

**Economic Cooperation Framework
Agreement - A Study of Cross-Straits
Economic Integration**

Siddharth Rai

© Institute of Chinese Studies, Delhi

Institute of Chinese Studies,

B-371 (3rd floor), Chittaranjan Park,

Kalkaji, New Delhi - 110 019

Landline Telephone: +91-11-4056 4823 Fax: +91-11-23830728

Email: info@icsin.org

Website: www.icsin.org

ABOUT THE AUTHOR

Siddharth Rai is a final year PhD student (Chinese studies) of the Department of East Asian Studies, Jawaharlal Nehru University, New Delhi. His topic for PhD dissertation is “China’s ‘Revive the Northeast’ Programme--A Study of Regional Economic Integration Model, 2003-2019.” He submitted his MPhil Dissertation on ‘Local Government Debt Governance in China (2007-2016)’ to Jawaharlal Nehru University in 2018.

Contact: rai250776@gmail.com

Economic Cooperation Framework Agreement - A Study of Cross-Straits Economic Integration

Abstract

China and Taiwan signed an interim preferential trade agreement – the Economic Cooperation Framework Agreement (ECFA) in June 2010 to formalise the indirect and unofficial trade relations between both sides of the straits. Unlike other free trade agreements signed by the mainland, Beijing didn't negotiate the ECFA via the Ministry of Commerce, in order to avoid recognising Taiwan as an independent country. The agreement met with a mixed response – with Taiwan's nationalist party Kuomintang (KMT)-led camp supporting the agreement and the main opposition party Democratic Progressive Party (DPP) opposing the agreement. This paper reviews the impact of ECFA on the political economy of Taiwan and the structural changes it brought to the industries and trade mechanisms on both side of the straits and assesses its impact on Taiwan's economic position in the Asia-Pacific region.

Keywords: China, Taiwan, Cross-Strait Relations, ASEAN, Asia Pacific, ECFA, New Southbound Policy (NSP)

Introduction

The research paper reviews the stated policy objectives of the ECFA and based on the quantitative and qualitative analysis examines the trade and investment and assesses the level of economic and industrial integration between both sides of the strait. The paper has five sections. The first section of the paper provides a brief background of the ECFA, the reasons for the signing of the agreement, and its stated objectives. The second section discusses the impact of ECFA on the cross-strait economic functional cooperation and trade mechanism.

The third section will review the economic policy shift from an efficiency-driven economy to an innovation-driven economy and the impact it had on the production structure and on the trading and investment patterns between both sides of the straits. The fourth section argues that the shift in economic policy and change in the production structure of the mainland companies had led to increased competition between high tech companies of Taiwan and China, which has caused a huge setback to the stated objectives of ECFA. The fifth section of the paper argues that Beijing is leveraging its geo-economic influence in the region to prevent Taiwan from reducing its trade reliance on China by diversifying its trading relations with other countries.

The research paper will use an empirical approach to analyze the cross-strait economic and trade relations between both sides of the straits. The research paper will then do a qualitative conclusion based on quantitative analysis. In the research paper, the stated objectives of the Economic Cooperation Framework Agreement (ECFA) are the constant variable, the economic

growth, trade, and investment data between both the straits are the dependent variables, and political relations and economic and trade policy of Taipei and Beijing as independent variables. The primary sources used in the research paper are mainly documents from the Bureau of Trade and Statistics, the Ministry of Finance, and the National Development Council of Taiwan. The secondary sources used in the paper are WTO reports, OECD reports, reports by Taiwan Semiconductor Industry Association, and local and regional newspaper articles.

Background

The Economic Cooperation Framework Agreement (ECFA) signed between the mainland-based nongovernmental organisation Association for Relations Across the Taiwan Straits (ARATS) and its Taiwanese counterpart, the Straits Exchange Foundation (SEF), is an agreement that provides a framework for further negotiations and cooperation in various sectors. The agreement which was originally called the ‘Comprehensive Economic Cooperation Agreement (CECA)’ was opposed by Taiwan’s main opposition party, the Democratic Progressive Party (DPP), saying it would subjugate Taiwanese sovereignty to Beijing. However, despite DPPs boycotting of the deal, the ruling nationalist party Kuomintang (KMT) managed to pass it in the Legislative Yuan in August 2010.

Why was ECFA signed?

Taiwan is an export-oriented economy that was severely hit during the 2008 global financial crisis. The export rates fell from a high of 10.1 percent in 2007 to 3.6 percent in 2008, and economic growth fell to a mere 0.7 and minus 1.57 in 2008 and 2009 respectively (National

Development Commission 2015: 29). The unemployment rate shot to more than 6 percent in mid-2009 from a low of 3.9 percent in early 2008. To bolster Taiwan's flagging economy, President Ma Ying-jeou administration accepted Beijing's proposal to negotiate a cross-strait free trade agreement.

Taipei was also concerned about the free trade agreement (FTA) negotiations between China and Asian countries, especially the ASEAN plus One and ASEAN plus Three trade agreements¹. Taipei was concerned that if it does not secure a trade agreement with China, which had emerged as a major player in the global economy, it would be marginalized in the Asian region.

Stated Objectives of ECFA

The main objectives ²of the ECFA were to increase the cooperation between the People's Republic of China (PRC) and the Republic of China (ROC) in economic, trade, and investment activities. The agreement is expected to create a conducive environment to boost further

¹ ASEAN has expanded its trading relations with individual countries by signing one plus free trade agreement with China (2002), with South Korea (2007), with Japan (2008), India (2009) and with Australia-New Zealand (2010).

<http://investasean.asean.org/index.php/page/view/asean-plus-agreements>

ASEAN Plus Three (APT) consist of ten ASEAN Member States and the People's Republic of China, Japan and the Republic of Korea. The APT Cooperation process began in December 1997 and since then has evolved as the main vehicle to promote East Asian Cooperation towards the long-term goal of building an East Asian Community, with ASEAN as the driving force.

<https://aseanplusthree.asean.org/about-apt/>

² The Association for Relations Across the Taiwan Straits and the Straits Exchange Foundation objectives were set in line with the basic principles of the WTO and in consideration of the economic conditions of the two parties.
<http://rtais.wto.org/rtadocs/713/TOA/English/Combined%20ECFA%20Text.pdf>

opening of trade in goods and services, facilitate protection mechanism for investments and establish a cooperation mechanism.

The second objective of the ECFA was to prevent Taiwan's marginalization in the region. Taipei hoped that signing a trade agreement with China would increase cross-strait economic interdependence and peaceful political relations, which would subsequently allow Taiwan to promote its economic relations and signing of a trade agreement with other countries, especially with the ASEAN countries. It also hoped that the agreement would provide Taiwanese industries and products access to China's cheap labor and vast market that would boost Taiwan's slowing economy and would add nearly 1.374 percent to Taiwan's GDP.

Cross-strait functional cooperation and trade mechanism

The ECFA tariff reduction program, which came into effect on 1 January 2011, had formalized the trade mechanism between cross-straits. Former Taiwanese President Ma Ying-jeou, the main proponent of ECFA, had signed 23 cooperation agreements with China during his two terms in the office to improve the institutional structure administering cross-straits economic and trade cooperation (Tsai and Liu 2017: 23).

Before the signing of the ECFA, cross-strait economic exchanges were carried out unofficially without any mutually acceptable policy guidelines³. Each side of the strait with a different political and economic system formulated its own policies and regulations to regulate cross-

³ Until 2008, cross-straits talks were at standstill as China insisted that talks could only occur on the basis of the One-China Policy and the 1992 Consensus, which was not accepted by the then President Chen Shui-bian of Democratic Progressive President. The impasse ended after pro-Beijing President Ma Ying-jeou of the Kuomintang came to power in 2008.
<https://dukespace.lib.duke.edu/dspace/bitstream/handle/10161/4955/Michelle%20Lu%20Final%20Thesis.pdf;sequence=1>

strait economic and trade exchanges. The financial exchanges and cooperation between both sides of the cross-straits were also carried out without any official platform to cooperate.

Taiwan, which had remained disconnected from mainland China in terms of trade, postal, and transportation services since 1949, was reconnected in 2008 after the two sides resumed institutionalized talks. Earlier businessmen from both sides had to travel indirectly via Hong Kong or Macau, which was both time-consuming and expensive. The mainland economic and trade association, the China Chamber of Commerce for Import and Export of Machinery and Electronic Products (CCCME) ⁴opened an office in Taipei, which was followed by the opening of an office by the Association of the Economy and Trade across the Taiwan Strait (AETATS). ⁵In order to promote its trade on the mainland, Taiwan also opened three economic and trade offices at Taiwan Trade Centre. The establishment of these trade institutions and mechanisms had improved the functional cooperation between the cross-straits.

According to the Association for Relations ‘Across the Taiwan Straits (ARATS)’, a mainland-based semi-official organization, the cross-strait trade volume in 2012 was \$168.96 billion, an increase of 30.76 percent from the 2008 cross-strait trade volume of \$129.22 billion. In March 2013, Taiwanese goods worth \$14.9 billion benefitted a preferential tariff of RMB5.029 billion (about \$818 million), whereas mainland goods worth \$2.8 billion benefitted from tariff preferences of 2.72 billion Taiwan dollars (about \$95.11 million) (Tu 2013: 1). After the

⁴ Founded in 1988, China Chamber of Commerce for Import and Export of Machinery and Electronic Products (CCCME) is the largest organization in foreign trade of machinery and electronic products in China.

http://www.ccme.org.cn/help/about_cccme.htm

⁵ The mainland-based Association of the Economy and Trade across the Taiwan Strait (AETATS), which was set up in 2004, is a non-profit organization sponsored by the Ministry of Commerce with the aim to promote cross-Strait economic and trade exchanges and cooperation.

https://www.chinadaily.com.cn/m/fujian/2015-06/17/content_21033011.htm

implementation of ECFA, there was also a notable increase in cross-strait trade in services, especially in the tourism sector. In 2014, more than 4 million Chinese tourists visited Taiwan, which was a significant rise from 280,000 in 2008 when Beijing relaxed restrictions on Chinese people traveling to Taiwan. Taiwanese people visiting the mainland also increased from 4.4 million in 2008 to 5.4 million in 2014.

However, despite an increase in the bilateral trade growth, there was a growing opposition against the ECFA in Taiwan. The Democratic Progressive Party (DPP) insisted that the trade agreement was only beneficial to large industrial enterprises and financial companies, who had already invested or were in the process of shifting their units to mainland China. The migration of Taiwanese companies to the mainland, which had started in the 1980s and 1990s to enjoy the cheap production factors in China⁶, got accelerated due to the preferential investment policy of the ECFA.

By the end of 2011, there were 4,897 industrial, commercial, and service companies that were directly engaged in overseas operations. The total number of overseas branches and enterprises controlled by the Taiwanese companies was 19,268, of which nearly 49.54 percent were in China (including Hong Kong and Macau) (National Statistics 2011: 63). The overseas production ratio of the manufacturing industry increased from 28.33 percent in 2006 to 37.27 percent in 2011 to 41.27 percent in 2016, which had put downward pressure on the salaries and adversely impacted the job market in Taiwan.

⁶ Due to rapid revaluation of the New Taiwan Dollar, worsening labour shortage, rising labour costs and a shortage of land for industrial purposes, Taiwanese companies started shifting its production bases to Southeast Asian countries and later to mainland China to maintain its comparative advantage in production.
https://www.nomurafoundation.or.jp/en/wordpress/wp-content/uploads/2014/09/20040203-04_Wen-Tuen_Wang.pdf

Taiwan’s export to China (including Hong Kong), which saw an initial jump of 37.1 percent in 2010 due to a lower base effect in 2009 caused by the global crisis and then 8.4 percent in 2011, slumped to minus 3.8 percent in 2012 and then to 3.4 percent and 2.6 percent in 2013 and 2014 respectively (chart 1) (Taiwan National Development Commission 2021: 38).

Chart: 1



Source: National Development Council Taiwan

After the implementation of ECFA, the Taiwanese economic growth rate also initially jumped to 10.63 percent, but later fell from 3.8 percent in 2011 to 2.48 percent in 2013 (Taiwan National Development Commission 2021: 50). The economic growth slightly increased to 4.72 percent before the Chinese stock market crash, which indirectly also impacted Taiwan’s economic growth.

In the industrial sector, due to the successive shifting of industries, overseas production, and automation, the share of the manufacturing industry in the job market gradually declined from 36.42 percent in 2001 to 33.56 percent in 2016, a decrease of 2.86 percentage points (Taiwan

National Statistics 2016: 35). The contribution of employment growth in the information and electronic industry between 2011 and 2016 saw a decline of 4.95 percent. The ECFA trade agreement also accelerated the hollowing out of the Taiwanese information communication and technology companies. The company's manufacturing of personal computer component systems and mobile devices shifted its base to China to exploit its lower production costs and large market.

The technological up-gradation of Chinese industries and the rise of the local supply chain led to a reduction in the import of intermediate goods from Taiwan. Taiwanese companies, which used to export semi-finished goods from Taiwan and assemble them as finished goods in China for re-export to developed markets also started to produce the intermediate goods in China to save the production costs. So, the revenue of Taiwanese-owned factories in China kept increasing but at the cost of Taiwanese workers. From 2001 to 2016, the Taiwanese manufacturing industry's gross production had increased by more than 3 percent, but its contribution to overall employment had declined by over 2 percent.

All these factors caused dissatisfaction amongst Taiwanese people against President Ma Ying-Jeou's government, which eventually erupted into a student-led protest, popularly known as Sunflower Movement against the proposed Cross-Strait Service Trade Agreement (CSSTA). The protestors, who were already concerned with China's growing influence on Taiwan's economy and trading activities, feared that the CSSTA, a follow-up deal of ECFA aimed at deregulating investments in the banking, healthcare, and tourism sector of the two sides of the straits would adversely impact the small and medium-sized enterprises engaged in the services industry and would further take away their jobs.

Taiwan's trade over-dependence on China once again became a political issue after the mid-June 2015 Chinese stock market crash. During the period, about 30 percent of the Shanghai Composite Index worth \$3 trillion was wiped out. The crash slowed down Chinese economic growth from 7.3 percent in 2014 to 6.9 percent in 2015, the slowest growth in the past 25 years (BBC 2016). Export-dependent Taiwanese economy was also adversely impacted by the Chinese economic slowdown as 26.5 percent of its annual export was directed toward China. The export to China dropped from \$128.5 billion in 2014 to \$112.5 and \$112.2 in 2015 and 2016 respectively.

A negative wave against the Ma Ying-jeou government was created due to the slowing economic growth, weak inbound investment, rising public debt, stagnant real wages, and risk of unemployment for higher-skilled workers, which ultimately led to his defeat in the 2016 election. Tsai Ing-wen led Democratic Progressive Party (DPP) came to power defeating the pro-Beijing party Kuomintang (KMT).

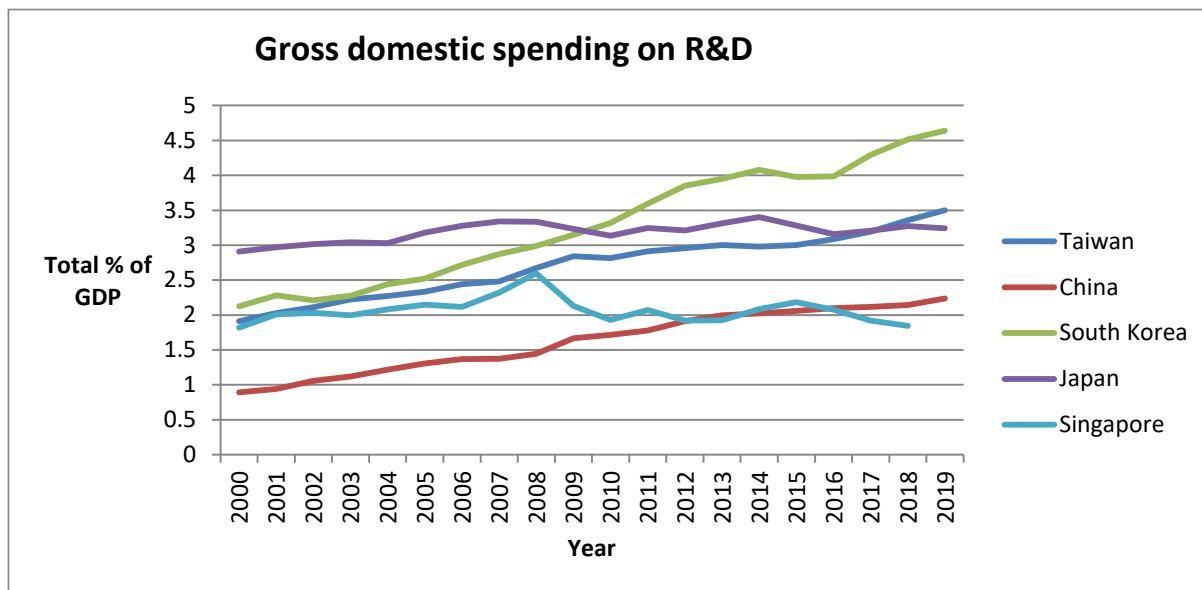
Structural Transformation: From Efficiency to Innovation-Driven Economy

Tsai Ing-wen after coming to power proposed an 'innovation driven' model ⁷to revive Taiwan's economic growth, a clear and formal shift from Taipei's earlier model of efficiency-driven economic growth. The transition from efficiency-driven to innovation-driven economic growth model is not new in the Asian region. Japan and South Korea were the early adopters of this model. Taiwan has been expanding resources on research and development (R&D) to maintain

⁷ President Tsai promoted the innovation driven model stating that the new model can help reduce Taiwan's dependence on a single market and to ensure Taiwan's economic autonomy.
<https://awpc.cattcenter.iastate.edu/2017/03/09/tsai-ing-wen-2016-taiwan-faces-the-future/>

its industrial productive competitiveness but compared to Japan and South Korea it was spending less.

Chart: 2



Source: OECD

As shown in chart 2, Taiwan’s expenditure on research and development (R&D) in terms of GDP percentage was 1.913 in 2000, whereas South Korea and Japan’s expenditures on R&D were 2.125 and 2.906 respectively. Taiwan’s expenditure on R&D went up to 2.816 in 2010 and then to 3 in 2015, but was still lagging behind South Korea and Japan, who were spending 3.316 and 3.137 in 2010, and then 3.978 and 3.282 in 2015 respectively.

Over the past several decades, Taiwanese companies have offshored their production to mainland China, but had kept more advanced technology and R&D centres in Taiwan to prevent the diffusion of high-end technologies (Cal et al. 2018: 14). The separation of production centre from the R&D units had also adversely impacted the innovation capability of

the Taiwanese companies, which became complacent by China's preferential treatment and cheap production factors.

In recent years, not only did the traditional industries shift their entire production chain, but large-scale manufacturing industries with high technology such as computer hardware, chemical, consumer electronics, electrical appliances, and the precision instruments also established their plants in China. The capital and technology brought by the Taiwanese companies and the multinational companies along with the economic reforms carried out by the Chinese government optimized the production cycle of the mainland industries and the domestic companies developed a complete set of industrial chain, high-tech R&D support, strong capital reserves, and vast market.

However, the Chinese economy which had grown at an average of 10 percent for the past three decades saw a sudden decline in its economic growth after the 2008 global financial crisis. In 2014, China adopted single digit growth as the new normal policy⁸ and shifted its economic growth engine from manufacturing to the service sector. Realizing the perils of over-reliance on exports, Beijing proposed to transform its economy from investment to a consumption-driven economy and raise its productivity through innovation and technological upgradation.

Over the past several years, China had gradually increased its R&D spending in terms of GDP from 0.893 percent in 2000 to 1.714 percent in 2010 to 2.057 percent in 2015. Since 2006, China began reducing its dependence on foreign technology by implementing an indigenous

⁸ Xi Jinping first time expounded about new normal policy at the Asia-Pacific Economic Cooperation (APEC) business leaders' summit. He stated we are working together to promote new industrialisation, informatisation, urbanisation, and agricultural modernisation, which will help resolve various growing pains. China's economy will rely more on domestic demand to avoid external risks of relying on exports. http://www.xinhuanet.com/politics/2014-11/09/c_1113175964.htm

innovation policy. In order to improve its innovation capacity, China also opened its high-tech market to the rest of the world, attracted the companies at the high end of the global value chain by giving preferential treatment, and encouraged mergers and acquisitions of such companies.

One high-tech sector which China has earnestly focused on is semiconductors. Under its ‘Made in China 2025’ program, China has set a target of producing 70 percent of its semiconductor needs domestically and has decided to allocate billions of dollars to that sector. In order to bolster its information and communication technology (ICT) manufacturing companies, China started sourcing semiconductors from its domestic companies rather than from Taiwanese companies. Taiwan’s integrated circuit, an important component in the semiconductor business, saw a decline in its exports to China from 50.5 percent in 2014 to 48.7 percent in 2015 (TSIA 2016: 12). Beijing, instead of exporting semiconductor components from Taiwan, encouraged the Taiwanese semiconductor companies to manufacture in China by providing tax benefits. Taiwan Semiconductor Manufacturing Co Ltd (TSMC), the world’s largest contract chipmaker signed a deal in March 2016 to establish a \$3 billion plant in Nanjing to produce 12-inch wafer fab and a design service centre.

If the high-tech semiconductor companies were beneficiaries of China’s new structural reforms, Taiwanese traditional manufacturing companies were the losers. In December 2014, the Chinese government issued Notice No. 62,⁹ which canceled the preferential treatment received

⁹ Notice No. 62: ‘Circular of the State Council on Cleaning up and Regulating Preferential Policies for Taxation and Other Preferential Policies’

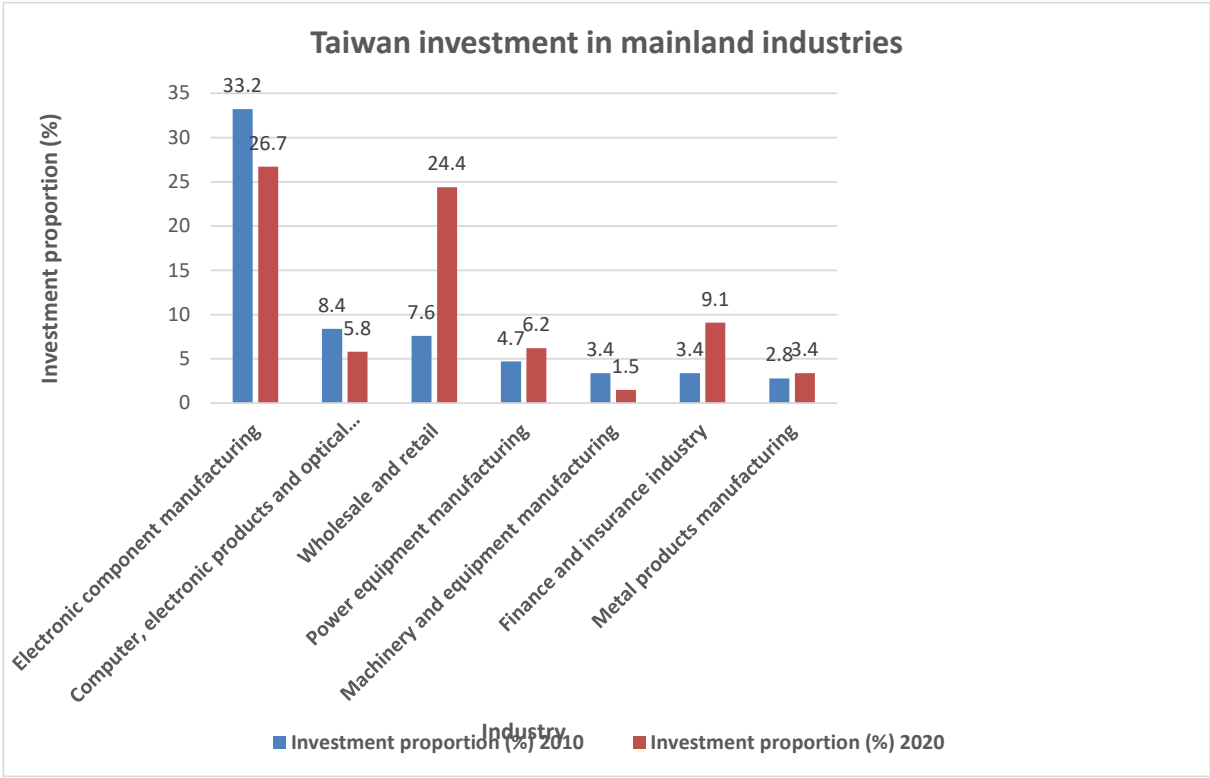
State Council issued this document stating standardizing preferential policies such as taxation would create a conducive environment for maintaining fair market competition, promote the formation of a unified national market system, and will enable the role of the market in resource allocation.

http://www.gov.cn/zhengce/content/2014-12/09/content_9295.htm

by Taiwanese companies of two year tax holiday followed by 50 percent tax rebate for the next three years (popularly known as ‘Two Free, Three Half’). This created an imperfect market competition between domestic companies and Taiwanese companies.

As the traditional Taiwanese manufacturing enterprises lost the benefits of investing in the mainland and faced stiff competition from the local Chinese companies, the Taiwanese investments in mainland China also saw an apparent shift from manufacturing to the services sector. The investment in the electronic component manufacturing industries in China was reduced from 33.2 percent of the overall investment in 2010 to 26.7 in 2020 (see chart 3).

Chart: 3



Source: Source: National Development Council Taiwan

The investment in computer, electronic products, and optical products manufacturing declined from 8.4 percent in 2010 to 5.8 percent in 2020 and investment in machinery and equipment manufacturing was reduced from 3.4 percent in 2010 to 1.5 percent in 2020. Whereas the investment in the services sector such as wholesale and retail companies and finance and insurance firms increased from 7.6 percent and 3.4 percent in 2010 to 24.4 percent and 9.1 percent in 2020 respectively.

Since the 2008 global financial crisis, Chinese manufacturing industries began to change their production structure by becoming more vertically integrated to reduce their dependency on foreign inputs for exports in the global value chain (GVC). Beijing encouraged its companies to foster a national value chain (NVC) by improving production processes, manufacturing higher-end products and urging them to innovate new technologies. Chinese companies focused on innovating new technologies for the value chain, but also created their domestic brands, marketed their products, increased their grasp on key resources and gained control of core links in the value chain. This change in the production structure increased competition between the industries of the two sides of the straits in the international market. Chinese companies which had already surpassed Taiwanese companies in the traditional manufacturing sectors have only high-tech industries to compete with Taiwan.

Cross-Strait Competition for high-tech industries

Over the past six years, the semiconductor sector, a mainstay of the Taiwanese economy has become an area of competition between China and Taiwan. The semiconductor industry

contributes around 30 percent of Taiwan's total exports (Laully and Cheng 2021). In 2020, the Taiwanese semiconductor industry's share in worldwide IC foundry revenue was approximately 77.3 percent, 57.7 percent in the worldwide package and testing revenue, and 20.1 percent in worldwide design revenue (TSIA 2021: 3).

A small island nation like Taiwan holds a dominant role in the global semiconductor supply chain, with its domestic company Taiwan Semiconductor Manufacturing Company (TSMC) producing 54 percent of the global chip's supply in 2020, whereas China, the second-largest economy in the world had to import more than \$350 billion worth of semiconductor in 2020.

China being the largest consumer of the semiconductor chip has developed its capability in assembly, testing, and packaging of electronics in the semiconductor sector, but is still lagging in the design and manufacture of semiconductor integrated circuits. Realizing the importance of advanced semiconductors as a key component in the other transformative technologies, Beijing launched the National Integrated Circuit Industry Development Promotion Programme ¹⁰in 2014, infusing \$150 billion in capital to penetrate the semiconductor sector.

The fund allocated for the program was used to finance several acquisitions made by Chinese semiconductor companies (OECD 2019: 50). The Chinese companies have acquired technologies by inserting a technology sharing clause in the joint venture contract with foreign companies. Beijing had leveraged its vast market as a luring factor to make foreign companies

¹⁰ National Integrated Circuit Industry Development Promotion Programme: The measures laid out under the programme was focused on design and manufacturing and aimed to boost the IC packaging and testing industry and to make breakthroughs in key equipment and materials.

http://www.cac.gov.cn/2014-06/26/c_1111325916.htm

http://usa.chinadaily.com.cn/business/2014-06/25/content_17613997.htm

sign the joint venture deal. Tsinghua Holdings¹¹, a state-owned enterprise and a subsidiary of Tsinghua University is the key player in the national integrated circuit sector and provided a propitious ecosystem for domestic companies to consolidate the IC design industry and to attract foreign companies to jointly-develop technologies for the Chinese market.

Foreign companies, in order to tap the growth potential in the Chinese market, had to comply with Chinese terms and conditions and partner with domestic companies like Tsinghua Holdings. Concerned about losing China's vast market to the global giants like Intel and Samsung, Taiwan also relaxed its regulations in 2015 and allowed its high-tech companies to invest in China. The new regulation allowed three of its chip manufacturers, including Taiwan Semiconductor Manufacturing Co (TSMC), to establish relatively advanced chip manufacturing plants in China (Yicai 2018).

Chinese state-owned company's plan to buy stakes in Taiwan's semiconductor companies got a setback after Tsai Ing-wen became president. Tsinghua Unigroup, a subsidiary of the Tsinghua Holdings had offered \$365 million to ChipMOS Technologies Inc and around \$600 million to Powertech Technology Inc to buy 25 percent stake in these companies but the deal had to be terminated due to a delay in the parliamentary review committee's decision (China Daily 2016). The deals would have made the Chinese state-owned enterprise the largest stakeholder in Powertech and second-largest in ChipMOS. Similarly, Tsinghua Unigroup had to call off a deal with the Siliconware Precision Industries (SPIL), Taiwan's second-largest chip assembler

¹¹ Tsinghua Holdings Co., Ltd is a solely state-owned corporation established in September 2003 with a registered capital of RMB2.5 billion. The company mainly operates in advanced technologies (integrated circuitry, environmental protection, and healthcare); innovation services; sci-tech finance; creative and cultural industries; and online education.

http://en.thholding.com.cn/2016-07/23/c_53617.htm

where the Unigroup was eyeing a 25 percent stake. Chinese state-backed companies not only bought stakes in Taiwanese semiconductor companies but also in other high-tech companies, where Taiwan enjoyed dominance.

A Chinese hi-tech manufacturer Luxshare Precision Industry bought Taiwanese company Wistron's iPhone assembly plant in China. The deal increased Luxshare's revenues five-fold to almost \$9 billion in five years and made it bigger than the Taiwanese contract electronic manufacturer Foxconn in terms of market capitalization (Laully and Cheng 2020). Alarmed by China's rampant acquisitions of high-tech companies across the globe under the Made in China 2025 plan, the USA had to block Chinese companies' acquisition of its semiconductor companies such as Lattice Semiconductor and Xcerra Corporation in 2017 and 2018 respectively. President Donald Trump, the then president of the USA also urged Taipei to restrict its largest chipmaker TSMC from supplying semiconductor chips to Huawei, China's largest telecommunications equipment supplier.

Another tactic that the Chinese company deployed to expand its growth in the semiconductor sector was poaching technical talents from Taiwanese semiconductor companies. In March 2021, two units of Chinese company Bitmain Technologies Ltd in New Taipei City and Hsinchu were investigated for violating Taiwan's domestic laws by recruiting local people without prior approval (Taipei Times 2021). Chinese companies have been poaching Taiwanese semiconductor engineers and technicians by offering hefty pay packages and other lucrative offers. Semiconductor Manufacturing International (SMIC), China's largest chip manufacturer was founded by Richard Chang, a former top executive of TSMC.

SMIC also hired many top executives of the TSMC, including former chief of research and development team Liang Mong-song and chief operating officer (COO) Chiang Shang-yi. Taiwan's Business Weekly reported that over the years more than 3,000 Taiwanese semiconductor engineers were lured away by mainland companies, which according to the Taiwan Institute of Economic Research estimate, amounted to 10 percent of overall Taiwanese engineers engaged in islands semiconductor research and development. In February 2018, Beijing rolled out '31 measures' ¹²and then in November 2019 launched '26 measures' to attract Taiwanese talents and investments in various fields.

To counter China's state-sponsored policies to target Taiwan's high-tech companies, Tsai government in December 2020 implemented the 'Measures Governing Investment Permits to the People of the Mainland Area' ¹³to ban Chinese military and Chinese Communist Party-owned companies to invest in Taiwan. The new rules will review all investments on a case-by-case basis and would consider a company as a Chinese company if 40 percent of that company's share is owned by a Chinese company. Taipei also launched the Asia Silicon Valley Development Project in September 2016. The Project's two primary objectives were to promote innovation and R&D in the internet of things (IoT), and to promote Taiwan's start-ups and entrepreneurship ecosystem. The Taiwanese government had allocated around \$11.3 billion New Taiwanese dollars (\$350 million USD) to transform Taiwan into Asia's Silicon Valley. The Taiwanese government is expecting that the Asia Silicon Valley plan along with other digital economy plans would increase the growth of Taiwan's IoT global market share from 3.8 percent in 2015 to 4.2 percent in 2020 and to 5 percent in 2025 (NDC 2016).

¹² 31 and 26 measures
http://english.www.gov.cn/statecouncil/ministries/201911/04/content_WS5dbfc912c6d0bcf8c4c1673e.html

¹³ Measures Governing Investment Permits to the People of the Mainland Area (大陸地區人民來臺投資許可辦法)
<https://law.moj.gov.tw/LawClass/LawAll.aspx?pcode=Q0040015>

The plan also aimed to create 100 successful companies, including local start-ups and R&D centers established by large corporations. Later in May 2017, the Taiwanese government clubbed Asia Silicon Valley Development Project with aerospace, biomedicine, circular economy, green energy, national defense, and new agriculture and labeled the program as ‘5+2 Innovative Industries Plan.’¹⁴The program was launched to push up-gradation and transformation and forge a new model for sustainable development. The program aimed to promote innovation, increase the competitiveness of industries and shift its industrial base from contract manufacturing to high-value-added, service- and solutions-oriented business models. Taiwan introduced this innovations-driven economic growth model to maintain its edge in the high-tech industries, as it had already lost its competitiveness in the traditional manufacturing sectors due to the diffusion of technologies.

The cross-strait competition in high-tech industries has derailed the policy objectives of the ECFA. Instead of achieving the primary goals of cross-strait economic integration and development, both sides of the straits have reached an impasse, with no more official talks on trade and investment, financial cooperation, and macro policy exchange. Since 2016, both sides of the straits have not signed any new agreement under the ECFA. The policies formulated by both sides of the straits are unilateral without consultation with the other side and designed to outmaneuver the other side.

Several scholars in Taiwan had questioned the government’s ambitious 5+2 plan asking whether it would resolve the structural problems that the Taiwanese economy was facing. They

¹⁴ 5+2 Innovative Industries Plan (5+2產業創新計畫)

<https://www.ey.gov.tw/Page/448DE008087A1971/f1755123-5be9-4395-a8c4-b9c012f14319>

believed that the real issues that Taiwan is grappling with are those of being unable to sign new free trade agreements with other countries due to Beijing's intervention, lower foreign investments, and brain drainage. Taipei has tried to expand its trade with Southeast Asian, South Asian, and Oceanic countries by rolling out a new southbound policy (NSP) but met with limited success. The next section will discuss Taiwan's effort to reduce its over-dependence on China by expanding its trade with other countries in the region and how Beijing is using its geo-economic might to prevent Taiwan from doing so.

Economic marginalization of Taiwan by Beijing

One of the important objectives of signing ECFA was that improved trade relations with mainland China would allow Taiwan to expand its trade relations with other regional countries. Taiwan's former Economic Affairs Minister Yiin Chii-ming had claimed that many ASEAN countries have given the assurance that if the ECFA is signed between Taiwan and China then they would also consider signing free trade agreement (FTA)¹⁵ with Taiwan (Chou 2010: 10). Since the signing of ECFA, Taipei had managed to sign economic cooperation agreement (ECA) with Singapore and New Zealand as a 'Separate Customs Territory of Taiwan, Penghu, Kinmen and Matsu'¹⁶ and not as an independent country (Young 2014: 8). The economic cooperation agreement signed in 2013 with New Zealand and Singapore during the Ma Ying-jeou government was possible because of Ma's pro-Beijing standpoint.

¹⁵ On a similar line President Ma Ying-jeou said "It (ECFA) can prevent us from being marginalized and is part of our internationalization efforts as we pursue similar trade agreements with other trading partners"
<https://taiwantoday.tw/news.php?unit=10&post=15197&unitname=Society-Top-News&postname=Government-sees-need-for-cross-strait-economic-deal>

¹⁶ Taiwan is a member or observer of a few organizations under different names, including the Asian Development Bank and the World Health Organisation under the name 'Chinese Taipei' and the WTO as the 'Separate Customs Territory of Taiwan, Penghu, Kinmen, and Matsu.'
<https://dukespace.lib.duke.edu/dspace/bitstream/handle/10161/4955/Michelle%20Lu%20Final%20Thesis.pdf;sequence=1>

However, China had not included Taiwan in its most ambitious economic development project ‘Belt and Road Initiative,’ which has a grand plan of investing and developing infrastructure projects across Asia and Europe. Taiwan wanted to be a founding member of the initiative but was not made part of it because of the political differences that Tsai Ing-wen had with Beijing¹⁷. Then Taiwan’s application to join the China-led Asian Infrastructure Investment Bank (AIIB) as a founding member was also rejected by Beijing saying ‘Taiwan’ was not an appropriate name. The Taiwan Affairs Office (TAO) under China’s State Council stated that Taiwan would be welcome to join AIIB later as ‘Chinese Taipei’ but not as Taiwan (Tiezzi 2015).

To alleviate the impact of China’s Belt and Road Initiative, Tsai government launched the New Southbound Policy (NSP) in May 2016, an economic plan to revive Taiwan’s trading activities with the ASEAN countries and to expand its trading relations with six south Asian countries including India, Pakistan, Bangladesh, Nepal, Sri Lanka, and Bhutan and with two Oceania countries, Australia and New Zealand. The goal of NSP was to not just improve trading relations with the above-mentioned 18 Asian countries but also to develop a sense of regional economic community in Asia and build long-term cooperative partnerships. (Singh 2019: 10)

NSP was considered an expanded version of the Go South Policy (GSP), which was unrolled in 1994 to expand Taiwan’s trade relations with ASEAN countries. At that time, the focus of the GSP was to reduce manufacturing costs by exploiting the cheap labour force in ASEAN

¹⁷ Beijing is upset with Tsai Ing-wen government because she and her party Democratic Progressive Party (DPP) refuse to endorse the “1992 Consensus,” a tacit agreement between the Taiwan nationalist party Kuomintang and the Communist Party of China that “there is only one China but with different political interpretations by both sides of the straits”.

<https://www.scmp.com/news/china/policies-politics/article/1948433/beijing-expresses-dissatisfaction-after-taiwans-new>

countries and the existing NSP was launched to foster the two-way process of trade and mutual exchanges with the target countries. In the 1990s, Taiwanese businessmen preferred China over ASEAN countries because of cultural and linguistic barriers. The 1998 riots against ethnic Chinese in Indonesia also dampened Taipei's drive to promote investment in ASEAN countries. So gradually by the 2000s, Taiwan's investment in China outgrew its investment in ASEAN countries.

According to Taiwan's Directorate General of Customs in the Ministry of Finance, Taiwan's total trade with ASEAN countries grew from approximately \$14.73 billion in 1992 to \$38.7 billion and \$64.604 billion in 2000 and 2008 respectively. Whereas, Taiwan's total trade with China grew from \$748.11 million in 1992 to \$10.44 billion and 98.273 billion in 2000 and 2008 respectively. In 1992, Taiwan's export to ASEAN countries was 8.448 billion, much higher than China's 1.05 million, but in 2008 Taiwan's export to China jumped to \$66.88 billion, whereas Taiwan's export to ASEAN grew to \$38.92. Taiwan's trade surplus with China also grew substantially in comparison to the ASEAN countries. In 2008, Taiwan had 35.492 billion and 13.248 billion trade surpluses with China and ASEAN respectively.

During the Ma Ying-jeou administration from 2008 to 2015, Taipei did not come up with any kind of policy measures to reinvigorate GSP to avoid displeasing Beijing. Ma's policy was mostly focused on China, which is reflected in the average total trade growth numbers. The average total trade growth between Taiwan and China from 2000 to 2007 was \$44.69 billion and from 2008 to 2015 it was \$113.61 billion. Whereas the average total trade growth between Taiwan and ASEAN from 2000 to 2007 was \$43.32 billion and from 2008 to 2015 it was \$77.81 billion. In terms of export growth, the average export between Taiwan and China grew

from \$29.59 billion between 2000 and 2007 to \$74.73 billion from 2008 to 2015. Export between Taiwan and ASEAN grew from \$23.41 billion between 2000 and 2007 to \$48.59 billion from 2008 to 2015.

Even though Tsai Ing-wen government advocated for reducing trade dependency on China and diversifying trade relations with other countries in the region, the trade numbers reflect that there wasn't any decline in trade with China compared to the pro-Beijing Ma Ying-jeou government. From 2016 to 2021, the average total trade between Taiwan and China was \$155.06 billion and the average export growth was \$96.52. However, there was some improvement in trade growth between Taiwan and ASEAN. During the same period, the average total trade growth between Taiwan and ASEAN was \$92.68 billion and the average export growth was \$57.55 billion.

During the 2020 Yushan Forum, President Tsai stated that under the New Southbound Policy Taiwan had signed more than 70 agreements and memorandums of understanding with NSP countries to promote cooperation in various sectors. In 2018, the Tsai government had allocated a budget of \$241 million for NSP initiative, an increase of 63 percent from the 2017 budget of \$131 million. Tsai government also allocated \$3.5 billion funds to assist infrastructure development projects in NSP countries (Office of the President, Taiwan 2020).

Taiwan's total trade with NSP countries was \$149.09 billion in 2021 with an average annual total trade of 115.37 billion between 2016 and 2021. During the same period, the average export and import between Taiwan and NSP countries were \$66.87 and \$48.5 billion respectively. The average total trade, export, and import between Taiwan and NSP countries

during the Ma government from 2012 to 2015 were \$108.51, \$65.63, and \$42.88 billion respectively. Overall, there is a slight growth in the average total trade between Taiwan and NSP countries due to Tsai government's push for NSP policy, but still, a long way to go before the region can balance Taiwan's trade overreliance on China.

Among the ASEAN countries, Singapore is the number one trading partner with Taiwan.

However, the average total trade growth calculated from data in table 1 shows that it has just grown from \$27.38 between 2012 and 2015 to \$27.95 billion between 2016 and 2021.

Taiwan's average total trade growth with Malaysia and Vietnam, its second and third-largest trading partner among ASEAN countries had grown to \$19.29 and \$15.41 billion between 2016 and 2021 compared to \$15.43 and \$11.7 billion during 2012 and 2015 respectively.

Table: 1

Taiwan's trade with ASEAN countries (unit: million US dollar)

| Year | Brunei | Indonesia | Laos | Malaysia | Myanmar | Philippines | Singapore | Thailand | Vietnam |
|------|--------|-----------|-------|-----------|---------|-------------|-----------|-----------|-----------|
| 2009 | 30.72 | 8,409.81 | 9.19 | 8,612.61 | 136.58 | 6,046.34 | 13,422.76 | 6,508.33 | 6,908.44 |
| 2010 | 36.53 | 10,529.63 | 10.92 | 13,642.83 | 170.8 | 8,301.83 | 19,732.23 | 9,117.22 | 8,815.88 |
| 2011 | 79.5 | 12,264.69 | 13.5 | 15,493.13 | 207.02 | 9,378.07 | 24,832.63 | 10,532.93 | 10,871.45 |
| 2012 | 71.14 | 12,514.99 | 11.02 | 14,398.91 | 221.8 | 10,976.34 | 28,196.38 | 10,262.50 | 10,726.62 |
| 2013 | 92.3 | 12,299.45 | 16.94 | 16,308.08 | 281.47 | 11,972.20 | 28,060.47 | 10,088.56 | 11,548.33 |
| 2014 | 487.75 | 11,221.97 | 19.53 | 17,396.73 | 328.58 | 11,599.74 | 28,912.64 | 10,398.26 | 12,540.75 |
| 2015 | 372.59 | 8,967.42 | 17.47 | 13,649.28 | 270.39 | 9,279.87 | 24,366.92 | 9,597.42 | 11,986.10 |
| 2016 | 134.08 | 7,058.33 | 21.06 | 14,103.73 | 281.85 | 10,863.78 | 23,674.02 | 9,308.86 | 12,259.35 |
| 2017 | 235.46 | 8,074.53 | 22.31 | 17,548.02 | 295.41 | 11,971.90 | 26,331.81 | 10,740.21 | 13,578.60 |
| 2018 | 401.33 | 8,816.83 | 20.57 | 19,907.28 | 342.71 | 11,436.34 | 25,741.23 | 10,750.39 | 14,469.88 |
| 2019 | 168.33 | 7,603.19 | 23.21 | 19,766.14 | 312.69 | 8,271.12 | 26,107.23 | 9,771.99 | 16,054.59 |
| 2020 | 213.7 | 6,783.80 | 18.42 | 19,348.45 | 269.49 | 7,771.41 | 28,073.46 | 9,833.82 | 16,019.54 |
| 2021 | 172.68 | 10,970.73 | 24.26 | 25,125.09 | 234.57 | 9,070.35 | 37,794.20 | 12,984.48 | 20,106.40 |

Source: Bureau of Trade and Statistics, Taiwan

Taiwan's average total trade growth with Indonesia and the Philippines between 2016 and 2021 was \$8.21 billion and \$9.89 billion, a decline from \$11.25 and \$10.95 billion respectively

between 2012 and 2015. Among the countries added during Tsai Ing-wen government to promote trade under the NSP, there is a slight growth in trade with India, Bangladesh, Australia and New Zealand. The average total trade between Taiwan and India, Bangladesh, Australia, and New Zealand grew from \$5.72, \$1.11, \$11.1, and \$1.29 billion between 2012 and 2015 to \$6.11, \$1.142, \$12.88, and \$1.36 billion between 2016 and 2021 respectively.

Table: 2

Taiwan's trade with NSP countries (excluding ASEAN countries) (unit US million dollars)

| Year | Australia | Bangladesh | India | New Zealand | Nepal | Pakistan |
|------|-----------|------------|----------|-------------|-------|----------|
| 2009 | 8,319.17 | 674.24 | 4,154.58 | 756.7 | 7.26 | 430 |
| 2010 | 12,053.34 | 854.01 | 6,465.83 | 1,083.50 | 8.33 | 603.89 |
| 2011 | 14,559.78 | 1,136.51 | 7,563.84 | 1,164.72 | 9.82 | 882.16 |
| 2012 | 12,940.81 | 1,133.94 | 6,008.17 | 1,213.79 | 8.61 | 629.36 |
| 2013 | 11,665.71 | 1,110.61 | 6,174.26 | 1,310.84 | 9.9 | 720.39 |
| 2014 | 10,882.57 | 1,214.08 | 5,911.13 | 1,371.41 | 11.53 | 985.68 |
| 2015 | 8,913.97 | 987.48 | 4,811.34 | 1,268.85 | 7.84 | 652.25 |
| 2016 | 9,067.21 | 1,005.18 | 5,006.12 | 1,239.57 | 9.11 | 607.16 |
| 2017 | 11,167.27 | 1,079.39 | 6,337.60 | 1,308.00 | 10.93 | 655.62 |
| 2018 | 12,948.00 | 1,230.32 | 7,030.48 | 1,393.81 | 27 | 912.19 |
| 2019 | 13,254.16 | 1,264.29 | 5,797.41 | 1,319.32 | 12.28 | 727.9 |
| 2020 | 11,292.25 | 939.59 | 4,795.56 | 1,301.76 | 10.48 | 524.58 |
| 2021 | 19,570.68 | 1,334.21 | 7,698.92 | 1,646.00 | 12.23 | 887.18 |

Source: Bureau of Trade and Statistics, Taiwan

So according to data, there is no distinctive upward trade growth with ASEAN and other NSP countries. Overall, there is a slight upward growth with most of the ASEAN and NSP countries but there is a slight trade decline also with countries like Indonesia and the Philippines.

However, trade with China is showing a distinctive upward growth. Taiwan's export to China (including Hong Kong) in 2021 was 42.3 percent of its total trade. The other countries in the order were much behind with ASEAN at 15.7 percent, the US at 14.7 percent, the EU at 8.6 percent, and Japan at 4.5 percent.

Taiwan's slow trade growth with other countries in the region can be attributed to the pressure tactics adopted by China against the countries that want to formalize trade relations with Taiwan on a bilateral basis. In the past, Taiwan had been in discussion with countries like European Union, Japan, and ASEAN countries for signing FTA, but the discussions couldn't materialize due to pressure from Beijing (Chou 2010: 9). China's dominant economic position in the region had discouraged countries from signing free trade agreements with Taiwan as it would recognise Taiwan as an independent country, which would go against China's standpoint of considering Taiwan as its renegade province. China expressed its displeasure to Philippines after it signed a bilateral investment agreement with Taiwan in December 2017. In October 2018, Australia had to abandon its plans to enter into a free trade agreement with Taiwan after China warned that any deal would have an adverse impact on the relations between Beijing and Canberra (Hunter 2018).

Taiwan's trade deal talks with US, which has been stuck since 2016, was restarted after President Tsai decided to lift the restriction on imports of US beef and pork containing ractopamine, an additive that enhances leanness. Recently, Beijing opposed a virtual meeting held on 1 June 2022 to launch the US-Taiwan Initiative on 21st-Century Trade saying it's a violation of the one-China principle and it will embolden separatist forces in Taiwan and will disrupt the peace and stability across the Taiwan Straits (Xinhua 2022).

China had not only prevented Taiwan from entering into bilateral trade agreement with other countries, but also excluded Taiwan from the Regional Comprehensive Economic Partnership Agreement (RCEP), world's largest trading bloc comprising of 15 member countries. China-led RCEP accounts for 59 per cent of Taiwan's exports and 65 per cent of its total outward foreign

direct investments (Kang 2020). No entry for Taiwan in RCEP would weaken its production supply chain network with countries like Vietnam, Malaysia, Singapore, Indonesia and Philippines in Southeast Asia and decrease its investment opportunities in the Asia-Pacific market.

The weakening of the existing supply chain with the RCEP member countries would adversely impact Taiwan's industrial competitiveness. South Korea, which used to rank 22nd, much behind Taiwan's 13th rank on the Global Competitiveness Index in 2010, was ranked just behind Taiwan's 12th position in 2019¹⁸. Taiwan and South Korea still compete for the top five export markets including China. Taiwan's exclusion from RCEP would also slowdown Taiwan's regional integration and would further lead to marginalisation both in terms of trade and investment.

China is leveraging its geo-economic influence in the region to restrict Taiwan's economic freedom and then carry out its ultimate goal of subjugating Taiwan under its economic influence. To offset the impact of being unable to join RCEP, Taipei has stepped up its efforts to join the Comprehensive and Progressive Agreement for Trans-Pacific Partnership (CPTPP), a Japan led free trade agreement (FTA) between 11 countries from Asia and the Pacific region. The CPTPP, which accounted for over a quarter of Taiwan's total world trade in 2019, could bolster Taiwan's regional economic integration efforts. However, Taiwan's access to CPTPP may not be a swift process, especially when almost all the CPTPP member countries top trading partner is China. In a preemptive move, China also formally applied to join CPTPP on 16 September 2021, six days before Taiwan applied for the membership.

¹⁸ In 2019, Taiwan's score for level of productivity determined by its set of institutions, policies and factors was 80.2, whereas South Korea's score was 79.6.
https://www3.weforum.org/docs/WEF_TheGlobalCompetitivenessReport2019.pdf

Although Washington considers Taipei as a key partner in the Indo-Pacific, but it did not invite Taiwan during the launch of the Indo-Pacific Economic Framework (IPEF) in May 2022 in Tokyo to avoid sending an impression to Beijing that it's an anti-China coalition. By excluding Taiwan, the US ensured the participation of 12 member countries who were already reluctant to join IPEF due to China factor (Focus Taiwan 2022). The US, however, has shown its commitment to deepening economic ties with Taiwan on a bilateral basis by launching the 'Taiwan-US Initiative on 21st Century Trade', which is expected to pave a bilateral trade agreement in the future.

Conclusion

The formal opening up of Taiwan's economy to China by signing ECFA had helped Taipei to weather the 2008 global financial crisis but it also accelerated the migration of the Taiwanese industries to mainland China. The ECFA was signed at a time when China was on the cusp of becoming the world's second-largest economy and was already rapidly expanding its presence in the global value chain. China's economic position has upgraded from a secondary to a primary role in cross-strait economic relations. China's complete industrial chain, strong international class companies, and deep capital strength have made Chinese companies more competitive than the traditional Taiwanese industries.

President Tsai Ing-wen brought in several economic policy changes to reduce Taiwan's overdependence on the Chinese economy and to boost its high-tech sector companies. However, unlike Chinese enterprises, which are guided by state industrial policies, the profit-

driven Taiwanese hi-tech companies continued trading and investing in the Chinese market until the US-China trade war broke out in 2018. President Tsai also unrolled New Southbound Policy to expand and diversify its trading relations with other countries in the region but with limited success as China is using its geo-economic influence in the region to isolate Taiwan.

References

1985. ‘Guowuyuan fabu guanyu Huaqiao touzi youhui de zanxing guidingde tongzhi’ (国务院发布关于华侨投资优惠的暂行规定的通知) [Notice of the State Council on the Interim Provisions Concerning Investment Preferences for Overseas Chinese], *Guowuyuan (国务院). guofa 49*. http://www.gov.cn/zhengce/content/2012-09/21/content_5383.htm (accessed on 18 December 2021).
2015. ‘Zhongyao tongji ziliao shouce’ (重要统计资料手册) [Important Statistical Data], Guojia fazhan weiyuanhui, zhonghua minguo (国家发展委员会, 中华民国) [National Development Commission, Republic of China], <https://bit.ly/3uzRWeV> (accessed on 10 January 2022).
2016. Taiwan Semiconductor Industry Association (TSIA). ‘Overview on Taiwan IC Industry’, <https://www.tsia.org.tw/EN/PubOverview?nodeID=60> (accessed on 28 January 2022).
2019. ‘Measuring distortions in international markets: The semiconductor value chain’, *OECD Trade Policy Paper* No. 234. https://www.oecd-ilibrary.org/trade/measuring-distortions-in-international-markets_8fe4491d-en (accessed on 2 January 2022).
2020. ‘President Tsai addresses opening of 2020 Yushan Forum’, *Office of the President, Republic of China*. 8 October, <https://english.president.gov.tw/News/6049> (accessed on 19 January 2022).
2021. ‘Gross domestic spending on R&D (2000-2020)’, <https://data.oecd.org/rd/gross-domestic-spending-on-r-d.htm> (accessed on 7 January 2022).
2021. ‘Taiwan Semiconductor Industry Association (TSIA)’, *Overview on Taiwan IC Industry*, <https://www.tsia.org.tw/EN/PubOverview?nodeID=60> (accessed on 29 January 2022).
2021. ‘Zhongyao tongji ziliao shouce’ (重要统计资料手册) [Important Statistical Data], Guojia fazhan weiyuanhui bianji, zhonghua minguo (国家发展委员会 编辑, 中华民国), <https://tinyurl.com/22mx9ajv> (accessed on 11 January 2022).

BBC. 2016. 'China economic growth slowest in 25 years' 19 January, <https://www.bbc.com/news/business-35349576> (accessed 13 February 2022).

Cal Clark, Alexander Tan, and Karl Ho. 2018. 'Ending Taiwan's Economic Stagnation: The Implications of the Elections of Presidents Tsai and Trump', *Contemporary Chinese Political Economy and Strategic Relations: An International Journal*, Vol. 4, No. 3, December 2018, pp. 871 -899.

China Daily. 2015. 'Mainland trade association opens Taiwan office', 16 June, http://www.chinadaily.com.cn/china/2015-06/16/content_21023018.htm (accessed on 22 December 2021).

Chou Chi-An. 2010. 'A Two-Edged Sword: The Economy Cooperation Framework Agreement Between the Republic of China and the People's Republic of China', *Brigham Young University International Law & Management Review*, Volume 6, Issue 2, Article 2.

Dou Shicong. 2018., 'Tsinghua Unigroup Joins with Intel to Develop 5G Chips', *Yicai Global*. 23 February, <https://www.yicaiglobal.com/news/tsinghua-unigroup-joins-with-intel-to-develop-5g-chips> (accessed on 6 January 2022).

Ferry, Timothy. 2017. 'The 5+2 Industrial Innovation Plan', *AmCham Taiwan*. 8 May, <https://topics.amcham.com.tw/2017/05/52-industrial-innovation-plan/> (accessed on 1 January 2022).

Focus Taiwan. 2022. 'Taiwan's exclusion from IPEF based on geopolitical factors: Taiwanese analysts', 23 May, <https://focustaiwan.tw/business/202205230005> (accessed on 7 June 2022).

Hunter, Fergus. 2018. 'Australia abandoned plans for Taiwanese free trade agreement after warning from China', *The Sydney Morning Herald*. 24 October, <https://www.smh.com.au/politics/federal/australia-abandoned-plans-for-taiwanese-free-trade-agreement-after-warning-from-china-20181024-p50bj5.html> (accessed on 27 December 2021).

Kang, Robert. 2020. 'Taiwan Puts in Place Strategies for Prospering Despite its RCEP Exemption', *Hong Kong Trade Development Council*. 23 December, <https://research.hktdc.com/en/article/NjA0ODk1Mjg5> (accessed on 24 December 2021).

Karen, Sutter. 2020. 'U.S.-Taiwan Trade Relations', *Congressional Research Service, In Focus*. 6 January, https://www.everycrsreport.com/files/2020-01-06_IF10256_b3fa7e18d8d0fb1cd83aa0bcae36d9aa7e03141c.pdf (accessed on 23 December 2021).

Lauly Li and Cheng Ting-Fang. 2020. 'Luxshare grows into China's iPhone champion with help from Apple', *Asia Nikkei*. 14 August, <https://asia.nikkei.com/Business/Business-Spotlight/Luxshare-grows-into-China-s-iPhone-champion-with-help-from-Apple> (accessed on 2 January 2022).

Lauly Li and Cheng Ting-Fang. 2021. 'Taiwan exports grow 9.7% in February on semiconductor demand', *Asia Nikkei*. 9 March, <https://tinyurl.com/bddkzhhs> (accessed on 4 January 2022).

Lee, Chun-yi and Ming-xi Yin. 2017. 'Chinese Investment in Taiwan: A Challenge or an Opportunity for Taiwan?', *Journal of Current Chinese Affairs*, 46, 1, 37–59.

Ma Si and Yang Yan. 2016. 'Tsinghua Unigroup sticks to Taiwan investment plan', *China Daily*. 25 May, https://www.chinadaily.com.cn/bizchina/2016-05/25/content_25456189.htm (accessed on 31 January 2021).

National Development Council (NDC), Taiwan. 2016. "'Asia Silicon Valley" plan to transform economic structure,' https://www.ndc.gov.tw/en/nc_8455_26267 (accessed on 26 December 2022).

National Statistics, Taiwan. 2011. 'Analysis of Census Results', <https://eng.stat.gov.tw/public/Data/461193427FDXHDYF3.pdf> (accessed on 16 January 2022).

National Statistics, Taiwan. 2016. 'Analysis of Census Results', <https://eng.stat.gov.tw/public/Data/982614395Q5ISNJQV.pdf> (accessed on 16 January 2022).

Nhan, Thanh Thi Hoang and Hoan, Quang Truong and Chung, Van Dong. 2020. 'Determinants of Trade Between Taiwan and ASEAN Countries: A PPML Estimator Approach', *SAGE Open*, April-June 2020: 1–13.

Oung, Angelica. 2020. 'Ministry tightens Chinese investment regulations', *Taipei Times*. 31 December, <https://taipeitimes.com/News/front/archives/2020/12/31/2003749681> (accessed on 29 December 2022).

Rosier, Kevin and O'Connor, Sean and Cuevas, Rolando. 2016. 'Taiwan's Economy amid Political Transition', *U.S.-China Economic and Security Review Commission, Staff Research Report*. 6 January,

<https://www.uscc.gov/sites/default/files/Research/Taiwan%27s%20Economy%20amid%20Political%20Transition.pdf> (accessed on 9 January 2022).

Singh, Teshu. 2019. 'The New Southbound Policy and India-Taiwan Relations', *Vivekananda International Foundation*, Paper, 4-19. <https://www.vifindia.org/sites/default/files/new-southbound-policy-and-india-taiwan-relations.pdf> (accessed on 11 January 2022).

South China Morning Post. 2021. 'China boosts semiconductor production in 2020, but imports keep apace, frustrating self-sufficiency goals', 19 January, <https://www.scmp.com/tech/policy/article/3118327/china-boosts-semiconductor-production-2020-imports-keep-apace> (accessed on 22 December 2021).

Taipei Times. 2021. 'Fears of talent poaching revived', 11 March, <https://bit.ly/3KyuC6Y> (accessed on 4 January 2022).

Tiezzi, Shannon. 2015. 'Taiwan's AIIB Bid Rejected', *The Diplomat*. 14 April, <https://thediplomat.com/2015/04/taiwans-aiib-bid-rejected/> (accessed on 13 January 2022).

Tsai, Tung-chieh and Liu, Tony Tai-ting. 2017. 'Cross-Strait Relations and Regional Integration: A Review of the Ma Ying-jeou Era (2008–2016)', *Journal of Current Chinese Affairs*, 46, 1, 11–35.

Tu Xiong. 2013. 'The current situation and future development trend of cross-strait economic cooperation.' *Association for Relations Across the Taiwan Straits*, 28 November, http://www.arats.com.cn/plyj/201311/t20131128_5281477.htm (accessed on 23 January 2022).

Wang Hua (王华). 2018. 'Liangan jingji ronghe fazhande dongli lai yuan yu tuijin lujing' (两岸经济融合发展的动力来源与推进路径) [The impetus and trajectory to boost the cross-strait economic integration and development], <https://core.ac.uk/download/pdf/323959154.pdf> (accessed 2 January 2022).

Woodhouse, Alice and Bland, Ben. 2018. 'US regulators block China semiconductor deal', *Financial Times*. 23 February, <https://www.ft.com/content/b3bfe924-1854-11e8-9e9c-25c814761640> (accessed on 21 December 2021).

Xinhua (新华). 2016. 'congkuang shengdao baodie – 2015 niande zhongguo gushi'(從狂升到暴跌——2015年的中國股市) [From a sharp rise to a sharp fall-China's stock market in 2015], 26 May, http://jjckb.xinhuanet.com/2016-05/26/c_135389505.htm (accessed on 14 December 2021).

Xinhua News Agency. 2018. 'Chinese mainland promotes cross-Strait exchanges, cooperation', 28 February, http://www.xinhuanet.com/english/2018-02/28/c_137005735.htm (accessed on 26 December 2021).

Xinhua News Agency. 2019. 'Chinese mainland rolls out measures to further boost economic, cultural ties with Taiwan', 4 November, http://www.xinhuanet.com/english/2019-11/04/c_138527295.htm (accessed on 23 December 2021).

Xinhua News Agency. 2022. 'U.S. urged to cease any form of official exchanges with Taiwan', 2 June, <https://english.news.cn/20220602/aea08c8268e940548f9e654acfe6b995/c.html> (accessed on 7 June 2022).

Young, Jason. 2014. 'Space for Taiwan in regional economic integration: Cooperation and partnership with New Zealand and Singapore', *Political science (Wellington, N.Z.)*, 66(1):3-22.

Yu-Jie Chen and Jerome Cohen. 2019. 'China-Taiwan Relations Re-Examined: The 1992 Consensus And Cross-Strait Agreements', *Penn Law: Legal Scholarship Repository*, Vol 4, Issue 1-2.

ICS OCCASIONAL PAPER *Back Issues*

ICS Occasional Papers showcase ongoing research of ICS faculty and associates on aspects of Chinese and East Asian politics, international relations, economy, society, history and culture.

| Issue No/Month | Title | Author |
|-----------------------|--|-----------------|
| No. 88 Dec 2022 | Xi's Vision for a 'Just' Global Order: Is China Seeking to Replace American Hegemony? | Upasana Ghosh |
| No. 84 Dec 2021 | China's Prospects in Afghanistan: Opportunities and Adversities | Ashu Maan |
| No.83 Dec 2021 | Looking Beyond the Crossroads: Rethinking China's Ecological Civilization amidst the COVID-19 Pandemic | Saloni Sharma |
| No. 82 Dec 2021 | China's Environmental Diplomacy: From Sovereignty to Authoritarian Environmentalism | Shagufta Yasmin |

PRINCIPAL SUPPORTERS TO ICS RESEARCH FUND

TATA TRUSTS



MINISTRY OF EXTERNAL AFFAIRS
GOVERNMENT OF INDIA



INDIAN COUNCIL OF
SOCIAL SCIENCE RESEARCH

GARGI AND VIDYA
PRAKASH DUTT FOUNDATION



JAMNALAL BAJAJ
FOUNDATION

PIROJSHA GODREJ FOUNDATION

ICS PUBLICATIONS



A short brief on a topic of contemporary interest with policy-related inputs



Platform for ongoing research of the ICS faculty and associates



Authored by the faculty, also emerging from research projects and international conferences



Draft paper of ongoing research

ICS JOURNAL



In its **57th** year, *China Report* is a refereed journal in the field of social sciences and international relations. It welcomes and offers a platform for original research from a multi-disciplinary perspective, in new and emerging areas, by scholars and research students. It seeks to promote analysis and vigorous debate on all aspects of Sino-Indian relations, India-China comparative studies and multilateral and bilateral initiatives and collaborations across Asia.

China Report is brought out by Sage Publications Ltd, New Delhi.

Editor
Associate Editor
Assistant Editor
Book Review Editor

Sreemati Chakrabarti
G. Balachandirane
Rityusha Mani Tiwari
Vijay K Nambiar



INSTITUTE OF CHINESE STUDIES
B-371 (3rd floor), Chittaranjan Park,
Kalkaji, New Delhi - 110 019
Landline Telephone: +91-11-4056 4823

<http://www.icsin.org/>

info@icsin.org



twitter.com/ics_delhi



facebook.com/icsin.delhi



[In.linkedin.com/icsdelhi](https://in.linkedin.com/icsdelhi)



soundcloud.com/ICSIN



youtube.com/ICSWEB



instagram.com/icsdelhi