

The Cases Study of “One Belt and One Road” and “Made in China 2025” Impact on the Development of Taiwan’s Machine Tool Industry

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Abstract

The research takes Taiwan's machine tool industry as the research subject, and gains an insight into the possible impacts of “Industry 4.0”, “Belt and Road Initiative” as well as “Made in China 2025” on the development of machine tool industry in Taiwan. Lastly, it is hoped that the machine tool makers in Taiwan will be able to develop and grasp market trends in line with their needs and the status quo in order to achieve direct and indirect operational results. Based on the research results, this research will propose conclusions and provide relevant recommendations on specific and substantial business improvement and policy formulation for the machine tool industry, relevant government agencies and academic research.

Keywords: machine tool industry, Industry 4.0, Belt and Road Initiative, Made in China 2025

1. Introduction

At the conclusion of the 19th CPC National Congress, Chinese President Xi Jinping emphasized on deepening the supply-side structural reforms, constructing a modernized economic system, putting the focus of economic development on the real economy, taking the improvement of the supply system quality as the main direction and continuing to focus on the Belt and Road Initiative. Xi Jinping stated that China should promote the formation of a new pattern of full liberalization by focusing on the construction of the Belt and the Road Initiative. In addition, we should stick to the idea of joint emphasis on “bringing in” and “going global”, adhere to the principle of co-consulting, co-construction and co-sharing, strengthen the openness and cooperation of innovation capability, and form an open pattern of linkage at home and abroad, and mutual assistance between the East and the West (cnYES, com, 2017). China's Belt and Road Initiative is mainly aimed at establishing a platform for cooperation between China and other countries. It connects the Asia-Pacific Economic Circle to the east and enters the European Economic Circle to the west to speed up the Chinese economic growth and transformation. Besides, with the support of its rising economic strength, China creates a trading and transportation corridor both on sea and land linking the Eurasian Continent (Li, 2017). The Belt and Road Initiative is both the "Silk Road Economic Belt" and the "21st Century Maritime Silk Road.", which is a concept of economic cooperation proposed by Xi Jinping in 2013 and has become China's major economic strategy as the transnational economic belt (Chao and Wu, 2015). From 2013 to 2016, Chinese-invested enterprises have made an investment of about USD 560 billion and provided various taxes of more than USD 100 billion to their host countries as well as created millions of jobs so as to promote the transformation of resources and labor advantages in their host countries into development advantages, which is generally welcomed by the countries where the investment is made (cnYES.com, 2017). The Belt and Road Initiative is not an entity or a mechanism. Rather, it is a concept and initiative of cooperative development that relies on the existing dual-multilateral mechanism between China and other related countries and regions. With the help of an established and effective regional cooperation platform, it is aimed to take over the historical symbol of the "Silk Road" in order to hold high the banner of peaceful development and proactively develop economic partnership with countries and regions along the route to jointly build a community of shared interests, common destiny and responsibility featured by mutual trust, economic integration and cultural tolerance (Chao and Wu, 2015). The Belt and Road Initiative will link the Asia-Pacific Economic Circle and the European Economic Circle in the combination of trade, investment and financial cooperation across the regions of East Asia, South Asia, Middle East, Europe and North Africa, covering more than 40 countries, and will become the most promising economic corridor and

strategic economic zone on the Eurasian continent in the future (Li, 2017). In addition, China adopted the "Made in China 2025" promotion plan on March 25, 2015. It can be said that "Made in China 2025" is the Chinese version of "Industry 4.0" and reveals the future goal of China's stepping into a powerful nation from a manufacturing country as well as represents China's manufacturing development path map. "Made in China 2025" has also become China's first plan spanning two five-years, including the 13th Five-Year Plan (2016 to 2020) and the 14th Five-Year Plan (2021-2025) (STPI, 2015). In addition, the key international industrial layout of "Made in China 2025" will be better integrated into the global division of labor system. China will take the countries along the Belt and Road as the focus of deepening international cooperation in manufacturing, encourage and guide China-based enterprises to invest and prosper in the countries along the route, carry out extensive exchanges with all walks of life both at home and abroad, expand bilateral, multilateral and regional cooperation and support the establishment of local industrial system (STPI, 2015).

With the rapid changes in the international market and the rise of China's red supply chain, the industry in Taiwan is facing severe and complicated competitive environment and manufacturing technology challenges. In addition, the slowdown in GDP growth, the frequent occurrence of labor disputes and labor policy disputes as well as the industrial restructuring are all common important topics. At present, apart from the developing countries that seize the mass production market in which Taiwan has excelled in the past, the leading manufacturers in Europe have started to seize the middle-class market. In response to the international trends such as "Industry 4.0" and "Made in China 2025", Executive Yuan of the Republic of China approved "Productivity 4.0 Development Program" on September 17th. The 10-year plan of "Productivity 4.0 Development Program" will initially give priority to the introduction of Internet of Things, intelligent robots and big data in the 7 major industries, including machine tools, 3C, metal processing, food, medical care, logistics and agriculture (BOST, Republic of China (Taiwan), 2015). In response to the fast-growing Internet of Things (IoT) industry, the world has entered an era of advanced manufacturing competition for smart integration. Among them, "Industry 4.0" is a rather hot topic in the near term. It brings about manufacturing changes that reduce costs and increase efficiency, but also pose many challenges for manufacturers. "Industry 4.0" covers a wide range of industries. With IoT, big data, service network and network security as the four pillars, it promotes the further development of the Industrial Machine Tool Industry, which plays a very important role in the technological base of national industries on the technological base and operating profits level of the overall national development (Liu, 2016). In Taiwan, the machine tool industry is well-established. With the "Productivity 4.0 Development Program" and its continued benefit from the trend of automation, if Taiwan's machine tool industry is integrated effectively with sound standardization and complicated system management, communication infrastructure and network security, it will advance toward "Industry 4.0". Coupled with the development of the global smart phones and smart machines, the future development of machine tool industry in Taiwan will continue to be optimistic. Therefore, this study takes Taiwan's machine tool industry as the research subject, and gains an insight into the possible impacts of "Industry 4.0", "Belt and Road Initiative" as well as "Made in China 2025" on the development of machine tool industry in Taiwan through literature surveys and essays. Lastly, it is hoped that the machine tool makers in Taiwan will be able to develop and grasp market trends in line with their needs and the status quo in order to achieve direct and indirect operational results. Based on the research results, this study will propose conclusions and provide relevant recommendations on specific and substantial business improvement and policy formulation for the machine tool industry, relevant government agencies and academic research.

2. Literature Review

In recent years, the cooperation among China's enterprises (Chinese Enterprises) in "going global" has shown rapid growth and Chinese manufacturing industry has ranked the first in the world in scale. The 13th Five-Year Plan shows that China will achieve a higher level of opening-up on the basis of its original opening up, and speed up its transformation and upgrading in an all-round way. Its core transformation will shift from "Made in China" to "Created in China". The concept, planning policies and overall strategic vision of the "Belt and Road Initiative" are important strategies in the 13th Five-Year Plan. The major contents include the response to the new round of China's reform and opening up and the balancing of regional development. Its strategy can be important engines to expand the opening up of the Midwest regions and development of the Midwest. Besides, it can consume the excess production capacity. Especially, supported by the huge financial support of the Asia Infrastructure Investment Bank (AIIB), the "Belt and Road Initiative" will further promote the Asia-Europe regional linkage and affect the existing cross-strait economic, trade and investment relations as well as impact on the external development of Taiwan's enterprises (Chao et al., 2016). The "Belt and Road" is not an entity or a mechanism. Rather, it is a concept and initiative of cooperative development that depends on the existing

dual-multilateral mechanism between China and other countries and regions. With the existing and effective platform for regional cooperation, the “Belt and Road Initiative” spans across Asia, Africa and Africa, and covers 26 countries and regions along the route with an estimated 4.4 billion population, which accounts for about 63% of the global total population. Most of the countries along the “Belt and Road Initiative” are developing countries and emerging economies with vast market space and considerable infrastructure construction scale, requiring an annual investment of USD 1,000 billion and a total trade volume of at least USD 100 million-USD 200 million along the route. Therefore, the countries have become an eye-catching target for investment in various countries and also an incentive for AIIB to attract more than 50 countries to participate in advance (Chao and Wu, 2015; Wen and Wang, 2015). The framework of the “Belt and Road Initiative” is clear. The two lines are spreading and the cooperation focuses on the basis of policy communication, facilities, connectivity, trade flow and financial facilities. The Midwest China is the biggest maneuver zone in the Chinese economic development. It expands its land rights westward and its support to seaward and maritime transportation lines to the east. The balanced development of land and sea rights under the “Belt and Road Initiative” is the general direction for China to walk toward the international economic development (Chao and Wu, 2015; Wen and Wang, 2015).

All the top 10 key areas proposed by “Made in China 2025” are high-tech and strategic industries, and are also the focus of future industrial policy support in China, including (1) the new generation of information technology industries, (2) high-end CNC machine tools and robots, (3) aerospace and aviation equipment, (4) marine engineering equipment and high-tech vessels, (5) advanced rail transit equipment, (6) energy-saving and new energy vehicles, (7) electrical equipment, (8) agricultural machinery (9) new materials and (10) biomedical and high performance medical devices (STPI, 2015). Therefore, “Made in China 2025” will bring about industrial upgrading opportunities in the first place, and China will vigorously develop advanced manufacturing industries and promote the growth of new industries and new forms of business such as producer services so as to push the industry toward the middle and high end. In addition, China has guided the industrial restructuring with policies and exported the excess domestic production capacity and labor through the outward expansion of infrastructure. In the meantime, it has coordinated the activities of promoting “AIIB” and “Silk Road Fund” as well as other means. In the past, China used labor-intensive industries with export-oriented production models to win output in the global production chain. With the global demand for exported products declining, “slow growth” is the “new normal” for China’s economic development. As a result, China has gradually shifted the focus of its industrial policies toward an “investment-oriented” industry that focuses on optimization of production technologies as well as product and service innovation to guide the industrial transformation (Li, 2017).

In recent years, China has promoted “high-speed railway diplomacy” all over the world and built high-speed railways by means of investment or cooperation in Russia, the United Kingdom, Hungary, Serbia, Romania, Turkey, Venezuela, the United States, Thailand and Indonesia, etc. China is ambitious to propose five global high-speed rail plans and hopes to extend the high-speed rail to Eurasia, North America, Central Asia and all regions in Southeast Asia with China as the center (Li, 2017). The interconnection of infrastructure is a priority area for the “Belt and Road Initiative”. On the basis of respecting the sovereignty and security concerns of the countries concerned, the CPC proposed that the countries along the route should strengthen the docking of infrastructure construction plans and technical standards, and jointly push forward the construction of international backbone corridors, which gradually forms an infrastructure network connecting Asian subregions and Asia, Europe and Africa. The Asian Development Bank has made estimates that investment in infrastructure construction in the Asia Pacific Region needs USD 8,000 billion for the 10-year period between 2010 and 2020, while ADB loans for infrastructure projects are only USD 100 billion per annum. One of the purposes of establishing the AIIB is to attract global funding to fill that gap (Li, 2017).

Under the intelligent development trend of global manufacturing industry, Germany vigorously promoted the “Industry 4.0 Initiative”, the United States proposed the “Advanced Manufacturing Partner Program” (AMP) in 2011, Japan promoted the “Industry 4.1J” in 2015, and South Korea promoted the “Advanced Technology National Plan (Manufacturing Innovation 3.0)” in 2014 (Lin, 2015). China put forward specific policies in the 12th Five-Year Plan (2011-2015) drawn up in 2011 and the 13th Five-Year Plan (2016-2020) drawn up in 2015. The most important of these are the “Belt and Road Initiative” and “Made in China 2025”. In response to this international trend, Executive Yuan of the Republic of China approved the “Productivity 4.0 Development Program” on September 17th, 2015 as the backbone of the next phase of technological development, focusing on manufacturing, services and agriculture in the expectation of enabling the industry to create new momentum for industrial growth through digital, virtual and networking intelligent production system. In the manufacturing industry, the precision machinery and ICT technologies that Taiwan is good at are combined to promote

high-value domestic sales and create high-end exports to connect global markets and enhance the international competitiveness of the industry as a whole, thus achieving the goal of “expanding domestic market demand and creating export opportunities”. In addition, the Ministry of Economic Affairs Bureau of Industry sets up the Productivity 4.0 Promotion Office based on the intelligent automation and applies the Internet of Things, intelligent robots, and huge amounts of data and other technologies, as well as production management to guide the domestic industrial restructuring and promote the networking service manufacturing system of intelligent manufacturing and intelligent service in order to reach the vision and goal of Productivity 4.0, and to declare the promotion of Taiwan's manufacturing industry as a paradigm of high-quality productive forces in the Asia Pacific Region and gradually increase the per capita gross domestic product of the manufacturing industry. “Industry 4.0” in Germany is dominated by the Cyber-Physical System (CPS). The United States emphasizes the value-added services of ICT, and Taiwan combines both the advantages and promote the Productivity 4.0 through lean management. It utilizes such technologies as CPS, Internet of Things, smart machinery/robots, huge data and precision management to enhance the added value and productivity of the industry by applying such value-added manufacturing as electronic information, metal transport equipment, machinery and equipment, textile and foodstuffs in order to create a comprehensive system integration solution and look forward to creating the next wave of overall industry momentum (Ministry of Economic Affairs' Productivity 4.0 Office, Republic of China (Taiwan), 2016).

Known as the "mother of machinery," machine tool is an important basis for the development of national industries, and Taiwan occupies an important position in the world machine tool industry. The machine tool industry is an export-oriented industry. In recent years, the machine tool industry in Taiwan has been developing rapidly. After Taiwan's machine tool industry output exceeded NTD 100 billion in 2005, it ranks among the best in both the exporting and manufacturing countries in the world for machine tools and has become the focus of Taiwan Industry, and even shoulders the key role of supporting the development of Taiwan's industry. A very high portion of Taiwan machine tool manufacturers is based in the central Taiwan area. In the machine tool industry supply chain, SME-based machine tools and their third-parties form the industrial settlement for labor division and cooperation production network. The interdependent social relations among manufacturers embedded in this cluster of industries allow the cooperation among manufacturers to adapt to various forms of cooperation quickly and flexibly in response to changes in the market and utilize all the available resources in the system to engage in every aspect of R&D, design, trial production, production, assembly and sales in order to further enhance the added value associated with the products in the process (Liu, 1999). HIWIN Technologies, Tongtai Machine & Tool, Chin Fong Machine, Good Way, Airtac, Yeong Chin Machinery, AWEA, TAKISAWA Technology, and Shieh Yih Machinery and other quality machine tool manufacturers have built a complete Zhongwei system that can respond to various industrial needs, make flexible adjustments and enhance the capacity of customized services. The close integration of all aspects of the Taiwan machinery industry supply chain with the geographical location, coupled with the perfect peripheral R&D institutions, tertiary institutions and industrial zones, has developed a mechanical design industry R&D culture with a sound satellite system architecture and greatly enhanced the Taiwan production efficiency of the machine tool industry, which is exactly the advantage of Taiwan machine tool industry in Taiwan.

In response to China's “Belt and Road Initiative” and “Made in China 2025”, the global economic and trade activities will surely change. Taiwan should make use of its potential and strength to take part in the grand construction and economic, trading, scientific and technological cooperation for development in Europe, Asia and Africa (Wen and Wang 2015). Taiwan's enterprises with technological capabilities in the industry can derive opportunities arising from the promotion of infrastructures by participating in the “Belt and Road Initiative” and “Made in China 2025” (Chao et al., 2016). China is both the biggest machinery exportation market for Taiwan and the largest machinery consumer market across the world. According to the latest statistics released by IEK at the end of 2016 (2016), the global machine tool market was USD 71.22 billion in 2016 due to the sluggish growth of the world's major economies and the decrease in market demand. Compared with 2015, it declined by 10.9%. Taiwan's machinery industry has also showed a decline of 6.4% from 2015, with a total output value of about NTD 904.5 billion. The total output value of metalworking machine tools in major sub-industries was NTD 117.3 billion (Chen, 2017). Expanding the “Belt and Road Initiative” policy for development of national railways, highways and related infrastructure construction along the routes is expected to drive the demand for various machinery. The “Made in China 2025” strategy is based on the principle of “innovation driven, quality first, green development, structural optimization, and human resources oriented” to promote the development of sophisticated CNC machine tools and robots and other sophisticated equipment. It will also help the industrial transformation and upgrading. At present, the dependence of manufacturing industry on key core technologies and high-end equipment is still high. If Taiwan manufacturers can grasp the opportunities and automation trends

of China's current policy-related machinery procurement, it will be an important key for cultivating the Chinese market. The key technologies and industrial layout of Taiwanese enterprises are still attractive to China.

3. Research and Analysis

The “Belt and Road Initiative” will drive the process of industrialization along the country's borders and enhance investment and cooperation in various manufacturing industries. With the “Belt and Road Initiative” and “Made in China 2025”, China will actively encourage and support the equipment manufacturing industry chain to “go global” to invest and start businesses in these countries, and promote the upgrading of local industries and increase employment. In recent years, due to the adjustment of economic structure and policy in China, the GDP growth rate has slightly declined. In particular, China's overcapacity that causes oversupply is regarded as the main cause of China's economic downturn in recent years. Therefore, how to solve the problem of overcapacity has become a top priority. For instance, in the case of the economic downturn, the production of raw materials will naturally be subject to an oversupply phenomenon, which can only be solved by adjusting production capacity. However, local governments in China are reluctant to let local enterprises cut production in order to protect their own tax revenue and employment performance so as not to affect their own political future. As a result, market demand is declining, but businesses continue to produce, which results in a decrease in revenue and the need to recognize large sums of bad debts. This in turn affects the bank's willingness to lend. When corporate bad debts increase, the regulations require banks to increase their mortgages or withdraw loans, which in turn will create a crisis in business closures and affect the willingness to invest (Li, 2017). Therefore, China hopes that by promoting the policy of the “Belt and Road Initiative”, export to emerging industrial countries such as Southeast Asia may be increased in order to resolve its surplus machine tool capacity and inventory. In order to improve its industrial structure and address the serious unbalance between the supply and demand of some raw materials and industrial products, China will continue to carry out the “supply-side reform”, which will not only limit the growth momentum of the machinery and equipment needed for its manufacturing imports, but also impact the import volume from Taiwan of machinery and equipment (Chen, 2017). Therefore, Taiwan's machinery industry must adopt such smart machinery applications to meet the current trend of global manufacturing development. Others include: standalone equipment and production lines with machine-to-machine communication (M2M), Internet of Things (IoT), standalone equipment and production lines with remote monitoring capabilities, or equipment and components with predictive maintenance capability in order to establish a digital enterprise and supply chain; reconstruct the national and regional manufacturing systems through intelligent machine-based human-interface the standalone equipment and production lines as well as smart robots; improve staff productivity and value through a standalone equipment and production lines with data analysis and decision support capabilities as well as smart robots (Chen, 2017). The study by Raffa and Zollo (1994) pointed out that when an enterprise did not sustain innovation and change, its competitiveness and economic profitability would show a decline. Tomala and Senechal (2004) also believed that in order to maintain the competitiveness of a company, it was necessary to strengthen the company's ability to innovate. The machine tools produced by Taiwanese manufacturers are high-end CNC machines and precision equipment. It is a product project that China actively encourages for assisting the industrial restructuring and upgrading. The prospects for developing medium-end and high-end models in the Chinese market are quite promising. With the emergence of a new generation of Internet technologies such as artificial intelligence and big data, as well as other new technologies, the manufacturing industry needs to be transformed from traditional manufacturing to smart manufacturing, including the transformation to green manufacturing and service manufacturing, which is very important for productivity. The development of high-end equipment manufacturing industry is not only an important driving force to promote industrial restructuring and upgrading, but also determines the overall competitiveness of the equipment manufacturing industry chain.

As a national hub industry, the machine tool industry drives the performance of manufacturing in terms of production efficiency and product accuracy. Therefore, the machine tool industry is regarded as an indicator of the national industrialization level. In recent years, the demand market for machine tools has been continuously developed, such as steam locomotives, home appliances, molds, aerospace and 3C industries, as well as recently emerging bio-medical, green energy and space industries. Among them, the core technology research has surpassed the early field dominated by institutions and electronic control. ICT technology, optical laser, image processing, remote wireless monitoring, and even cloud computing, etc., have been integrated into the technical application category of machine tools (Liu, 2016). Taiwan's manufacturing industry constantly learns from the imitations to enhance its management capability and technical level by virtue of its flexible and flexible features. Coupled with its niche advantages in production, marketing and other professional fields, the manufacturing industry in Taiwan adapts to the changes in the market demand well due to its relatively small size and responds

to changes in the economic climate with a high degree of flexibility (Wu, 2008). In order to improve the competitiveness of Taiwan's machinery industry, Executive Yuan of the Republic of China passed the "Smart Machinery Industry Promotion Program" in 2016. It is expected to build the construction energy for intelligent machinery and smart production lines based on the existing precision machinery industry and combining with a series of intelligent tech elements, including robots, Internet of Things, huge data, CPS, 3D printing and sensors, which can be called "Taiwan's starting year of intelligent machinery". Taiwan's machinery industry will be able to obtain higher value from smart standalone equipment, automated and intelligent production lines as well as the overall manufacturing of energy solutions. The aerospace and semiconductor industries will be selected as the main application fields for developing intelligent machine tools and high-tech production equipment (Chen, 2017). The development of Taiwan's machine tools is mainly conducted in central Taiwan due to the regional demand. However, the machine tool cluster in Taichung is the largest machine tool industrial cluster in the world at present, and it is quite necessary to expand the operational scale of Taiwan's industries, cultivate the professional technical personnel and explore the emerging markets in order to continue to maintain their unique industries in Taiwan (Tsai, 2010). The current global machine tool market is optimistic about the needs of emerging industries or countries with industrial restructuring. Therefore, Taiwan should gain a firm footing in the new century by using the global layout and the China market as well as the "Belt and Road Initiative" to build Taiwan's international status and brand in key and crucial industries (Wen and Wang, 2015). The intelligent machine is the key to "Industry 4.0/Intelligent Manufacturing". The system architecture includes a machine base, a sensor or a sensing module, a data storage, a computing and control module, and a communication module, which can be respectively used in manufacturing and personal/home/business areas. The system can use the sensor to perceive the surrounding environment in the face of unknown and changing environment, accomplish special tasks through various control models and automatically adjust the reaction of the machine itself (Chen, 2017). The infrastructure related to the "Belt and Road Initiative" will combine concepts such as IoT, smart city, smart grid, smart transportation and smart home in the future, and select specific cities in both sides as IoT and smart city test and demonstration applications in order to explore smart medical treatment care, environmental protection, smart grid and smart transportation, thus forming solutions to further develop the global market (Wen and Wang, 2015)

4. Results and Discussion

In conclusion, massive machine tool industry is needed to support "Industry 4.0". However, with the saturation of Taiwan's domestic demand market in recent years, the rise of China's manufacturing industry and the shrinking of domestic exports have greatly affected the country's economic development. Therefore, how to effectively upgrade Taiwan's manufacturing industry is an urgent issue. Chang (2015) pointed out that the process from the proposal of German Industry 4.0 in 2011 to its finalization in 2013 mainly integrated all kinds of industry-related technologies with various related experiences and established a complete Smart Factory. In addition, the various partnerships were linked and integrated for the improvement of overall German manufacturing industry in the aspects of computer, digital, intelligent and other aspects. Thus, it can be seen that if companies get rid of the previous traditional manufacturing model, and transform new forms of industry, more elements of design innovation are needed. Taiwan is strategically located in the center of the first island chain. If Xiamen, Quanzhou, Pingtan, Fuzhou, Taiwan, Kaohsiung, and Taichung can be connected, and the undersea tunnels among Fujian, Kinmen and Taiwan can be built, the one-day high speed railway life circle of China and Taiwan will be established to form an economic, trading, cultural and tourism economic belt by connecting the "Trans-Asian Railway" and the "Asia-Europe Land Bridge". Thus, it will further enable the "Belt and Road Initiative" to break through the first island chain eastwards and develop toward the western Pacific (Wen and Wang, 2015).

Taiwan's machine tool industry has a leading position, and its product sophistication, customization and R&D innovation ability occupy a place in the international market competition. The development of the machinery industry across the Taiwan Strait has its own advantages and strong cooperation complementarity for transformation and upgrading. Brand building and international market expansion should be the common direction for both sides to work together. In the future, Taiwan should actively promote the upgrading of industrial policies and regulations with the goal of helping the Taiwan-funded enterprises to enhance their international competitiveness on the positive side and safeguarding Taiwan's public funds and industrial technologies; the negative effect is to try to avoid the obsolete laws and regulations and the logic of industrial development from becoming a stumbling block to industrial innovation and investment (Lin, 2015). Taiwan's participation in the "Belt and Road Initiative" is an important practice of cross-strait economic, trade, science and technology cooperation and economic integration in the Asia Pacific Region. Whether the two sides of the

Strait will create substantive interests of “Belt and Road, Opening of Both Sides” through substantive and cooperative relations will determine the evaluation of dividends for cross-strait relations. In this regard, the authorities on both sides of the Strait should, apart from acting in a pragmatic manner, deal with cross-strait economic, trading, scientific and technological cooperation programs and road maps in a concerted manner and sincerely communicate with each other. For the Belt and Road Initiative, cross-strait industries may struggle against each other in the global market. The possible vicious competition of technologies and talents also requires both parties to face themselves openly and make every effort to find a reasonable solution (Wen and Wang, 2015). In the implementation of “Made in China 2025”, China vigorously promotes the in-depth integration of information technology and manufacturing technology, and focuses on intelligent manufacturing to speed up the transformation and upgrading of the manufacturing industry. While catching up with the rapid economic development in China and integrating into the Chinese market, and jointly promoting technological innovation as well as industrial restructuring and upgrading, Taiwan businessmen should seize the opportunity and join hands in building the “Belt and Road Initiative” to jointly expand the international market.

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