue making its products for sale in China and abroad.
3. **Terms and Conditions in Joint Venture Partnerships:** Conditions of JVs can affect their success from the Canadian perspective; e.g.,
  - a) a requirement in most JVs for technology transfer;
  - b) pressure to sell a key technology to a Chinese company, or lose out on another opportunity (e.g. a procurement contract);
  - c) branding in the name of the Chinese partner;
  - d) inferior quality parts are used, damaging the Canadian partner's reputation;
  - e) requiring the Canadian partner to create an R&D centre in China;
  - f) the Chinese partner competes against its own JV by underbidding; and
  - g) the JV sells to third countries undermining direct Canadian sales.
4. **Degree of access to the Chinese market:** Canadian executives often accept difficult terms in order to gain access to the promised "large Chinese market". But China is not one big market; rather it is 40 to 50 regional markets, depending upon the sector, so sales are slow to come.

## American Experience with Joint Ventures

The American experience with similar Chinese business practices has been salutary. A "Section 301" report issued by the United States Trade Representative's Office revealed many challenges that American companies had faced doing business in China. The 215-page report identified many ways in which China's market is not a level playing field

for western firms – the report assessed EU evidence as well as American. Major companies had been told to move to a JV or leave China. The foreign company then was forced to reveal its core IP, but the Chinese partner did not have to reveal theirs. The report also found pressures to transfer or disclose technology through administrative and licensing approvals. The report is important reading for any Canadian executive considering setting up a Chinese JV, or other arrangements such as mergers and acquisitions.

## Positioning for Better Success

There are key measures a company can take improve its negotiating position.

### 1. Good Models and Best Practices

- a) Complementary roles are better than partners making similar products;
- b) Announcing the joint venture too early makes it difficult to walk away from the table when the Chinese partner is making onerous demands;
- c) Doing your due diligence is even more important in China than other markets;
- d) Make one or more key parts in Canada and have them installed in China;
- e) Do not expose the company's newest technologies; focus on older products;
- f) Ensure that you retain super-majority voting rights on key issues;
- g) Network with other Canadian firms who have experience in China;
- h) Seek the advice of the Canadian Trade Commissioner Service; and
- i) Be prepared for surprises to be able to respond quickly to changes.

2. **Selecting a Chinese Partner Company:** Canadian company executives may be approached by a Chinese company or researcher. They need to be prepared to invest years, not months, prior to committing to a JV partner in China, and they should also be prepared to walk away.

3. **The Negotiation Process:** Before the negotiations begin, the Canadian company should have a long-term vision for the joint venture. Top level legal advice from western firms engaged in China should be sought. The Canadian negotiators should also have an exit strategy.

#### 4. Conditions of Joint Venture Agreements:

Key features that should be aimed for in the negotiations include:

- a) At least 51% (for Canadian company) control should be the target. Where it is lower, super-majority voting rights should be included for critical issues.
- b) Quality of the product is a reputational risk for the Canadian company, which should have sign-off for parts and suppliers in order to ensure quality.
- c) Branding of the product should be in the name of the Canadian company.
- d) Selling to third countries should only be included where the Canadian company does not itself export, and has no interest in doing so in the future.
- e) The ownership of innovations should be clear, especially where an R&D centre in China is also a condition of the agreement.
- f) Appointment of the General Manager should ideally be a Canadian with deep Chinese business experience.

### Public Policy and Joint Ventures in China

Joint ventures are often discussed in the context of **trade** with China but they are Canadian **investment** in China. To the extent that the Canadian technology has been exported to China up until the JV was negotiated, manufacturing will decrease and jobs will be lost in Canada. Most Canadian technology firms have received Canadian government R&D funding via grants or tax measures, so taxpayer supported technologies are at risk.

# Introduction

Since the 1980s, equity joint ventures (JVs)<sup>1</sup> have been one of a number of models for companies from other countries to establish themselves in China (see footnotes for other models). However, since 2015, Chinese government policy for key sectors has preferred, and in many cases required, these equity joint ventures for western technology firms, as China looked for ways to move up the global value chain. These business collaborations allow for a sharing of inputs, ownership and profits, and usually see the Chinese partner owning more than 50%. In particular, foreign *technology* companies (as opposed to services and other sectors) have been either compelled by law or forcefully persuaded to enter into equity JVs, including western firms that had been previously been operating as Wholly Foreign Owned Enterprises (WFOE)<sup>2</sup> operating in China for many years. As we will see in this report, this model of JVs backed by Chinese policy, legislation and business practices has led to an extensive transfer of technology from western firms to Chinese companies, frequently resulting in a loss of control by the originating company. While it is an aspiration of many developing countries to become industrialized nations, the strategy of using majority joint ventures to this end is a uniquely Chinese approach.

For example, Hewlett Packard was told by government officials in 2015 to sell 51% of their China business to Tsinghua Holding Company or leave China. The

company chose to stay, and got \$2.3B for the sale – but it lost controlling interest in its China market.<sup>3</sup> Then the same thing happened to Cisco which now has 49% of its joint venture with its Chinese partner Inspur.<sup>4</sup> Another large American firm, Microsoft, was concerned in 2015 when it saw that the Chinese government was replacing its software in financial institutions, government and military offices with a Chinese technology called Neokylin – with companies in the Chinese economy picking up the trend and further reducing Microsoft’s market. As they saw their China business losing market share, Microsoft decided to negotiate a joint venture in which they now own 43% of their China business.<sup>5</sup> More recently, foreign JVs such as Microsoft, HP and Dell’s have found their software again being replaced in government offices across China pursuant to a directive from the Chinese Communist Party Central Office in apparent retaliation for the US ban on American firms from doing business with Huawei.<sup>6</sup> Full replacement is to be completed within three years.

Seeing China’s move to force U.S. technology firms to abandon WFOEs for JVs, the experience of Canadian technology companies is instructive and even more concerning in some respects. This report is intended to better inform Canadian technology companies before they head into negotiations in China, and to alert those already in a joint venture of additional issues to which they should be alert.

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<sup>1</sup> Equity JVs apportion a percentage ownership between two or more Chinese and foreign partners. Contractual JVs between a foreign firm and a Chinese partner share the benefits of the JV by contractual arrangements such as licensing of technology. Both are governed by China’s *Foreign Investment Law*. Available at: [http://www.fdi.gov.cn/1800000121\\_39\\_4872\\_0\\_7.html](http://www.fdi.gov.cn/1800000121_39_4872_0_7.html)

<sup>2</sup> WFOEs are companies owned in full by a foreign firm operating in China.

<sup>3</sup> Charlie Osborne, “HP, Tsinghua partner in joint Chinese enterprise tech venture”, ZDNet, May 21, 2015. Available at: <https://www.zdnet.com/article/hp-tsinghua-partner-in-joint-chinese-enterprise-tech-venture/>

<sup>4</sup> Cisco press release “The Inspur-Cisco Joint Venture is Officially Inaugurated”, November 11, 2016. Available at: <https://newsroom.cisco.com/press-release-content?articleId=1805023>

<sup>5</sup> Josh Horowitz, “Microsoft’s new joint venture shows that China’s bullying tactics work on US tech firms”, *Quartz*, December 17, 2015. Available at: <https://qz.com/576457/microsofts-new-joint-venture-shows-that-chinas-bullying-tactics-work-on-us-tech-firms/>

<sup>6</sup> Kate Lyons, “China tells government offices to remove all foreign computer equipment”, *The Guardian*, December 9, 2019. Available at: <https://amp.theguardian.com/world/2019/dec/09/china-tells-government-offices-to-remove-all-foreign-computer-equipment>

# The Purpose of this Report

This report describes the experience of foreign firms, and particularly Canadian technology firms, in the joint ventures that they have had in China. The research reflects interviews with Canadian Presidents and Vice Presidents of companies with joint ventures in China, and/or in some cases the head of legal or business development and/or the managing director of the joint venture. While the research began as a review of companies' anecdotal experiences, the accumulating evidence across sectors and from small to very large companies became consistent and compelling as a new trend since 2015. More than three dozen companies with joint ventures have been reviewed (26 Canadian, 9 American, 2 German and 1 Swiss), some of which have multiple JVs in China, and important trends have been identified. The findings have been discussed extensively over the past two years with companies, government trade officials, and investment advisors active in China. With respect to the Canadian companies, it is clear that in virtually every case, the companies saw only their own negotiations and terms of the deals. They were not aware of trends across other joint ventures, nor conditions that might be difficult for them to manage. Had they known, their strategies may have been developed differently. There are no available empirical materials for these trends, so it has been necessary to rely on interviews and company documentation.

This report is designed to highlight frequent terms of negotiations and issues that may arise in order to help Canadian companies better prepare for joint venture negotiations in the future. It will also identify best practices in protecting the Canadian part of the joint venture and identify models that have shown success in the complex Chinese market. Canadian company names will, in most cases not be used but their sectors or other non-identifying information may be provided. This is not because the company representatives requested that their

name not be used in subsequent presentations of their experience – none of them made such a request, and some of the information is public in company press releases or quarterly reports. Rather, given that some of the issues identified are not “good news stories” about their experience, and not wishing to associate a negative report with specific Canadian technology companies, especially those that are publicly traded, the decision was taken not to name companies except in one case of a good model for other companies to consider.

The report demonstrates some of the pitfalls for future Canadian firms that are considering entering into joint ventures in China. Details have been shared with Canadian and U.S. government officials so that they are informed of the Chinese government's actions at a firm level, and so that trade officials may be in a better position to inform companies embarking on joint venture agreements in China. In addition, specifics can be shared with select Chinese government officials, should they wish, so that government cannot deny that these are the real experiences of foreign firms, as they did with similar observations made by the U.S. government.

While difficult challenges are identified, it is not the intention to advise firms not to establish facilities in the Chinese market; nor does this report advise against entering into joint ventures. Canadian firms will continue to enter the Chinese market through joint ventures, WFOEs, and other forms of investment. This report will describe the experience to date around equity joint ventures so that companies can consider their options with more information and be prepared for negotiations.

The author's 37-year career in government was focussed on building and supporting Canadian technology companies by designing, funding and implementing R&D programs and policies, and improving their linkages with university and

college innovators. Their continued success in new markets is an important part of their strength in the Canadian economy. The author also spent seven years as one of the four Canadian members of the Canada-China Joint Committee on Science and Technology. One of the touchstones of the Committee's work was the principle that, in China's market, Canadian researchers and firms should remain in control of their intellectual property (IP) and have decision-making authority over their product manufacturing and sales. As will be seen, that has not always been the case.

# 1. Chinese Policies of Importance to Canadian Companies

## 1.1 The Indigenous Innovation Policy

The reason for China's focus on joint ventures is the central government's desire to build their own technology capacity, reflected in their **Indigenous Innovation Policy** which includes accelerating integrated innovation, absorbing new technology into China's homegrown technology, as well as "reinnovation" based on **assimilation and absorption of foreign technology to make it Chinese and improve national innovation capability**. This gives rise to western firms complaining of Chinese firms taking their intellectual property – and it is government policy. The Policy also has a target of reducing China's dependence on western technology to below 30% of the Chinese market by 2025. First established in the Medium to Long Term Plan for Science and Technology in 2006, the 30% target was to be met by 2020.<sup>7</sup> But by 2015 it was clear that that target would not be met so it was extended to 2025 and there was a renewed effort to have foreign firms enter equity joint ventures where their business in China would be shared with a Chinese company.<sup>8</sup> This allows the Chinese system to treat the joint venture as a Chinese company for the purposes of meeting the 30% target, and allows the Chinese partner to benefit from the technology, innovation, and knowledge of the western firm. For the purposes of a Canadian firm considering a JV, this objective lies at the heart of much of what foreign firms have experienced, as their JV partner has absconded with their technology through various tactics.

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<sup>7</sup> Ministry of Science and Technology, *National Medium- and Long-Term Program for Science and Technology Development*. Section 2, last para. PP 9-11 <http://www.most.gov.cn/kjgh/kjghzsq/>

<sup>8</sup> See, for example, the 70% domestic content of core components requirement in the Made in China 2025 Plan. For analysis of the Plan see the Center for Strategic and International Studies, *Made in China 2025*. Available at: <https://www.csis.org/analysis/made-in-china-2025>

<sup>9</sup> Canadian Security and Intelligence Service, *China in the Age of Strategic Rivalry*, May 2018, p. 109, Available at: <https://www>

Some sectors will need to make a significant effort to make the 30% target. For example, in 2016 the percentage of foreign ownership in China's semiconductor market was 91%.<sup>9</sup> That year the central government announced that it would be spending US\$150B to reduce the western share to the 30% target by 2025. This is being done in part by JVs, mergers and acquisitions, and the US Commerce Secretary Penny Pritzker protested that such an influx of Chinese investment in the international market would distort the sector.<sup>10</sup> In some sectors, the target is more aggressive – for example, for new energy vehicles, the target is lower at 20% by 2020 and computer operating systems is 20% by 2025.

## 1.2 Research & Development Programs and Expenditures

The regime of Xi Jinping launched a major initiative in 2014 that scrapped more than 100 government programs that supported industry R&D and replaced them with five program areas: National S&T Major Projects (e.g., aerospace and information technologies), Key National R&D Programs (for international cooperation and areas key to social and economic development), Special Fund for Enterprises for Technological Innovation, Special Projects for Infrastructure and Talent, and National Natural Science Foundation of China (NSFC). Seven sectoral centres were identified to manage applications, and peer review was identified as the decision-making

[canada.ca/content/dam/ctsis-scrs/documents/publications/CSIS-Academic-Outreach-China-report-May-2018-en.pdf](http://canada.ca/content/dam/ctsis-scrs/documents/publications/CSIS-Academic-Outreach-China-report-May-2018-en.pdf)

<sup>10</sup> David Lawder, "U.S. Commerce chief warns against China semiconductor investment binge", Reuters, November 3, 2016. Available at: <https://www.reuters.com/article/us-usa-china-trade-semiconductors/u-s-commerce-chief-warns-against-china-semiconductor-investment-binge-idUSKBN12YOEG>

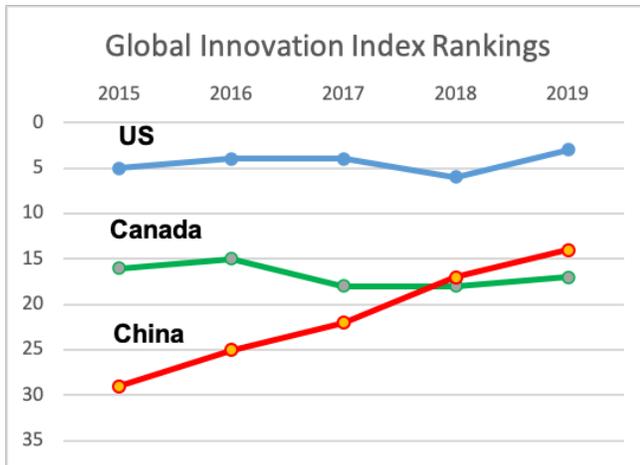


Fig. 1: Annual rankings from the World Economic Forum's Global Innovation Index 2019.

system.<sup>11</sup> This was a major reform in governance and process, and it is the suite of programs that funds many companies that now participate in joint ventures with western companies.

In addition to these reforms, China has invested massive spending on R&D of US\$291.6B (US\$554.3B PPP) in 2018, up 11.1% from the year before.<sup>12</sup> This has boosted Mainland **China's standing in the Global Innovation Index<sup>13</sup> from 29<sup>th</sup> to 14<sup>th</sup> in just four years.** It is no wonder that Canadian companies are wanting to partner with companies and researchers in China! Canada has dropped from 15th to 17th, so by the accepted measures of the World Economic Forum, China has now passed Canada in innovation. The U.S. had dropped to 6<sup>th</sup> in 2018 but has now risen back up to 3<sup>rd</sup>.

One important target is China's Gross Expenditures on R&D intensity (GERD/GDP) target of 2.5% by 2020. In March 2019, China announced that it would meet that target a year early<sup>14</sup> – this would be quite a leap from its most recent R&D intensity performance of 2.19% in 2018 and 2.15% in 2017. China continues to lag behind

<sup>11</sup> More information on the 2014-15 reforms can be found at: Margaret McCuaig-Johnston and Moxi Zhang, *China Embarks on Major Changes in Science and Technology*, China Institute, University of Alberta, Vol. 2, Issue No. 2, June 2015, pp. 41-48. <https://cloudfront.ualberta.ca/-/media/china/media-gallery/research/occasional-papers/stmccuaigjohnston-zhang201506.pdf>

<sup>12</sup> Teddy Ng, Jane Tsai, *China's Funding for Science and Research to reach 2.5 percent of GDP in 2019*, South China Morning Post, March 10, 2019. Available at <https://www.scmp.com/news/china/science/article/2189427/chinas-funding-science-and-research-reach-25->

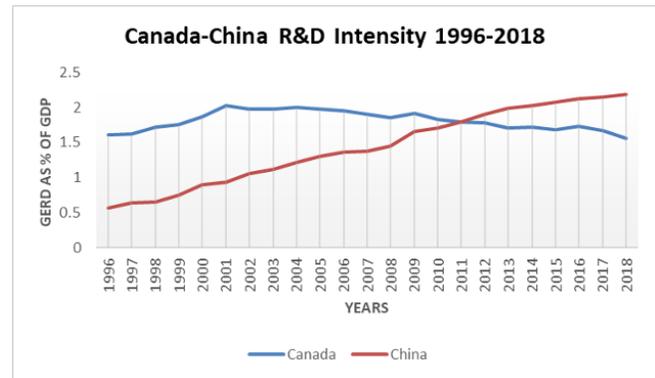


Fig. 2: Statistics from the Organisation for Economic Cooperation and Development, July 2020.

the U.S. at 2.83% and Taiwan at 3.46%. It remains to be seen whether they will be able to accomplish 2.5% GERD, particularly given the economic slow-down due to COVID-19, but it demonstrates **China's strong focus on R&D and innovation as the key driver of the economy.**

Regrettably, Canada's GERD intensity rating has been going down in the past decade, and China passed us in 2011. Our latest number for 2018 stands at 1.56%. And Chinese officials for the past few years have openly commented, often with disdain, on Canada's poor record of commercialisation. Within China, **scientists frequently complain that spending on basic research at 5.6% is not high enough<sup>15</sup>, and this is an area where they want to partner with the West. They say that they still have much they want to learn from us.** In fact, Canadian researchers report that, despite China's dramatic advances in innovation, their engagement with Chinese counterparts is still very much a one-way street, with the Chinese researcher taking Canadian ideas on board and not feeding back much in return.

cent-gdp-2019

Frequently referenced PPP or Purchasing Power Parity can be found at OECD, Main Science and Technology Indicators, July 9, 2020. Available at: [https://stats.oecd.org/Index.aspx?DataSetCode=MSTI\\_PUB](https://stats.oecd.org/Index.aspx?DataSetCode=MSTI_PUB)

<sup>13</sup> World Economic Forum, *Global Innovation Index 2019*, p. xxxiv. <https://www.globalinnovationindex.org/gii-2019-report> Switzerland and Sweden sit at 1 and 2 respectively. The 2020 Index will be published late July 2020.

<sup>14</sup> Ng and Tsai.

<sup>15</sup> Ibid.

### 1.3 Intellectual Property Policy

Likewise, China's intellectual property (IP) regime has undergone reforms. This has long been an area where western firms have complained of their technology being copied, their copyrights infringed and their products being deconstructed in order to replicate them. President Xi was well aware of these concerns, and on taking office he sent Premier Li Keqiang and Tian Lipu, President of the Sino Intellectual Property Office (SIPO), to various international capitals to brief senior government, legal, and business leaders to reassure western executives that he would be tightening up the system.<sup>16</sup> In addition, three IP courts were created in Beijing, Shanghai and Shenzhen, and 25 "IPR Protection Centers" were established in competitive industrial clusters.<sup>17</sup>

The most significant reform was the November 2019 issuance by the State Council and the CCP Central Committee of a new **Guideline on Strengthening Intellectual Property Rights Protection** which addresses IP protection for all firms operating in China. By 2022, the State Council is hoping to have curbed IPR infringement, and addressed the difficulties (such as high cost) of safeguarding IP protection. In addition, China will strengthen punishment for infringements and counterfeiting. There is also to be stronger protection of trade secrets, confidential business information and source codes, and improved communication between domestic and foreign rights holders.<sup>18</sup> The timing of this announcement, a month and a half before the Phase 1 trade deal was due to be signed, is likely designed to meet some of the criticisms made against China by American companies, to be discussed in more detail in the section below on the American experience with joint ventures.

Reforms such as this could lead to more transparent and fair cases that foreign firms would be able to win. However, since January 1, 2018 **the Supreme People's Court has stopped publishing numbers**

**of foreign-related cases, particularly Canadian and American cases.** In the view of some American experts, this may relate to a drop off in court rulings, and/or cases being delayed or stayed. Output numbers feed into performance evaluations so the SPC may be trying to obfuscate for that reason. And even when data was being published, there were limitations in the data due to the difficulty of finding true comparables. Nevertheless, it is not good news for foreign companies that the fate of foreign cases is now less clear rather than more transparent. In addition, the author was told by a Chinese national in Shanghai that even when they win, foreign firms most often have a hard time collecting on the financial settlements of their case decisions – but again, there is no data to quantify this dynamic.

Another challenge related to IP developed in China came in 2018 when the State Council issued draft **Rules on External Transfers of Intellectual Property Rights** (IPR) with a review mechanism that covers external transfers of IP such as patent rights, layout designs of integrated circuits, computer software, and new plant varieties. The rules apply to both the process of technology export and foreign investors' acquisition of Chinese enterprises. Such transfers will be investigated and **where they would involve China's national security or "the core technology innovation in China in key fields" they will be blocked.**<sup>19</sup> While the rules were made public as "draft", a Chinese official has confirmed that they are working rules now being implemented, with local governments developing corresponding policies to carry out the rules.<sup>20</sup> SIPO also has the authority to block patent exports.

Despite China's efforts at reform, **many patent and copyright issues are continuing, as the culture of using the IP of other companies is a practice deeply engrained in China's business culture.** In 2014, Canadian firms operating in China had identified IP rules and practices as 4<sup>th</sup> among their top concerns; in 2016 it had dropped out of the top five concerns, but rose back up again to 4<sup>th</sup> in the Canada China

<sup>16</sup> McCuaig-Johnston and Zhang, p. 37.

<sup>17</sup> State Council, "China accelerates layout of IPR protection centers", November 25, 2019. Available at: [http://english.www.gov.cn/policies/policywatch/201911/25/content\\_WS5ddbc543c6d0bcf8c4c17ca1.html](http://english.www.gov.cn/policies/policywatch/201911/25/content_WS5ddbc543c6d0bcf8c4c17ca1.html)

<sup>18</sup> State Council, "China issues guideline for enhancing IPR protection", November 24, 2019. Available at: [http://english.www.gov.cn/policies/latestreleases/201911/24/content\\_WS5dda789bc6d0bcf8c4c17bd4.html](http://english.www.gov.cn/policies/latestreleases/201911/24/content_WS5dda789bc6d0bcf8c4c17bd4.html)

<sup>19</sup> State Council, *State Council releases rules on external IPR transfers*,

March 29, 2018. Accessed at [http://english.gov.cn/policies/latest\\_releases/2018/03/29/content\\_281476094282268.htm](http://english.gov.cn/policies/latest_releases/2018/03/29/content_281476094282268.htm)

<sup>20</sup> Implementation of the Rules on External Transfers of IP in Jiangsu Province. Available at: [http://www.jiangsu.gov.cn/art/2018/11/8/art\\_46144\\_7874584.html](http://www.jiangsu.gov.cn/art/2018/11/8/art_46144_7874584.html). Also, explanation by a Director of the Sino Intellectual Property Office that the Rules will not influence foreign investment and the general openness of China towards trade. Available at: [http://www.jiangsu.gov.cn/art/2018/11/8/art\\_46144\\_7874584.html](http://www.jiangsu.gov.cn/art/2018/11/8/art_46144_7874584.html)

Business Council's 2018/19 Survey of members, with differences in business culture also rising into the top five in 2018/19.<sup>21</sup> (CCBC's 2019/20 Survey did not address IP, focussing instead on tense Canada-China relations, the US-China trade war, COVID-19 and China's economic development.<sup>22</sup>) Similarly, members of the U.S.-China Business Council had identified IP as their 10th priority concern in 2018 but that rose to 6th in 2019.<sup>23</sup> Clearly IP issues are still a major concern, and the promises of reform have not led to the improvements that Canadian and American firms were expecting.

## 1.4 Data Protection

One technology frontier that is becoming extremely important in China is the development and use of data. China is positioning itself to take full advantage of its large population to amass data that can then be manipulated for many purposes. It is also taking in data from other countries, often without charge, for storage and analysis. However, in April 2018 a new regulation, the **Measures for the Administration of Scientific Data**, was announced to impose severe restrictions on the export of scientific data from China (including that developed with foreign partners), while expanding access to data more widely within the country. The new regulations are intended to block the "leakage" of data to foreign countries, joint research foreign partners and foreign investors. Data that is intended for cross-border transfer (including data related to publication in foreign science journals) must be submitted for review at the applicable data center. The Measures apply to "scientific data" funded through a government budget, and under specified circumstances may apply to any organisation or individual inside China. Since they were announced,

the Measures have been the subject of discussion among the scientific research funding agencies of western countries and those in China.<sup>24</sup>

Scientific data involving "state secrets, national security, trade secrets, personal privacy, and societal and public interests may not be made public or transferred unless reviewed and given strictly restricted access". At the same time, China will strengthen its national Scientific Data Centers and its ability to aggregate data from various departments and local governments.<sup>25</sup> These regulations also support the government's cyber-security and social credit system for monitoring citizens' activities. In addition, China is seeking to access data abroad via Chinese companies, as will be seen below.

## 1.5 China's Negative List

The policies driving some of these challenges are reflected in **China's Special Management Measures for Foreign Investment Access**. The Measures include a list of sectors where foreign investment is encouraged, but the provision that gets the most attention is the **Negative List which prohibits foreign ownership in some sectors and restricts it to Chinese majority joint ventures in others**. Due to the intense criticism raised by American firms and by firms of other countries operating in China, the National Development and Reform Commission and the Ministry of Commerce revised China's Negative List<sup>26</sup> effective July 28, 2018, reducing the number of sectors affected from 63 to 48. Then in 2019 they further reduced the number to 40 sectors,<sup>27</sup> and most recently to 33<sup>28</sup>. It has been noted that sectors are often taken off the list when the domestic Chinese sector development has improved to the point that foreign competition is no longer a threat.<sup>29</sup> However, in the past few years,

<sup>21</sup> Canada-China Business Council, *Canada-China Business Survey, 2018/2019 Summary*, p. 11. Available at: <https://ccbc.com/wp-content/uploads/2019/05/2018-2019-Survey-Summary-FINAL-.pdf>

<sup>22</sup> Canada-China Business Council, *Canada-China Business Impact Survey 2019/2020*. Available at: [https://ccbc.com/wp-content/uploads/2020/05/CCBC-Business-Impact-Survey\\_Public\\_2019\\_2020\\_FINAL.pdf](https://ccbc.com/wp-content/uploads/2020/05/CCBC-Business-Impact-Survey_Public_2019_2020_FINAL.pdf)

<sup>23</sup> United States-China Business Council, *Member Survey, 2019*, pp. 1, 14-15. Available at: <https://www.uschina.org/reports/uscbc-2019-member-survey>

<sup>24</sup> Zhang Zhihao, "Rules to enhance security, openness of scientific data", *China Daily*, April 5, 2018. Accessed at <http://www.chinadaily.com.cn/a/201804/05/WS5ac58554a3105cdcf6516611.html>; and Lester Ross, Kenneth Zhou, and Tao Xu, "China Expands Access to Scientific Data Domestically, Imposes Restrictions on Export of Scientific Data", April 26, 2018. Available at <https://www.wilmerhale.com/en/insights/client-alerts/2018-04-26-china-expands-access-to-scientific-data-domestically-imposes-restrictions-on-export-of-scientific-data>

[www.wilmerhale.com/en/insights/client-alerts/2018-04-26-china-expands-access-to-scientific-data-domestically-imposes-restrictions-on-export-of-scientific-data](https://www.wilmerhale.com/en/insights/client-alerts/2018-04-26-china-expands-access-to-scientific-data-domestically-imposes-restrictions-on-export-of-scientific-data)

<sup>25</sup> Ibid.

<sup>26</sup> The Negative List, titled "The Special Management Measures for Foreign Investment Access". Accessed at <http://www.ndrc.gov.cn/zcfb/zcfbl/201806/W020180628640822720353.pdf>

<sup>27</sup> State Council, "Special management measures for foreign investment access (negative list) (2019 edition)", July 30, 2019. Available at: <https://www.jingoffice.com/foreign-investment-access-negative-list/>

<sup>28</sup> State Council, "Special management measures on Access to Foreign Investment (2020 edition) ("2020 National Negative List") Available at: [file:///C:/Users/Owner/Downloads/The\\_2020\\_National\\_Negative\\_List-The\\_Special\\_Administrative\\_Measures\\_on\\_Access\\_to\\_Foreign\\_Investment.pdf](file:///C:/Users/Owner/Downloads/The_2020_National_Negative_List-The_Special_Administrative_Measures_on_Access_to_Foreign_Investment.pdf)

some sectors were dropped from the list because other Chinese regulations now prohibited foreign ownership in those areas (e.g., radio, TV, movie production; manufacturing of weapons and ammunition). In the 2018 list, two items from the 2017 list were merged (surveying and mapping). **These changes give the appearance that the list has been shortened while in fact they continue to be prohibited.** In addition, cultural performance groups were added to the Restricted List, and “domestic shipping companies” was added in 2018 and then taken off again in 2019. On December 31, 2019, new regulations for foreign direct investment were issued by the State Council.<sup>30</sup>

A notable change in 2018 from a technology perspective is that “new energy vehicles” such as electric vehicles will no longer require a majority Chinese joint venture. (In 2020 commercial vehicles were added to this exception.) This was welcome news for Tesla which had been negotiating its joint venture since June 2017 and had rejected their designated Chinese partner as a weak company as well as objecting to the requirement for branding with a Chinese name, not the Tesla name. Tesla has gone on to construct a manufacturing facility near Shanghai and announced in December 2019 that the first cars had rolled off the line and been sent to buyers. Furthermore, the current requirement for a majority Chinese joint venture in general auto manufacturing will be lifted in 2022.

Restrictions on the share of foreign ownership are being eased in financial services (securities, futures, life insurance) allowing up to 51% before July 1, 2020, with all controls lifted in the new Negative List; this is leading some Western securities companies to look into setting up joint ventures in China.<sup>31</sup> In addition, design, manufacture and maintenance of specified types of aircraft no longer appear as either restricted or prohibited.

The Negative List **restriction** to majority (or capped as indicated) Chinese joint ventures will continue to apply inter alia in sectors such as:

- construction and operation of nuclear power

- plants as well as gas & heat (city of more than 500K), water and drainage networks;
- water transport, shipping and air transport companies, and construction and operation of airports (in air, foreign enterprise not to exceed 25%);
- telecommunications (except call centres, certain value-added, and multi-party communication);
- market research companies;
- breeding of new varieties of wheat and corn (it had previously been all crops); relaxed for wheat in 2020 to Chinese ownership not less than 34%;
- printing of publications;
- higher education and pre-school institutions; and
- medical institutions.

As noted above, most telecommunications must be “controlled by the Chinese side” in a joint venture – that is, **foreign telecom companies such as Ericsson and Nokia are not able to operate in China in the manner that Huawei has proposed to operate in other countries; they have Chinese joint ventures for their operations there.**

Furthermore, one very concerning provision in the new Foreign Investment Law is the requirement that “where any country or region takes discriminatory prohibitive, restrictive, or other similar measures against the People’s Republic of China with respect to investment, the People’s Republic of China may take corresponding measures against such country or region based on the actual circumstances.”<sup>32</sup> So as of January 1, 2020 when the law came into effect, **any country that wishes to, for example, ban Huawei from its 5G, could face serious reciprocal action from the Chinese government on its own companies operating in China.**

As will be seen, the pressure on western firms to have a joint venture was often in sectors that were not included on the Negative List, such as clean technology, with Chinese consultants and Chinese government officials emphasizing that it would be easier for the company to become established in China if it had a Chinese partner to open doors – partners that often have an interest in gravitating

<sup>29</sup> European Chamber of Commerce in China, *Stance on the Updated Negative List for Foreign Investment*, July 2, 2020. Available at: [https://www.eurochamber.com.cn/en/press-releases/3253/stance\\_on\\_the\\_updated\\_negative\\_list\\_for\\_foreign\\_investment](https://www.eurochamber.com.cn/en/press-releases/3253/stance_on_the_updated_negative_list_for_foreign_investment)

<sup>30</sup> State Council, Regulations of the People’s Republic of China on the Implementation of the Foreign Investment Law,

December 31, 2019. Available at: [http://www.gov.cn/zhengce/content/2019-12/31/content\\_5465449.htm](http://www.gov.cn/zhengce/content/2019-12/31/content_5465449.htm)

<sup>31</sup> Chi Dehua, “China eases barriers to foreign investment in new negative list”, GBTIMES, June 29, 2018. Accessed at <https://gbtimes.com/china-eases-barriers-to-foreign-investment-with-new-negative-list>

<sup>32</sup> Foreign Investment Law, Article 40.

the foreign technology into their own product line. In addition, while the list requires majority Chinese ownership, at 51% or even 50.1%, many JVs give the Chinese partner far above the 51% required by the list.

The **prohibition** of foreign investment will now apply to:

- rare earth exploration, mining and mineral processing;
- radioactive mineral exploration, mining, smelting, processing and nuclear fuel production; air traffic control;
- postal companies;
- Chinese legal affairs;
- genetically modified varieties of crops, livestock and aquatic products, as well as aquatic products more generally;
- development and application of human stem cells, genetic diagnosis and treatment technologies;
- ocean mapping, aerial photography;
- surveying and mapping, and geological and mineral surveys;
- social surveys;
- humanities and social science research institutions;
- compulsory education and religious education institutions;
- all news agencies, book and news publishing, radio and TV stations and programming, all aspects of video transmission and microwave stations;
- satellite TV facilities and key components;
- film production and distribution;
- cultural stores; and
- performance groups.

The prohibition on rare earths (used in cell phones) is recent – it had been only restricted on the previous list. However, it has been the experience of Canadian firms that, for many years, they had been frozen out of that market without explanation – this is now formalizing that government policy.

In addition to the principal Negative List, the pilot Free Trade Zones in China, such as those in Shanghai and Tianjin were somewhat more relaxed in recent years. In 2019 and then 2020 the number of sectors affected was reduced to 30 sectors, with specific conditions applying in:

- agriculture (from 49 to 66% foreign ownership permitted of seed production);
- mining (foreign oil and gas exploration permitted); and
- cultural industries and value-added telecommunications<sup>33</sup>.

One interesting addition to the Negative List procedures in 2020 is that the State Council now has the power to override the Negative List and permit specific foreign investors into the market. The respected European Chamber of Commerce in China has suggested that this could be positive if it is used to test the market and ultimately open it more widely. However, the Chamber also flagged a concern that companies need transparency and a predictable approval system, and firms could find themselves out of favour in a politicized system when their home governments are at odds with Beijing.<sup>34</sup>

It is worth noting that the list of restricted and prohibited is far more restrictive than Canada's own legislation for the review of foreign ownership in Canadian sectors. This suggests that one approach to negotiations with China should be the objective of reciprocity in treatment of each country's companies. Furthermore, as can be seen with rare earths, China is identifying key strategic sectors and ensuring continued or even more stringent protection of them from foreign ownership. This is mirrored in intellectual property and data exports, as described above.

At the same time as the 2019 Negative List changes, administrative filing to two agencies was streamlined to one form. However, there remain enormous administrative burdens for foreign companies in China such as the annual reporting requirements and myriad approvals required by numerous government agencies, and local governments. And the Negative List is explicit that "current regulations" remain in effect for "administrative approvals, qualification conditions, national security, etc." Companies have often said that these day to day barriers are the most difficult to surmount. In fact, the OECD reports that China is the 4th most restrictive country economy of 69 OECD and non-OECD countries assessed in terms of freedom of doing business.<sup>35</sup> And that is analysing only its formal laws and policies formally adopted by the government,

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<sup>33</sup> Jing Shuiyu, Zhong Nan, "New List for FTZs opens key sectors", *China Daily*, July 2, 2018. Accessed at <http://usa.chinadaily.com.cn/a/201807/02/WS5b393463a3103349141dffffd.html>

<sup>34</sup> European Chamber of Commerce in China.

not the many administrative hurdles that companies face. Those administrative hurdles are increasing significantly with the new Corporate Social Credit System (CSCS) described in the next section.

## 1.6 Requirements of the Corporate Social Credit System

For a few years now, foreign companies operating in China have been required to have a Communist Party Cell or Committee as well as a Party representative on the Board. A very recent and more significant requirement facing domestic and foreign firms in China now is a new **Corporate Social Credit System**<sup>36</sup> being implemented to give scores to companies and their executives based on how well the company behaves in China as a good corporate citizen. This is applying to companies the same type of Social Credit System applied to citizens that has been rolling out across China since 2016. Under that system, individuals' WeChat and Weibo exchanges are monitored and they can lose the right to take a high-speed train (5.5M people had already been given this punishment in 2018) or plane (18M people prohibited in 2018), can lose job opportunities and promotions, and lose a place for their child in a good school. It has emerged that the children of some human rights activists are prohibited from attending school at all!<sup>37</sup> Academics speaking at conferences are now praising the nation and the Party to win a higher score – those not doing so lose points.

**The application of a similar system in business will see the government punishing and rewarding firms according to how well they align with government and Party standards, objectives, behaviours and required performance.** According to a report<sup>38</sup> of the European Chamber of Commerce in China, foreign companies and JVs have to input exceedingly comprehensive data on more than 300 factors to demonstrate alignment, for input into a centralized digital database that has multiple sources of

information. Control over the data rests with the government. There is also a blacklisting system and a structure for punishment (e.g., fines, higher inspection rates, targeted audits, exclusion from subsidies and tax rebates, restriction from public procurement, public shaming) as well as rewards for “good behaviour” (e.g., access to tax breaks, low interest loans, R&D grants). The behaviour of employees will also impact the company's score – especially but not restricted to that of the senior management and the head of legal affairs.<sup>39</sup> As of mid 2019, much of the system was operational but it was still far from being fully implemented.<sup>40</sup>

**One related variable in regulating firm behaviour in China is the government authorities' recent tightening of regulations to punish severely the leaders of companies that have committed environmental or safety infractions, whether intentionally or by neglect, with serious prison time.** The appointed leaders of local municipalities are increasingly being held accountable for environmental damage to rivers and lands, so are quick to turn to local companies to find fault. Senior managers of firms in China are regularly jailed for contravention of regulations that would result in a fine in the West. The author met with the former General Manager (GM) of a U.S. technology joint venture in Changchun who indicated that the GM of a competing firm had been imprisoned for an environmental infraction, and he himself had come close to that when safety regulations were tightened in 2015. So after thirteen years in his position he decided to leave China rather than risk their medieval prison conditions. The new Corporate Social Credit System will provide an additional measure whereby the company and its employees can be held accountable, and rewarded or punished. **Over time, the requirements for good behaviour will be tightened as the system is calibrated.** Beijing asserts that the new system will create a “fair, transparent and predictable” business environment. Foreign companies have responded that they fear

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<sup>35</sup> OECD, Foreign Direct Investment Regulatory Restrictiveness Index, 2018. Available at: <https://stats.oecd.org/Index.aspx?datasetcode=FDIINDEX#>

<sup>36</sup> Evelyn Cheng, *China is building a 'comprehensive system' for tracking companies' activities*, CNBC, September 4, 2019. <https://www.cnbc.com/2019/09/04/china-plans-for-corporate-social-credit-system-eu-sinolytics-report.html>

<sup>37</sup> Li Wenzu, “Imprisoned Lawyer Wang Quanzhang's Six-year-old Son Once Again Forced Out of School”, China Change, September 6, 2019. Available at: <https://chinachange.org/2019/09/06/>

imprisoned-lawyer-wang-quanzhangs-six-year-old-son-once-again-forced-out-of-school/

<sup>38</sup> European Chamber of Commerce in China, *The Digital Hand: How China's Corporate Social Credit System Conditions Market Actors*, 2019. Available at [https://static.eurochamber.com.cn/upload/documents/documents/The\\_Digital\\_Hand\\_How\\_China\\_s\\_Corporate\\_Social\\_Credit\\_System\\_Conditions\\_Market\\_Actors\[709\].pdf](https://static.eurochamber.com.cn/upload/documents/documents/The_Digital_Hand_How_China_s_Corporate_Social_Credit_System_Conditions_Market_Actors[709].pdf)

<sup>39</sup> Evelyn Cheng, September 4, 2019.

<sup>40</sup> European Chamber of Commerce in China, p. 3.

the data compiled will be used against them in the event of a trade dispute and to give their Chinese competitors an advantage in the Chinese market.<sup>41</sup> This is an emerging but very important factor in Canadian firms determining whether to establish a joint venture or a wholly foreign owned enterprise in China because it is a much more intrusive system than the one to which most firms in Canada are accustomed. It will be important to see the experience of other Canadian firms as they become accustomed to the new requirements, as it is calibrated over time, and as companies see the severity of the punishments meted out to those firms (and their senior executives) that are not fully compliant.

## 1.7 Policy for the Integration of Military and Civilian Technology Development

A government policy highlighted in the 2016 *Strategy of Innovation-Driven Development* is the *integration of civilian and military technology development*.<sup>42</sup> Scientists and engineers across many disciplines are being compelled to work with counterparts in military universities and research institutes to identify technologies and systems that can be adapted to serve military purposes. Similarly, if requested companies must collaborate with, and manufacture for, the military even where they would prefer not to. **This goes beyond what we traditionally know as dual-use, as it is forcing applications that would likely not emerge otherwise.** In addition, it goes far beyond the U.S. or Canadian defence procurement systems wherein companies can choose to bid on projects, or not. In China, they are compelled to take on military projects. President Xi himself chairs the National Commission for Civilian and Military Development, so it is clearly a high priority of the central government.

China is using artificial intelligence, in particular, in its bid to develop an advanced military capacity in a

process that it calls “intelligentization” to transform both the economy and the military. Its university R&D capacity in AI, being built in collaboration with researchers around the world, is being leveraged with private sector progress in what the Chinese military are calling the advent of a new military revolution.<sup>43</sup> China’s AI companies are active participants in this race to build the most advanced weapons, including lethal autonomous systems – weapons that use their own built-in intelligence, not controlled by humans.

**Military and civilian technology integration is an important initiative in the context of collaboration with other countries. It means that joint ventures with Chinese companies or researchers may be serving China’s military development.** This will not always be evident to the Canadian partners. Canadian companies should be familiar with the Canadian Controlled Goods Program and its policies regarding such collaborations. This could apply to almost any field but disciplines such as artificial intelligence, biotechnology, quantum technologies and advanced materials are particularly vulnerable to being redirected to military applications.

For the academic sector, Universities Canada has prepared an excellent set of guidelines for those researchers who collaborate with countries where there may be a risk of their intellectual property being stolen or used for purposes not anticipated by the researcher. **It is worthwhile for Canadian companies to review this document for some of the signals they should keep in mind as they collaborate with partners in China.**

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<sup>41</sup> Frank Tang, *China pushing ahead with controversial corporate social credit rating system for 33 million firms*, *South China Morning Post*, September 17, 2019. Available at <https://www.scmp.com/economy/china-economy/article/3027674/china-pushing-ahead-controversial-corporate-social-credit>

<sup>42</sup> State Council Office and the Central Committee of the Communist Party of China, *Plan for Implementing the National Strategy of Innovation-Driven Development*, May 2016, p. 14.

<sup>43</sup> Elsa Kania, *Battlefield Singularity: Artificial Intelligence, Military Revolution, and China’s Future Military Power*, November

2017. Available at: <https://www.cnas.org/publications/reports/battlefield-singularity-artificial-intelligence-military-revolution-and-chinas-future-military-power>

<sup>44</sup> Universities Canada, *Mitigating Economic and/or Geopolitical Risks in Sensitive Research Projects: A Tool for University Researchers*, December 2019. Available at: <https://telfer.uottawa.ca/assets/research/documents/docs/Mitigating-economic-and-or-geopolitical-risks-in-sensitive-research-projects-dec-2019.pdf>

# 2. Issues Affecting Canadian Technology Joint Ventures in China

## 2.1 The Ratio of Ownership

In investigating Canadian technology companies' joint ventures in China, one would expect that the ratio of ownership in most partnerships would reflect something close to 50/50 or 51/49. It was therefore surprising to find that the first Canadian joint ventures reviewed had a much more **unbalanced ratio of 90/10, 80/20, 65/35, and 60/40 for four clean energy technology companies, and 70/30 for an oceans technology company – all heavily favouring the Chinese partner.** As indicated above, these are not sectors on the Negative List, requiring a joint venture that puts the Chinese partner in the decision-making position. So they would have been able to establish a WFOE but they were persuaded that it would be better for them to enter the Chinese market in partnership with a Chinese company, a company that makes similar products to their own. As John Gruetzner points out, another JV structure is to have two Chinese partners plus the Canadian, where one Chinese partner is a financial partner who will usually be aligned with the Canadian technology partner rather than the Chinese partner.

Recall that it is 100% the Canadian technology that is being manufactured and sold in China and sometimes sold to third countries. To settle for a relatively small percentage may reflect the nervousness of Canadian firms entering a complex market, but these companies are not alone. Looking at more and more Canadian firms, it was the norm – though there is one JV of a long-time Canadian company in China that was at 80% ownership for the Canadian firm and it has been very successful, as have been the firm's other JVs that are at or below 50%. Certainly, 80% is very rare for the foreign JV partner of any country. **One senior corporate leader who is no longer on the board of a company with such joint ventures told me that if the ownership is less than 50% it might as well be zero;** that seems an exaggeration but it clearly makes the point that the ratio matters.

## 2.2. Pressures for the Canadian Firm to give up more Ownership over Time

Early in this study it was possible to find several Canadian technology firms that seemed to have negotiated a good ratio for their joint ventures. One in the auto sector signed a 50/50 agreement in 2016, but a year later they signed another that was 50.1 to 49.9 --- not a huge change but one can see the issue of control firming up.

Another joint venture was 51/49 in favour of the Canadian internet technology firm --- one of the few instances which did not favour the Chinese partner. And in this case, the Canadian President chose the managing director of the joint venture. But when the President of the Canadian company was interviewed to find how he arrived at 51%, hoping that it might provide a good model or best practice for other Canadian firms, he said that it actually starts at 51% but ramps down over time. When asked why he would agree to that in an advanced technology sector of the future, he said that that was all that his Chinese partner would agree to. He then described how he and his staff are now travelling across Canada finding similar nascent technologies in university labs and SMEs to package and take to his Chinese partner. He agreed that he was, in effect, a "bundler" of technologies in the same way that wealthy political donors in the US bundle the donations from their wealthy friends and acquaintances and give large sums to their preferred political party. **In this case, the Chinese partner (a large SOE) is getting not only his technology but emerging technologies from across Canada which may not have an opportunity to grow here.** If there were more growth capital and post-seed funding for SMEs in Canada, the offer of the Chinese market might not have as much allure.

In the case of a clean energy company, a JV signed in 2008 gave the Canadian company a 35% share. However, in 2016 it sold 11.7% to its Chinese partner. The announcement said that "[Canadian partner] is

pleased to support the goal of [Chinese partner] to increase its majority ownership position in [the JV]". This statement appeared designed to signal to the Chinese government that the Chinese company had successfully acquired an even bigger share, just by asking for it.

In two biotech and medical device joint ventures, the Chinese partner was supposed to find sales and manage distribution. When the Canadian company challenged them that nothing seemed to be happening, the Chinese partner said they had been busy with other projects and would pay more attention to the Canadian product --- but they wanted a higher share of the ratio.

In another case, a Canadian company that makes technology for military and industrial applications had a 23% share of his company's joint venture in China. Again, the Chinese partner was not performing their part of the arrangement. The President of the Canadian company indicated that he felt he had no other choice but to sell the factory equipment he had brought over from Canada along with the IP for the software to his Chinese partner and get out of the JV completely. The Chinese company was starting to make the product for the Chinese market, and perhaps will be a competitor of the Canadian firm in international markets in the longer term.

Since 2016 the author has been tracking this trend of the Chinese partner taking over, over time, but a lively description of this dynamic is offered more recently in an October 2019 China Law Blog that describes how **"once the Chinese JV partners either believe they no longer need their foreign joint venture partner or simply no longer want to share in the JV spoils with their foreign partner, they will work to drive the foreign partner out of the venture"**.<sup>45</sup> It is interesting reading and informs several of the measures suggested below for more effective negotiation and management of JVs.

## 2.3 Terms and Conditions in Joint Venture Partnerships

### a) Requirement for forced technology transfer

There are a wide variety of conditions of JVs that can affect the success of the arrangement from the point

of view of the Canadian company. One factor is the requirement in most joint ventures for technology transfer – that is, the details and **specifications of the core design and IP of the western firm must be revealed – but little or none of the Chinese partner's**. When the author asked a Chinese official about this unbalanced dynamic in joint ventures he replied, "Of course that is what we are doing. That is how China is developing its technology capacity." Indeed, a high-profile JV with these requirements was that of Ford Motors and its partner Chang'an. China's State Council Office liked the terms of the JV so much that they started calling it the Chang'an model of JVs, requiring technology transfer, and it encouraged other Chinese firms to follow the same practice in their own JVs.

If the Canadian company refuses, the JV does not move forward and the Canadian firm either finds a new partner, establishes a WFOE or does not access the Chinese market. **The pressures for technology transfer have been particularly severe in strategic sectors where China is looking for a technology edge and international leadership, such as clean technologies, artificial intelligence, information technologies, semiconductors, automotive and aerospace**. Of course, most of these are also sectors of strategic importance to Canada, and in which we have joint ventures in China. While the new Foreign Investment Law that came into effect January 1, 2020 states that "Administrative organs and their employees must not force the transfer of technology through administrative measures" it also provides that "The State encourages technological cooperation to be conducted in the course of foreign investment" and Chinese companies can be expected to continue to press for it.<sup>46</sup> It was sobering to see a report in the *Wall Street Journal* in May 2019 indicating that European firms have reported a doubling of incidents of companies reporting they felt compelled to transfer technology to maintain market access: 20% of firms in 2019 up from 10% in 2017.<sup>47</sup> This is despite repeated assurance by the Chinese government that this practice would stop. The Law will also move away from foreign investment structures and use only Chinese company legal provisions within three years.

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<sup>45</sup> Corey Coyle, "The China Joint Venture Squeeze Out – How it Works and How You Must Respond", *China Law Blog*, August 27, 2019. Available at: [https://www.chinalawblog.com/2019/08/the-china-joint-venture-squeeze-out-how-it-works-and-how-you-must-](https://www.chinalawblog.com/2019/08/the-china-joint-venture-squeeze-out-how-it-works-and-how-you-must-respond.html)

[respond.html](https://www.chinalawblog.com/2019/08/the-china-joint-venture-squeeze-out-how-it-works-and-how-you-must-respond.html)

<sup>46</sup> Foreign Investment Law, Article 22.

<sup>47</sup> Julie Wernau, *Forced Technology Transfers Are on the Rise in China*, *European Firms Say*, *The Wall Street Journal*, May 20, 2019.

#### b) One JV negotiation can affect a separate deal

Another dynamic that one Canadian multinational firm experienced was **high stakes pressure to sell to a Chinese company one of its key technology designs, not made in China, or face consequences**. This is another form of forced technology transfer. In this case, the firm refused to sell and lost out on a big procurement contract. The connection between the two events was clear. A Chinese official interviewed for this report said that pressure is often brought to bear on a western company in negotiations through a seemingly unconnected route by government authorities or other companies. “We call it Team China”, he said, in describing the way in which Chinese government officials and Chinese business people work together to advance the objectives of China’s economic policy.

#### c) Branding is often Chinese

The branding of the product for sale in China is also often a problem in technology company JVs. Remembering that it is a Canadian product being manufactured and sold in China, it should carry the Canadian name and visibility. Too often, the **Chinese partner insists that its own name should be on the product. Then at a later stage the technology may be absorbed into the Chinese company’s product line, and that process is seamless to the customers in China**. It can seem inevitable or a fait accompli. The standard procedure is to submit three names including the preferred name to the local authority. They may come back with a different name, but negotiation or returning with another name is sometimes possible. Having the Chinese partner on board with the name is, of course, important for the local authority.

#### d) Quality as a reputational risk

Another variable is the quality of the components or parts in the product. This can have a **reputational impact on the Canadian firm if the parts are lower quality, particularly if the JV is selling to third countries**. But the Chinese partner will usually assert that they need to be able to sell the product for a lower price, so the parts need to be different than those that the Canadian firm would normally

use. This is something that should be watched carefully, with adjustments to parts suppliers made as necessary. Those who manage JVs in China have said that it is a serious challenge to build a supply chain in China – suppliers are not completely dependable. This issue may become more pronounced, as the Corporate Social Credit System will be assessing firms on the performance of their suppliers.<sup>48</sup>

#### e) Establishing an R&D centre in China

A related condition often required of western joint ventures involving large companies is that they establish an R&D centre in China. This can entail a significant expenditure, and will result in an investment in the development of people and advanced technology products for the Chinese market. **The Canadian firm may continue to have an R&D centre in Canada, and over time there can develop a close exchange between the two, which makes it harder to protect the development of beta technologies in Canada** while opening up for China the benefits of the latest innovations by Canada’s highly qualified scientists and engineers.

#### f) The Chinese partner may compete with its own joint venture

Another dynamic in a Chinese joint venture arises when the Chinese partner chooses to compete with its own JV with the Canadian company. Again, this is a risk when the Canadian firm partners with a Chinese company that makes similar products. Sometimes the two products can exist side by side in the Chinese market, but at other times, especially where there are large procurements at stake, **the Chinese partner has information as to what the JV will bid, and then underbids that amount to secure the contract**.

#### g) The JV may be required to sell to third countries

We see this too in JVs that sell to third countries, a condition that in past has been “encouraged” under China’s legislation governing joint ventures – so many Chinese firms took that condition as instruction. (It no longer appears in the new Foreign Investment Act.) This can lead to reduced direct sales from Canada to those countries of the same

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<sup>48</sup> European Chamber of Commerce in China, p. 1.

or similar products. It has also been the case that the Chinese-controlled Canadian JV goes into a procurement market that Canada has previously sold to directly so that the new Canadian-Chinese product comes with the gold seal of Canadian quality – and then **during the negotiation the Chinese firm separately persuades the third country to buy the Chinese product instead in a bait-and-switch tactic.** Of course, it usually carries a lower price – with lower standards of quality than the Canada-China JV's product would carry. Therefore, allowing sale to third countries in the JV agreement should be included only after very careful deliberation.

## 2.4 Degree of access to the Chinese market

Most often, the terms of a new JV are offered on a take it or leave it basis. Canadian executives talk frequently about the Chinese being “tough negotiators”. The terms in the actual detailed negotiations are often much more onerous than the companies anticipate. So why do they agree to them? The potential Chinese partner, and the government officials who often attend the meetings, promise in the lead up to the negotiations the huge Chinese market of more than a billion consumers just waiting to buy the Canadian product. The Chinese firm can open all the doors to make that happen. So they sign.

**But China is not one big market with easy access by the Chinese partner. Rather it is 40 to 50 regional markets, depending upon the sector.** So the sales are slow to come, and questions to the Chinese partner lead to friction in the JV. Even in the sectors of clean energy and clean tech, where China is eager for new technologies and wants to meet its environmental and climate change objectives, numerous Canadians have said that our firms have been slow to see the market open up for them and few are seeing the profits they expected. And the longer it takes, the more chance there is of the Chinese partner trying to ease out the Canadian firm.

Indeed, **some investment organisations that advise western firms in China now discourage companies from participating in JVs there.** They have seen many foreign firms taken advantage of in their JV partnerships, and do not want to see others they are counselling fall into the same situation. While many less-developed and developing countries have aspirations to develop an advanced industrial and

technology-focussed economy, China is proactively driving this agenda with rough business practices that are more aggressive than other countries where investors could place their marginal dollars.

The question that will be addressed later in this report is, for those companies that choose to engage in the Chinese market, how can they protect against some of the Chinese business practices and generate company strategies that work.

# 3. American Experience with Joint Ventures

There are very close links between Canadian and U.S. companies and common business practices, and the U.S. has extensive business experience in the Chinese market. Therefore, it is useful to have a look at their analysis of issues they have encountered. In short, the American experience with similar Chinese business practices has been salutary. Throughout 2018 and 2019, the United States and China were in the throes of on again, off again negotiations for a trade agreement. The catalyst for these negotiations was a report<sup>49</sup> issued March 22, 2018 by the United States Trade Representative's (USTR) Office that revealed many of the challenges that American companies had faced doing business in China. An update report released November 20, 2018 provided additional examples.<sup>50</sup> The Section 301 report, as it is known, addressed numerous problems that firms have had in their joint ventures including forced technology transfer and IP theft. In a very measured analysis, the 215 page report identified many ways in which China's market is not a level playing field for Western firms – the report assessed EU evidence as well as American.

The same day as the report's release, the President of the U.S. announced actions he could take including tariffs, WTO reference, and constraints on Chinese access to sensitive American technologies.<sup>51</sup> It was hoped that the tariffs he imposed would bring China to the negotiating table to change their business practices – not a trade war tactic that Canada would ever be in a position to use. China's new Foreign Investment Law and its accompanying regulations

were China's effort to demonstrate some progress on some of the issues involved in the negotiation – though as has been pointed out above, it has weaknesses and is not expected to resolve most of the problems that the report identified, and the changes were already signaled in March 2019 when the Law was first released, to go into effect January 1, 2020. The regulations do appear to make one significant concession which is no longer setting limits on the amount of currency a foreign company can take out of China. That had constrained companies from taking their profits home, requiring them to reinvest most of their profits in China.

The key issue that the report identified was that Western companies have been forced to take Chinese partners in joint ventures in order to access the Chinese market – even when the firm's sector did not appear on the Negative List. Often the Chinese partner was designated by Chinese government officials. Then the foreign company was forced to reveal its core IP, but the Chinese partner did not have to reveal theirs. This is the "forced technology transfer" accusation that U.S. leaders have cited so often, and it is similar to the experience of Canadian firms, as described above. Examples of information that has had to be revealed is source code, complete design databases, behaviour models, logic models and processing unit layouts. China's new Foreign Investment Law requires that administrative organisations not require technology transfer, but it "encourages" technology collaboration. It remains to be seen whether Chinese company partners

<sup>49</sup> Office of the United States Trade Representative, "Findings of the Investigation into China's Acts, Policies, and Practices related to Technology Transfer, Intellectual Property, and Innovation under Section 301 of the Trade Act of 1974", March 22, 2018. Available at <https://ustr.gov/sites/default/files/Section%20301%20FINAL.PDF>

<sup>50</sup> Office of the United States Trade Representative, "Update Concerning China's Acts, Policies and Practices related to Technology Transfer, Intellectual Property, and Innovation",

November 20, 2018. Available at: <https://ustr.gov/sites/default/files/enforcement/301Investigations/301%20Report%20Update.pdf>

<sup>51</sup> Squire Patton Boggs, "President Trump Announces Trade Actions Targeting Chinese Tech and Intellectual Property Policies", *Global IP & Technology Law Blog*, April 6, 2018. Accessed at <https://www.iptechblog.com/2018/04/president-trump-announces-trade-actions-targeting-chinese-tech-and-intellectual-property-policies/>

interpret “encourages” as they should do their best to accomplish it, as they do with other soft messages that appear in Chinese laws. At the same time, in rejecting further action on improving Chinese business practices related to foreign companies, China’s Foreign Minister Wang Yi warned the U.S. “not to interfere with China’s sovereignty”.<sup>52</sup>

Other findings are that technology improvements made in China are deemed in law to be the Chinese partner’s IP and legislation gives the Chinese partner the right to all foreign IP after ten years. The western firms’ technology specs such as factory layout details must be provided to local authorities for approval and is likely to be shared with competing firms represented on advisory committees to the local authority.

The Section 301 report found, in addition to forced technology transfers, that there are pressures to transfer or disclose technology through administrative and licensing approvals. **The rules are often vague and subject to the personal interpretation of officials who may take an aggressive role in requiring conditions that go beyond written requirements.**

The USTR Report documented how sensitive technical information must often be disclosed to get administrative approval to build factories, and local companies sometimes use that information to compete. In addition, technical information given to government is sometimes passed to expert panels that may include competitors. Such panels can come into play at numerous stages in the company’s operations and in a wide variety of industries.

These problems have not sat well with Western firms. A survey of firms on behalf of the European Commission found that only 12% would prefer their JV arrangement over an independent wholly foreign-owned enterprise.<sup>53</sup> Some American companies have sued their own JV partner in Chinese courts for IP theft, and some have appealed trade secret misappropriation at the US International Trade Commission.<sup>54</sup> And they have seen their top talent attracted away to Chinese firms and labs for salaries far above market norms, often subsidized by the

Chinese government. In concluding its comprehensive report, USTR recommended more intensive bilateral engagement on the issues, WTO dispute settlement and/or additional Section 301 investigations. Interestingly, it did not recommend increases in tariffs<sup>55</sup> though the trade negotiations have seen very intensive bilateral discussion of China’s business practices, as the tariffs were designed to bring about.

The Section 301 report is important reading for any Canadian executive considering setting up a Chinese JV, or other arrangements such as mergers and acquisitions. When it was first issued, Beijing pushed back hard, saying no such practices occur in China. Some American colleagues who research China’s innovation system also pointed out that the findings were not backed up by specific company examples and quantitative analysis. The report instead speaks in broader terms about the dynamics that companies faced on the ground. This is because the input from companies came in the form of roll-up briefs presented by 50 industry associations and experts that are summarized at the end of the report. **Companies in the US are usually reluctant to go on the record with their complaints, even to their own government, due to uncertainty about how the information will be used, and if made public, the potential actions of Chinese authorities or partners in retaliation, and the reaction of shareholders in public firms. It is important for the Canadian Government to have good communications with individual companies doing business in China.** USTR officials were interested to hear details of the author’s company-specific research when the findings were presented at USTR offices in April 2019, and there was similar interest on the part of senior officials of the European Council Chamber of Commerce when it was presented in Beijing in December 2018.

On the heels of the USTR report, in June 2018 the White House Office of Trade and Manufacturing Policy published an even more pointed report entitled “How China’s Economic Aggression Threatens the Technologies and Intellectual Property of the United States and the World”.<sup>56</sup> While short at 35 pages, the

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<sup>52</sup> David Lawder and David Brunnstrom, “In swipe at Trump, China tells U.N. tariffs could plunge world into recession”, *Reuters*, September 27, 2019. Available at: <https://www.reuters.com/article/us-un-assembly-china/in-swipe-at-trump-china-tells-u-n-tariffs-could-plunge-world-into-recession-idUSKBN1WC26W>

<sup>53</sup> European Commission, Impact Assessment Report on the EU-China Investment Relations, SWD, May 23, 2013. Accessed at [http://ec.europa.eu/smart-regulation/impact/ia\\_carried\\_out/](http://ec.europa.eu/smart-regulation/impact/ia_carried_out/)

[docs/ia\\_2013/swd\\_2013\\_0185\\_en.pdf](https://www.whitehouse.gov/wp-content/uploads/2018/06/FINAL-China-Technology-Report-6.18.18-PDF.pdf)

<sup>54</sup> Section 301 Report, pp. 27-28.

<sup>55</sup> Section 301 Report, p. 182.

<sup>56</sup> White House Office of Trade and Manufacturing Policy, “How China’s Economic Aggression Threatens the Technologies and Intellectual Property of the United States and the World”, June 2018. Accessed at <https://www.whitehouse.gov/wp-content/uploads/2018/06/FINAL-China-Technology-Report-6.18.18-PDF.pdf>

report packs a wallop. Its focus is China's:

- acquiring key technologies and IP from other countries; and
- capturing emerging industries that will drive future economic growth and many advancements in the defense industry

It is a shorter but more alarmist report with strong accusations and evidence of counterfeiting, piracy, reverse engineering, onerous licensing requirements, discriminatory patent requirements, requirements to store all data in China, burdensome and intrusive testing, technology standards that deviate from international standards, discriminatory catalogues and lists, and the requirement to have Communist Party members on boards of the JV, among other issues. **The target audience for the report is, at least in part, other western countries that have experienced similar challenges in the Chinese market as the U.S. hoped to gather support among other countries for China to change its behaviors.** It is useful to read the two reports together.

So how did all this analysis play itself out in the U.S.-China trade deal? There were some elements that had been announced and put into legislation in the previous year, such as financial markets opening up and pharmaceutical patents protected as well as a commitment that persons of one Party would not be required to transfer technology to persons of the other Party. But as President Trump added increased U.S. agricultural exports to the discussions, and then additional sectors too, the resolution of China's other business practices took a back seat to cash sales for American companies.<sup>57</sup> The trade deal is now expressed as Phase 1, with the more contentious issues of business practices held over to a Phase 2 Deal which is to be negotiated after the next election. In the meantime, it has been very concerning to see that the US\$200B in hundreds of additional U.S. exports now covered in the 28 page Annex to the trade deal duplicates many Canadian products including lobster, salmon, wine, soybeans, wheat, meat products, machinery, energy products,

tourism, education.<sup>58</sup> It is expected that the Chinese public would not ramp up their consumption of these U.S. products suddenly and dramatically, so these exports are likely to come from displaced exports from Canada and other countries.

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<sup>57</sup> Margaret McCuaig-Johnston, "The U.S.-China trade deal has a drawback", *Globe and Mail Report on Business*, October 14, 2019. Available at: <https://www.theglobeandmail.com/business/commentary/article-the-us-china-trade-deal-has-a-drawback/>  
<sup>58</sup> *Economic and Trade Agreement between the Government of the United States of America and the Government of the People's Republic*

*of China*, January 1, 2020 to December 31, 2021, pp 6-3 to 6-28. Another US\$50B in the trade deal is represented by lowered tariffs. Available at: [https://ustr.gov/sites/default/files/files/agreements/phase%20one%20agreement/Economic\\_And\\_Trade\\_Agreement\\_Between\\_The\\_United\\_States\\_And\\_China\\_Text.pdf](https://ustr.gov/sites/default/files/files/agreements/phase%20one%20agreement/Economic_And_Trade_Agreement_Between_The_United_States_And_China_Text.pdf)

# 4. Positioning for Better Success

There are a number of measures a company can take to go into its joint venture partnerships with an improved negotiating position. Before even starting to engage with potential partners in China, a company should assess whether they are ready to go global, and should take steps to develop and refine an international strategy with clear objectives. Generally, those that have already engaged abroad by exporting or collaborating internationally will see more success in China.

## 4.1 Good Models and Best Practices

### a) Complementary roles are a good model across numerous sectors

In terms of good models, there is one that works extremely well and could be replicated in other sectors. That is a model where the roles of the two partners are complementary rather than competing or duplicative. In this case, the name of the company in question is being revealed because it is a positive story about how JVs can work successfully.

BQE is a wastewater treatment company based in Vancouver, and its partner is a copper mine in China. It treats the water as it comes out of the mine's processing system and extracts the copper and zinc for resale. The JV won the 2008 China Mining Environmental Protection Award. This first JV was 50/50 and led to the negotiation of a second in 2014. The plants generate revenues from copper concentrate sales, ensuring that the mine water treatment is both economically and environmentally sustainable. In this case, the partner was not another wastewater treatment company but rather the user of the technology, the copper mine. One can see

that Canadian firms could be in a position to use this model in other sectors.

### b) Do not announce your joint venture too early

A key lesson learned from some Canadian JVs is not to announce too early that you are going to negotiate a JV, especially in the case of publicly traded companies. Once the plan is public and the negotiations on details start, it may be very difficult to walk away from the table when the Chinese partner is making onerous demands. It is critical for the company to leave itself room to back out if the terms are unacceptable. But if the JV has already been announced, the CEO may feel boxed in, as s/he may not want shareholders or employees to feel that s/he was not a good negotiator or "couldn't get it done". The Board may start to consider whether a different CEO would be able to negotiate more effectively to allow the company to tap "the massive Chinese market". It should be noted that the TMX (Toronto Stock Exchange and TSX Venture Exchange) has rules to permit no announcement until the project is approved by governments.<sup>59</sup>

### c) Do your due diligence

Related to not announcing too early is the need to do your due diligence on your potential partner and their sector in China. Of course, this is a standard rule in business, but the China market is not like other markets, and it is essential that you gather as much information as possible before even visiting the country, so you know all the right questions to ask before you get there.

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<sup>59</sup> The author is grateful to John Gruetzner for pointing out this provision, and other commercial elements for the report.

**d) Make one or more parts in Canada and install in China**

Some Canadian companies have also chosen to continue to make one or two key parts in Canada and ship them to China for installation. Of course, that assumes that the Chinese partner's engineers would have difficulty deconstructing them to see how they could be replicated.

**e) Do not expose the company's newest technologies**

Some companies have focussed in the Chinese market on products that are several years old, not newer alpha or beta products. Therefore, the integrity of the firm's cutting-edge product line is still intact if IP or design were to be stolen or duplicated in China. Many firms bring over only their older products so that sharing their IP on those products does not threaten the future product lines of the Canadian partner. Improvements and innovations (or "reinnovations" as discussed above) made in China on a JV's product line are deemed by the Chinese courts to be Chinese IP. Therefore, incremental changes based on an older generation product are not as serious, and in fact could open up new product variations for the Canadian company, stemming from the highly qualified talent that China is now producing.

**f) Super-majority voting rights**

Another good practice is negotiating in the JV agreement what are called "super-majority voting rights" on the Board. This is a condition that, in cases where the Canadian partner has minority ownership of the JV and therefore fewer members on the JV Board, for Board votes on key issues the Canadian member(s) would have veto rights over "reserved matters" such that they must be decided by unanimous approval. However, the matters to be subjected to these terms must be set out in advance in the terms of the JV agreement. It is, of course, difficult to anticipate at the outset all the instances where the Canadian firm would want to have veto rights, and the Chinese partner can be expected to negotiate this vigorously. Therefore, this is one of those elements of the deal where good legal advice is critical. Lawyers based in China and working on behalf of western firms can identify those types of decisions that should be subject to super-majority voting rights, and can provide precedents that will be compelling to the Chinese firm.

**g) Network with other Canadian firms who have experience in China**

Canadian companies are also well advised to network with other Canadian firms that have experience with JVs in China. One might think that they would not be inclined to share negative stories about their own experiences or lessons learned. But many years of dealing with Canadian companies have demonstrated that they are surprisingly generous in helping other firms with tangible advice. This is especially true when the companies are not in competition or are in different sectors.

As indicated earlier in this report, Canadian companies that have signed joint ventures only saw their own negotiations. They did not realize that there is a pattern of western companies being taken advantage of in many of the same ways in their negotiations as well as in how the JV developed over time. The Canada-China Business Council (CCBC) and the Hong Kong-Canada Business Association (HKCBA) hold regular events and conferences where CEOs are invited to speak about their experiences. Following up with them for a bilateral discussion as to how they have managed their JVs can yield extremely valuable insights before the Canadian company representatives even get on a plane to go to China. If the company does choose to establish a joint venture in China, or simply trade to China, membership in one of these organisations is an excellent investment. But until that decision is made, most events are open to registration by non-members.

In addition, CCBC has offices in Beijing and Shanghai with staff who know the China market well. They also have offices in Canada – specifically in Toronto, Vancouver, Calgary, Montreal, and Halifax – and regularly hold conferences, workshops and other events for current and prospective members. In addition, CCBC provides opportunities for networking with Chinese companies as its membership is comprised of both Canadian and Chinese corporations and organisations. HKCBA has chapters in Calgary, Edmonton, Winnipeg, Toronto, Ottawa, Montreal and Atlantic Canada.

**h) Tap into the advice of the Canadian Trade Commissioner Service**

Most importantly, the Canadian Trade Commissioner Service (TCS) has extensive experience in assisting Canadian firms and suggesting additional resources.

They are located in 14 cities across China, and welcome inquiries from Canadian companies. They also have Trade Commissioners working in the Government of Canada's Regional Offices across the country for local consultations and information. This is an important place to start for those firms considering setting up WFOE facilities or joint ventures in China. In addition, there is a very useful TCS webpage on joint ventures on the Government of Canada's website.

#### **i) Develop your China competencies**

It is critically important that your firm have a solid base of employees in key roles who are knowledgeable about China. These could be Chinese-Canadians or other Canadians who have spent years studying China's business system and learning the language. Canadian universities are now putting an increased focus on training for competencies related to China. And these will be the trusted employees who will be engaging in the joint venture in the interests of the Canadian partner. The owners of the Canadian company too must develop their own knowledge base regarding China's industrial structure, economic strategies, and business practices.

#### **j) Your company needs to be able to respond quickly to changes and surprises**

One last observation is that firms establishing trade, facilities, and/or joint ventures in China must be agile and prepared for surprises. This is certainly a lesson that has come home to Canadian firms in the past year as some sectors saw a downturn in trade, companies with facilities in China saw their China business levelling off, and many firms developed new policies on travel to and throughout China by their Canadian employees. Most Canadian firms have comprehensive Risk Registers to assess how their market might change and exposures for certain problems that may arise. But who could have anticipated that the extradition arrest of a Chinese citizen travelling through Canada could have resulted in innocent Canadians being imprisoned and key sectors facing trade embargoes? Canadian firms with a presence in China must be prepared for a wide range of eventualities including a downturn in their China business that comes from an unrelated problem or event. The fact that the detained and then imprisoned Canadian Michael Spavor is a businessman and entrepreneur has given many

Canadian business executives pause, as does the apparent lack of rule of law in the way that they have been treated in the Chinese system, with no access to lawyers for more than a year.

Furthermore, the coronavirus resulted in shuttered factories and offices for extensive periods of time. This is not the first virus of the sort that has caused a business turndown in China, though it is the worst and most dramatic. These are risk assessments of an entirely different kind than those to which most Canadian firms are accustomed. And Canadian citizens living in, or travelling to, China must keep informed of the Travel Advisory regarding China of the Canadian government – it's also good advice to watch the travel advisory for China of the U.S. Government, according to Canadian officials.

### **4.2 Selecting a Chinese Partner Company**

Often, Canadian company executives or researchers will be approached by a Chinese company or researcher offering to partner in China and open the Chinese market to their products. The Canadian company may not have even considered a move to China, yet they will often make the trip to China to see what the offer looks like. This puts them in a reactive mode and could entail a lot of company time, which may be wasted if it is not in the context of a strategic plan for the company's business, including an international strategy. **Chinese companies often go on fishing expeditions to catch Canadian companies and researchers in labs without having a good idea of the product or the fit for the Chinese market.**

Consultants in China or Chinese Government officials may also suggest or strongly encourage a particular designated partner. In addition, partners may be identified through a start-up company incubator or accelerator in Canada that has corporate and investment links to China. But a well-chosen professional consultant can do a real partner search and location analysis. The most effective partner may not be a company that makes a similar product --- their incentive is often to absorb Canadian technology into their own product line. A more appropriate partner may be a company that is the user of the Canadian technology, as was described above in the section on Good Models and Best Practices.

Canadian companies are going to need to be prepared to invest a lot of time, years rather than

months, prior to committing to a JV partnership in China. This will involve many trips to China by the lead executives (including the CEO and perhaps the Board Chair) to better get to know potential partners. Shared meals with potential partners and other contacts are an important part of the process and work is not normally discussed in that context. Indeed, mention by a Canadian executive of possible elements of a potential deal during informal meals can be a faux pas that sets the relationship back significantly. It is a process of getting to know and trust one another on a personal level. Multiple visits are also necessary to engage a law firm active in China that has extensive experience working on behalf of western firms, and often a consultant who works for western firms for advice about the relative benefits of JVs and WFOEs. In addition, visits are necessary to meet with parts suppliers, to identify factory sites, and become knowledgeable about the requirements of local authorities. Return visits to the company's Canadian facilities by potential Chinese partners are also necessary.

If, at the end of all this, the Canadian executives still have an uneasy feeling about elements of the potential Chinese partners' attitude or information, this is a good time to pull back to focus on other markets – even though a lot of time has already been spent on exploring the potential of the Chinese market. Canadian executives' instincts about such things are usually not wrong.

One last admonition: Companies should also be aware that some firms have fallen victim to a scam where executives are invited to China by a Chinese company that has a seemingly legitimate website, and phone calls come from the numbers on the website – but during the visit the executives are told it is traditional for the foreign company to pay the (exorbitant) price for dinner as well as other fees and costs. Ultimately, they learn that there is no company by that name in that business.<sup>60</sup>

### 4.3 The Negotiation Process

Before the negotiations begin, the Canadian company should have a long-term vision for the joint venture.

Where does it want the JV to be in the Chinese market in 10-15 years or longer? How does this JV fit with the company's global plans and strategies for other parts of the Chinese market or Asia more broadly? A strategic plan should guide the plans for the JV, not an incremental approach which could see the company get into trouble as time goes on. As mentioned above, the intention to participate in a joint venture should not be announced too early in the process. This can box the company in, especially publicly traded companies, whereby if negotiations do not go well it is difficult to walk away from the table. It may appear that the CEO "could not get it done" or "isn't a good negotiator" when in fact, the Chinese company was not coming through as earlier promised.

This is a common experience for Canadian firms. When the Chinese company is courting them, there are many promises made. But as soon as the actual negotiations begin, the demeanour of the prospective Chinese partner changes and they become very aggressive in what they are seeking. One CEO who was going to have a 35% joint venture with two Chinese partners at 35% and 30% respectively – so three fairly equal partners. But when the actual negotiations started, the second partner had mysteriously vanished with no explanation. That meant that it was now 35% to 65%, with the Chinese partner very much in the controlling position. And the Chinese company was pulling things off the table that had previously committed during earlier very congenial discussions.

The Canadian negotiators should also have an exit strategy for the negotiations. One CEO said that he suddenly realized that he was being "fleeced" – and there wasn't anything he could do about it – the negotiations had progressed too far. He said that the Canadian negotiators have to be very strong and very sophisticated. The Chinese partner will ask for things over and over, and the Canadians will start agreeing while also thinking it is far too much the partner is demanding and very unfair. But the promise of the huge China market is on the table, and Canadian firms often cave in to demands in China that they would resist in other countries.

A senior company official should lead the negotiations, often the CEO depending on how

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<sup>60</sup> Dan Harris, "The Sign the Contract in China Scam Revisited", *China Law Blog*, June 5, 2018. Available at: <https://www.chinalawblog.com/2018/06/the-sign-the-contract-in-china-scam-revisited.html>

comfortable s/he is in pushing back in Chinese negotiations. The negotiators must have the authority to walk away from the table if necessary. The author spoke with numerous CEOs who walked away from their JV negotiations, realizing that the deal that their potential Chinese partner foresaw bore little resemblance to their own expectations.

While a local consultant may be engaged to provide background knowledge of the sector and the market in the Chinese context, that person should not take a leading role in the negotiations. Rather, the CEO or a senior member of his/her executive should lead, with a local consultant in support as necessary. More importantly, detail-level legal advice is critical. There are numerous western law firms in major centres in China that serve the interests of western companies hoping to set up joint ventures and other arrangements in China. An investment in their advice is essential and could allow the firm to avoid very serious problems with the JV down the road.

The role of Chinese central, provincial and local officials can be important in the negotiations. In the negotiating room, government officials may be carrying the business cards of the Chinese company with a company business title. The Canadian firm does not realize that there are Chinese government officials in the room. If the Chinese company wants to bring pressure to bear on the Canadian company, they may use leverage on some other aspect of their activities in China. The company is told if they do not capitulate on a key issue in the negotiation, they will lose out on another unrelated factor perhaps related to another deal. This has been verified to me by Chinese lawyers that advise Western firms, by a Chinese official, and by senior Canadian corporate executives who have been on the receiving end of this pressure, and in some cases lost significant contracts because they would not comply with government demands on other projects.

Many western executives talk about how aggressive Chinese company executives are in negotiations. Yes, they are, and it should be no surprise. They learn how to negotiate at the age of three when they go to the market with their mother to buy meat and vegetables; the first price is never the real price, and loud and extended negotiations can ensue over products costing much less than a dollar. This is the norm in China, but it is certainly not what “nice” Canadians are accustomed to. When asked why they agreed to onerous and unusual terms in their joint venture agreements, Canadian CEOs have told

me that that is all the Chinese would agree to. But how hard did the Canadians push? The Chinese often say to Canadians that they are very “han” (憨). The word means honest and straightforward – but behind our backs, to one another they say we are the other meaning of “han” which is naïve, gullible and simple-minded. Indeed! Canadian executives need to ensure that term is not used in reference to their negotiation skills. They need to push hard for everything they want in the joint venture agreement – it will never be “worked out later”.

The author has also been told by several lawyers of a Western law firm in Shanghai that advises Canadian, American, and other western countries' companies negotiating JV deals that Canadian executives as a general rule more often agree to terms pressed on them by their Chinese partner, rather than pushing back, negotiating for more on their side, or walking away. It seems that we are the often prototypical “nice” Canadians – when the Chinese partner says they could not possibly agree to some element, we in effect say OK, and move on to the next one rather than insisting on the company's preferred position. This could explain the very unbalanced ownership ratio in many Canadian JVs.

As we saw above, the ratio in the joint venture is critical, and it is often one of the factors that is decided early in the negotiations. **The target for the Canadian company should be 51%.** For anything under 50% there need to be real tangible levers for the Canadian firm to control its product (several are suggested below). Because in JVs in China the normal pattern is that it is 100% the Canadian technology or product that is being manufactured and sold – so why should only a small share go to the Canadian company that innovated it?

Likewise, the day to day responsibilities of the JV should not be decided by the Chinese partner alone. The most important of these decisions, off the top, are who hires the general manager, who hires the head of legal, and who controls the JV's chop. The latter is the signature of the company, and ideally it would be controlled by the Canadian-appointed executives, and at minimum by a joint process. This is also where the role of the Canadian company's trusted Chinese-Canadian employees is critical. They need to review all the Chinese documents in the negotiations, and be key assets in the negotiations and in the on-the-ground running of the JV.

#### 4.4 Conditions of Joint Venture Agreements

Building on the lessons learned by Canadian firms that have gone before, as discussed above, key features that should be aimed for in the negotiations include:

- i) At least a 51% (for the Canadian company) to 49% ownership and control ratio should be the target. Some advise control or 10% and below to minimize losses. Where the Canadian firm is prepared to agree to an ownership ratio of less than 50%, it should press for super-majority voting rights for critical issues.
- ii) Quality of the product is a reputational risk for the Canadian company. The Chinese partner may want to replace parts with cheaper quality parts to be able to sell it at a lower price. In some cases this may be acceptable, but the Canadian company should always reserve a sign-off for parts and suppliers in order to ensure that the parts are contributing to the quality of the product it is prepared to sell.
- iii) Branding of the product should be in the name of the Canadian company – having the Chinese partner on board with the name is, of course, important for the local authority. Sometimes the JV will have an acronym based on the combined names of the two companies, often with the Chinese name first. The product will not have Canadian visibility in the market in that situation.
- iv) Selling to third countries should only be included where the Canadian company does not itself export to other countries, and has no interest in doing so in the future. The Canadian partner must retain control of this decision, as well as the more detailed level of which countries and when.
- v) The status of innovations or improvements to the product or manufacturing line should be clear to the Canadian partner, especially where an R&D centre in China is also a condition of the agreement. It is likely that such innovations will be deemed Chinese and render the technology Chinese in the eyes of the courts. Clarity at the outset is essential before final signatures.
- vi) Appointment of the General Manager should ideally be a Canadian with deep Chinese business experience, and/or from the Canadian company. The legal advisor under Chinese law must be a Chinese lawyer. However, the Canadian partner should be intimately involved in both appointments, rather than just taking the word of the Chinese company that the individual(s) will be good. They may have worked or be currently working at the Chinese company and in a JV context may not necessarily have the best interests of the Canadian partner front of mind. Who controls the company's chop is also a critical factor.
- vii) Marketing and sales are key reasons why firms fail in China. This is best managed by a Chinese executive expert in marketing.
- viii) The makeup and structure of the Board are critical, including a Vice Chair. Expert advice should be sought for the particular sector and Chinese partner. Some Board members should come from China and not be affiliated with the Chinese partner. Others should come from Canada with Chinese experience.

# 5. Public Policy and Joint Ventures in China

As a former senior government official, and one who spent most of her career in science, technology and innovation policy, programs and funding, the author would like to make a few more general points about joint ventures in China with her public policy hat on.

First of all, joint ventures are often discussed in the context of “improving trade with China”. But they are not, in fact, trade. They are Canadian investment in China. Our companies send their factory equipment over to China and set up production lines and employ Chinese workers. But this is the prime model for China for foreign technology companies in order to achieve the objectives of the Indigenous Innovation Policy discussed earlier in this report. And the more we follow this model, the more we will revert to the olden days when Canadian trade focussed on commodities as the classic hewers of wood and drawers of water. We want our Canadian technology companies to be able to trade to China. In addition, having more of our technology trade converted to Canadian investment in China will show up in our reduced exports statistics.

Furthermore, to the extent that the particular Canadian technology has been traded to China up until the JV was negotiated, manufacturing will decrease and jobs will be lost in Canada once the product is being made in China. Ideally the company would be growing the number of jobs overall, not just transferring Canadian jobs to Chinese factories and design offices. And what does the joint venture look like in ten to fifteen years? What involvement will the Canadian company have?

It is also clear that most Canadian technology companies have received Canadian government R&D funding via grants or tax measures --- most of them in the multi- millions of dollars over the years. Given the dynamics of joint ventures described in this report and in the USTR Section 301 report, there is a question as to whether that technology will be turned

into Chinese technology over time. That is what has happened in joint ventures where the Chinese partner took over the Canadian joint venture with little or nothing coming back to the Canadian company now – as well as where Canadian technology companies now have a high percentage of their ownership in the hands of Chinese companies.

It is clear that China will continue to develop as an innovative nation with a large international presence. For those in the Canadian federal, provincial, territorial and local government continuing to engage with China and endeavouring to understand the emerging trends in the Chinese market(s), it is very helpful to be able to learn about developments there from Canadian firms operating in China in joint ventures. This is a useful eye for Canada on the Chinese market and on the competitors of Canadian firms. And Canadian firms cannot afford to be marginalized in the international marketplace.

At the same time, the prime public policy objective must be ensuring that Canadian firms are prospering in that market. Canadian participation in joint ventures may not make sense at the firm level. Very often this will mean that Canadian companies that are not ready for that tough market will need to stay out until they are fully ready, and others may need to develop exit strategies that allow them to retain their key intellectual and physical property; exit strategies must also take into account the Chinese regulations about taking financial assets and data out of the country. For other companies, a wholly foreign owned enterprise (WFOE) structure may be more sound to protect their IP and future sales.

Where possible, Canadian government investment should focus on R&D that will allow Canadian technology companies to develop their products in Canada and export them abroad, with international collaboration that keeps the Canadian firms in the driver’s seat for their own technology.

# Conclusion

China's aspirations to break out of past industrial structures and move up the value-chain are shared by other countries. But China appears to be unique in its aggressive co-opting of western technology through joint venture ownership structures and complementary business practices, being driven by the tactics and targets of the Indigenous Innovation Policy.

In briefings with China watchers on the findings of this research, several have suggested providing a more "balanced" perspective on joint ventures in China. But when urged to provide examples of successful joint ventures, they say they do not have any – they just want to encourage a more positive tone about China in the messages to be drawn from the research. The author has proactively sought out success stories and has found a number of them which are documented in this report. At the same time, it has not been the objective of the research to ensure that China and its business practices are viewed positively, but rather to document the actual experience of Canadian companies in detail and over time.

What remains to be seen going forward is **how our Canadian technology company joint ventures in China will come through the COVID-19 pandemic, which itself followed a very difficult year in Canada-China relations** with cancellations and postponements of business deals in 2019, 52% of companies from both countries changing their business plans from slightly to significantly, and travel to China by Canadian business executives down significantly.<sup>61</sup>

China's management of COVID-19 saw most companies and factories shuttered for the approximately three months, depending on location in the country. It was expected that many SMEs in China would not make it through to reopening.

Some of those may be the Canadian joint ventures and/or the suppliers to the Canadian joint ventures. Depending on how well the joint venture was doing leading up to January 2020, both partners may decide to take the opportunity of the pandemic shutdown to close permanently. While this is potentially the case for technology company joint ventures, many service sector joint ventures could be even more hard hit, except those in the health sector which could emerge stronger.

In other cases, it is possible that the joint venture could be kept afloat by the deeper pockets of the company in Canada. Indeed, the Canadian company might take this opportunity to position to move into a Wholly Foreign Owned Entity rather than a joint venture structure.

Or where the Canadian company is cash poor, especially when its facilities in Canada were shut as COVID-19 spread, the Chinese partner may use the lack of Canadian financial resources as a breach of contract to take over the joint venture as a 100% Chinese entity. The Chinese partner may even take advantage of a cash poor Canadian partner to attempt a takeover of the company's core business in Canada. Some Chinese partners in joint ventures are already major shareholders in their Canadian partner company, quite apart from their joint venture in China. The Government of Canada has expressed concern about foreign takeovers of weakened Canadian companies and has introduced a new review procedure to potentially block foreign (not only Chinese) investments that take advantage of such situations. Further assistance could be provided by the Business Development Bank of Canada and/or Export Development Canada to provide bridge financing for the Canadian companies to get them through this difficult period. Further research could

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<sup>61</sup> CCBC, pp. 3-8

be undertaken to determine how our Canadian technology companies fare in China post-COVID-19, including related investment and trade impacts.

In terms of future business practice reforms in China under the so-called Phase 2 negotiations with the U.S., the prominent Chinese business and investment leader Shan Weijian, Group Chairman and CEO of private equity firm PAG Group, was asked about this in a virtual panel presentation with the Asia Society of Southern California April 21, 2020. He indicated that post-COVID “I don’t think anyone will go back to those economic issues anytime soon.....It’s not on the agenda. I think the priority is to dig out of this hole, that is, the virus-induced lockdown.”<sup>62</sup>

This report has identified significant challenges that Canadian and other western firms have had getting traction in the Chinese market through joint ventures, but it has not been the intention to steer all Canadian firms away from that market. There are some good models, best practices and lessons learned for companies considering establishing a joint venture in China. For companies that do their homework, talk with other firms with experience there, and seek out quality legal advice, with additional consulting advice for the particular market in China, there are profits to be made.

It is hoped that this report will serve to inform Canadian companies and governments so that they will see the broader patterns of Chinese business practices regarding joint ventures, and put companies in a better position to negotiate their own JV where they choose to do so.

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<sup>62</sup> Shan Weijian, Group Chairman and CEO of PAG Group, “COVID-19: Global Economic Fallout”, Asia Society of Southern California, April 21, 2020. Available at: <https://asiasociety.org/southern-california/events/webcast-covid-19-global-economic-fallout>

# Annex 1

## Key Chinese Policies and their Implications for Canadian Companies

### Description

### Implications

#### 1. Indigenous Innovation Policy

This policy aims to enhance the amount of Chinese technology in China's market by reducing foreign technology in the market to below 30% by 2025. This includes accelerating integrated innovation, absorbing new technology into China's homegrown technology, and "reinnovation" based on assimilation and absorption of foreign technology to make it Chinese.

- Starting in 2015, foreign technology companies were told to sell 51% or more of their China business to a Chinese partner
- These joint ventures are now the preferred model for technology companies in China
- Technology is transferred to the Chinese partner, and there is risk of losing intellectual property to the Chinese firm
- Over time, numerous Canadian companies have been forced out of the Chinese market

#### 2. Research and Development Programs and Expenditures

In 2014 the current regime launched a major R&D reform with massive new spending. It scrapped more than 100 government programs that supported research and development, and replaced them with five program areas:

- National S&T Major Projects (e.g. aerospace and IT)
- Key National R&D Programs (international cooperation)
- Special Fund for Enterprises for Technological Innovation
- Special Projects for Infrastructure and Talent
- National Natural Science Foundation of China

- With the increase in Chinese funding and flat support in Canada (depending on the sector), Canadian companies are incentivized to partner with Chinese firms
- Canadian technology companies may be able to partner with Chinese companies that are being funded by one or more of these new programs
- However, the partnership is usually one in which the Chinese firm benefits from the core Canadian technology and innovations, but the core innovations of the Chinese firm do not have to be shared. There has been a one-way street of innovation, and this is continuing.

### 3. Guidelines for Strengthening Intellectual Property (IP) Rights Protection

In 2019 China introduced this guideline which addresses IP protection for all firms operating in China. The government policy hopes to have curbed IPR infringement and addressed the difficulties in protecting IP by 2022. The policy will also strengthen punishments for IP infringements and counterfeiting. A 2018 Policy sets rules for the review of external transfers of IP and it is blocked if the IP involves national security or “core technology innovation in China in key fields”.

- Could lead to more transparent and fair cases for Canadian firms
- However, since 2018 China has stopped publishing numbers of foreign cases, so the systems has become less transparent
- And, even if they win their case, firms often have difficulty collecting any damages awarded
- The 2018 policy could make it difficult for Canadian firms to use or be credited for technologies they developed in China

### 4. Data Protection Policies

In April 2018 China introduced a regulation that imposes severe restrictions on the export of scientific data, including that developed with foreign partners. Data intended for export must be submitted for review, which could result in the transfer being blocked for strategic or security reasons.

- Since the announcement, the measures have been the subject of discussion among scientific funding agencies of western countries and China
- Many firms keep their data in China for no, or low, cost but may not be able to retrieve it later.

### 5. The “Negative List”

Special Management Measures for Foreign Investment Access (the “Negative List”) prohibits foreign ownership in some sectors and restricts ownership to Chinese controlled joint ventures in others. The policy was introduced in 2017 and revised by reducing the number of sectors from 63 in 2018 to 40 in 2019 and to 33 in 2020. However, some sectors taken off the List have been prohibited from foreign ownership in other laws, so the number of sectors actually prohibited is more than 33.

- Companies must obtain clear advice before proceeding as to whether and under what conditions they will be permitted to invest in China
- Where their sector is not on the list, they should aim to establish a wholly foreign owned enterprise (WFOE) rather than a joint venture
- Companies should also be aware that under a new Foreign Investment Law, China reserves the right to retaliate against any country that takes restrictive measures against Chinese foreign investment in that country

### 6. Requirements of the Corporate Social Credit System

Foreign companies operating in China are required to have a Communist Party Cell and a Party representative on their Board. Now, companies are also subject to the Corporate Social Credit System, which rates companies and their executives on how well they behave as good corporate citizens, and rewards or punishes them accordingly.

- Firms will have onerous reporting requirements (e.g. inputting data on more than 300 factors); a large database will make appeals difficult
- Punishments include: fines, higher inspection rates, targeted audits, exclusion from subsidies, restriction from public procurement, and public shaming
- Rewards include: low interest loans and lower taxes

## 7. Policy for the Integration of Military and Civilian Technology Development

The 2016 Strategy of Innovation-Driven Development includes a policy for the integration of civilian and military technology development. Chinese companies, as well as scientists and engineers across many disciplines, are compelled to work with counterparts in military companies, universities and research institutes to identify innovative technologies and systems that can be adapted to serve military purposes.

- Companies in joint ventures may be partnering with a Chinese partner that is part of this process serving China's military development; Canadian companies must consider the Canadian Controlled Goods Program
- Particularly vulnerable technologies: artificial intelligence, biotechnology, quantum technologies and advanced materials

# Annex 2

## Key Chinese Business Practices and their Implications for Canadian Companies

### Description

### Implications

#### 1. Joint Venture Ownership Ratio

The ownership ratios for Canadian joint ventures in China can range from 60/40 to 90/10 in favour of the Chinese partner, even in sectors where a joint venture is not required by the Negative List. This even occurs where the Canadian partner has created 100% of the technology being made.

- Canadian companies should aim in their JV negotiations to hold at least 50% of the JV ownership and control, with the concomitant ability to hire the General Manager and head of legal, and control the chop.
- If their sector is not on the Negative List they should aim to have a WFOE

#### 2. Pressures to give up more Ownership over Time

Even in cases where the original joint venture ratio is equal or in the Canadian firm's favour, the JV agreement may include explicit terms that reduce the Canadian share over time, or, the Chinese partner may use assertive tactics or cash commitments to get the Canadian firm to agree to a reduced share. Cash-poor companies in sectors such as clean tech and clean energy are particular targets.

- Few Canadian firms establish a presence in China with the view that they will leave after just a couple of years, leaving behind their technology and factory with their Chinese partner.
- They should not be moving to China if they are cash poor. They should be looking for minority investors in Canada, including Chinese investors.

#### 3. Terms and Conditions imposed in Chinese Joint Ventures

- Forced Technology Transfer:* The joint venture agreement may require that the Canadian partner reveal the details and specifications of the core design and IP to the Chinese partner, while the reverse is not required.
- Pressure to sell your key technology to a Chinese firm or lose a contract:* A Canadian firm bidding on a procurement contract lost out when it refused to sell one unique technology to a Chinese company.
- Branding of the Product:* The Chinese partner too often insists that its own name should be on the JV and product(s) making it easier to absorb the

- The US trade negotiations were to address this issue but all that the new Foreign Investment Law provides is that government authorities will not require tech transfer. This is deep seeded in China's business culture, so it is expected to continue for some time.
- This tends to be an issue for larger companies, though all companies should be aware of the potential for linkage of one deal in China to another.
- This is a key issue that should be addressed in the JV negotiations. The Canadian company should

product and technology into its own product line.

- d. *Quality of product components or parts:* The Chinese partner may substitute lower quality parts into the Canadian product to be able to sell at a lower price, thereby damaging the reputation of the Canadian firm.
- e. *Establish an R&D Centre in China:* This requirement can involve significant expense and can expose the Canadian firm to theft of technology.
- f. *Chinese Partner Competes against its own Joint Venture:* If both partners make similar products, the Chinese partner has the information it needs to underbid its own joint venture for government and other procurement projects.
- g. *Sales to Third Countries:* Joint ventures were “encouraged” to sell to third countries in Chinese legislation but this has left the Canadian firm unable to sell from Canada into previously held markets. In one case, the JV (with previous gold standard technology sales to the particular country) proposed a project, but the Chinese partner separately went directly to the government of the third country and negotiated its own deal, leaving the JV with nothing, and few prospects of Canadian sales in the future to that country.

#### 4. Degree of Access to the Chinese Market

Many of the above conditions are agreed to by the Canadian partner because of the promise of access to the huge Chinese consumer market; however, the market (depending on the sector) is much more complex (as many as 40 to 50 regional markets). So, sales are much more difficult to make and slower to emerge than anticipated.

#### 5. Vague Rules subject to Local Interpretation

Local administrative and licensing approvals are subject to rules that are often vague and subject to the personal interpretation of officials who may take an aggressive role in requiring conditions that go beyond written requirements.

try to keep its own brand worldwide, and its name first in a hyphenated JV name.

- There will be a lot of pressure to use cheaper parts. The Canadian firm must approve parts and suppliers, especially since the new Corporate Social Credit System will decrease scores of foreign JVs if suppliers have poor performance.
- An R&D Centre is a prime place for technology transfer, as the Canadian R&D Centre will have regular exchange. Given China’s innovation, there may be advances from the Chinese R&D Centre but those are considered the Chinese partner’s by China’s courts.
- This has happened to Canadian companies, and there is little the firm can do to combat it other than discussion with its Chinese partner. It has to hope that it will get at least a few of such contracts.
- Canadian companies should plan to sell directly to other countries rather than agreeing that the JV would sell directly.
- In addition, Canadian trade statistics will be affected to the extent that exports from Canada are displaced by sales by the JV from China, or direct sales by the Chinese partner alone.

- A sector analysis should be undertaken or funded by the company in advance of JV negotiations. Consultants working in China in the key sector are well suited to provide this, but in addition the company should do its own research through the Canadian Trade Commissioner Service and CCBC and/or HKCBC members.

- Handling the demands and expectations of local authorities will require advice from lawyers and a local consultant(s). The Chinese partner may also be able to assist, though in some cases s/he is working with the local authority informally to demand more.

# Annex 3

## Company Registration in China

Adapted from an article by Matt Slater, Founder and CEO of China Checkup.  
See: <https://www.chinacheckup.com/blogs/articles/company-registration-in-china>

Understanding company registration in China is an important consideration if you are assessing the legitimacy of a Chinese company and the business information and credentials they are providing you. The following are six of the most common forms of company registration in China.

### 1. Wholly Foreign Owned Enterprise (WFOE)

WFOE refers to a company in China that is solely established by foreign parties, and that does not have direct involvement of a mainland Chinese investor. Setting up a WFOE requires an agreed level of foreign capital to be invested and registered with the authorities. It is one of the most popular forms of incorporation for foreign companies in mainland China as it allows them complete control of their operations.

### 2. Joint Venture (JV)

Joint Venture is a form of company registration where there is both a mainland Chinese party and a foreign party. When China started opening up to foreign investment the JV was the main method for foreign companies to get into the Chinese market and they did this by partnering with a local Chinese company to create a joint venture. There are two types of JVs possible:

- One is an Equity JV where the two (or more) collaborating firms form a new company in China and each partner owns an agreed equity share of the new company.
- The second is Contractual JV where the partners agree by contract to undertake a business opportunity together.

A number of joint venture problems and the WFOE model as an alternative has led to the number of new JVs decreasing year by year. However, in some restricted industries (as set out in the “Negative List”, such as media), operating as a JV is the only option for foreign companies looking to get into China.

### 3. Representative Office

A Representative Office is not actually a legal entity in China; it exists solely for the purpose of representing a foreign-registered company within China. Opening a Representative Office is a reasonably simple way for a foreign company to have a limited presence in China, but there are heavy restrictions on what they can do. For example, it cannot directly employ any staff or even collect money.

### 4. State Owned Enterprise (SOE)

Not so long ago all businesses in China were owned by the government, but since reforms started in the 1980’s the market share of SOE’s has decreased markedly. These days the phrase “State Owned Enterprise” is most often associated with the word “reform”, but make no mistake, SOEs still contribute hugely to China’s economy and constitute some of the world’s largest companies. Most SOEs are set up to operate in specific key sectors considered to be of strategic importance by the government, such as aerospace, telecommunications or electric power. In recent years, China has further strengthened SOEs, and Chinese officials sometimes refer to them as the pillar of the Chinese economy.

### 5. Private Enterprise

Private enterprises are largely responsible for transforming China from the past of inefficient state-controlled monopolies and government handouts to a high-growth, vibrant, modern economy. A private enterprise is a company registered by an individual,

group of individuals or companies without any government ownership. When doing business, it is important to remember that all companies operating in mainland China must be legally registered and possess a valid business licence.

## **6. Individually Owned**

“Individually owned” is the simplest form of company registration in China, and is primarily used for very small companies. As the name suggests, it is a company form in which the company is owned by only one individual, who must be a Chinese national. It can be understood to be China’s equivalent of a Sole Proprietor and is a common form of registration for Chinese individuals operating a simple business such as a basic restaurant or a shop.



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