

Economy and Foreign Exchange Reserves in Cross-Strait Relations: An Analysis from the Dynamics of Taiwan's Economy and Trade Policy

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Introduction

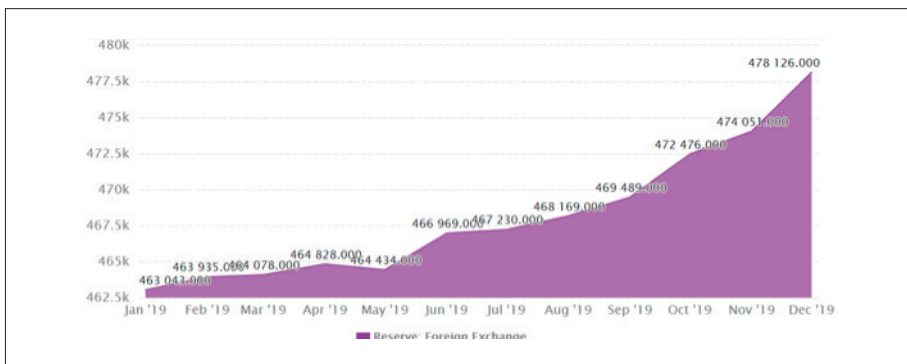
At the beginning of the research, it is necessary to understand how the Taiwanese economy has developed. It is equally essential to identify the key actors related to the particular policy and its implication for the national economy. Furthermore, it is crucial to scrutinize how modernization-based ideologies reformed the Taiwanese economy before ultimately analyzing how the trading policy prompts foreign exchange reserves in the Cross-Strait relations. This idea derives from the concept of modernization developed in 1864 by sociologist, political economist, and philosopher Max Weber, supported by Seymour Martin Lipset.¹ Weber defined modernization as a progressive transition from traditional to modern societies while undergoing dynamic economic development and social change, while Lipset's concept in socioeconomics argued that democratization would follow modernization despite a deferred timing due to globalization. Lipset and Kendall further mentioned that modernization is accompanied by urbanization and the rapid process of industrialization. Thus, these modernization-based ideologies are the primary concept of the research.²

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‘Economic miracle’ then occurred in the mid-1960s to survive the Asian Financial Crisis in 1997, accompanied by the first direct presidential election. One significant phenomenon of the ‘miracle’ was the Land Reform policy in the 1960s to 1970s which subsequently advanced the agriculture sector and industrialized it. In the 1980s, Taiwan became capital-intensive with rising labor productivity, privatization, and sizeable foreign investment. With knowledge-based industries, Taiwan subsequently became one of the world’s most important Information and Communication Technology (ICT) industries. Taiwan also applied the Import Substitution Industrialization and Export Oriented Industrialization policy, to which the latter was more favored.

Understanding the popular trade surplus, another economic variable that stands well and is suitable with the Import Substitution Industrialization and Export Oriented Industrialization policies is the foreign exchange reserves, especially the latter. In this case, the research is focused on Cross-Strait relations. Despite the diplomatic isolation, Taiwan’s trade balance with China has significantly improved since the 1970s. Following Mainland China’s former President Deng Xiaoping’s economic reform policies, Taiwan began investing in China, which subsequently bestowed Taipei membership in various international organizations. As a result, according to the statistics, the trade balance between Taiwan and China multiplied five times from 1999-to 2018.³ Significantly, the Central Bank of the Republic of China, which accounted for the foreign exchange reserves of Taiwan, noted the constant growth in the foreign exchange reserves as indicated in Figure 1.

Figure 1. Taiwan’s Foreign Exchange Reserves Statistics in 2019



Source: Central Bank of Republic of China

Many Neoclassical economists argued the so-called ‘economic miracle’ resulted from the reforming economic policy, which included cost-advantage measures and capital-intensive production. In the game-changing economic recovery, Taiwan experienced a series of policy reforms, including but not limited to the management of foreign reserves, which ultimately affected the exchange rate and attracted foreign investment. Research conducted on Taiwanese economic reform had pinpointed one primary key policy, namely the Export Oriented Industrialization. Thus, the question emerged of how the export-oriented industrialization stimulated the economic growth, particularly foreign exchange reserves. Moreover, it would benefit developing and underdeveloped countries to adopt similar monetary policies to advance their respective economies. In this case, “How did export-oriented industrialization policy affect the rapid industrialization of the Taiwanese economy?”

Foreign Exchange Reserves

Over the years, there have been significant scholars writing about foreign exchange reserves. Two theoretical studies on foreign exchange reserves management and its macroeconomic impacts⁴ will be provided in addition to an empirical review of Taiwan’s economic evolution.⁵ The compositions of foreign exchange reserves consisted of the floating exchange rate advancement and trade flows with reserve currency and the currency in which its debt service payments were dominated (see Figure 2).⁶ Avraham Ben-Bassat compared the reserves portfolios in developing and industrial countries (1976-1980) through an empirical study. For the former, the actual and optimal resources portfolios were similar. At the same time, the same gap of the latter increased despite having been calculated to have supposedly declined for optimal purpose. Thus, a country’s foreign exchange reserves were influenced heavily by its motivation for holding funds, risk and return on various currencies, and interest in maintaining international currency stability.⁷

Figure 2. Composition of Foreign Exchange Reserves

$IR = \text{Forex} + \text{Gold} + \text{SDR} + \text{IMF} + \text{Other}$
IR: foreign exchange reserves
SDR: special drawing rights in the IMF
IMF: reserve position in the IMF
Other: other assets that fall in foreign exchange reserves

Focusing on long-term-growth, Polterovich argued that the contribution of foreign exchange reserves was to develop the economy by increasing both investment to GDP ratio and capital productivity, which resulted in the premise: (1) foreign exchange reserves accumulation caused the real exchange rate depreciated that was expansionary in the short run; (2) real exchange rate depreciation allowed to take full advantage of export externality and triggered export-led growth; and (3) foreign exchange reserves-builds-up attracted foreign direct investment because it increased credibility of the government of a recipient country and lowered the dollar price of tangible assets. It was considered necessary to maximize the utility of the foreign exchange reserves in consumption, capital stock, labor input, and external debt, as evidently displayed across countries where the rise in foreign exchange reserves gave rise to debt, however shortening debt maturity and decreasing consumption which ultimately triggered enhancement and growth.

Economic Growth Theory

Arguably, the most relevant theoretical framework that underlies Taiwanese economic recovery during the period in particular is covered by Neoclassical Economy. According to E. Roy Weintraub (1985), the central ideas of neoclassical economy—which later became the umbrella of other common assumptions to date—resolved around rational behavior of the consumers which maximize the gain from their purchases forming “full utility.” Rational behavior theory also argues that consumers will assess the value based on their knowledge of prices and information before deciding on their choices of purchase. With such perceptions on the consumers’ side, competition among producers will be simultaneously encouraged as well as the value of products and services.⁸

On the other hand, however, many neoclassical economists could not have covered the economic recovery in detailed manner. Fu-Lai Tony

Yu added that besides from neoclassical economy, Taiwanese economic recovery was also fueled by policy change enacted by Li Kuo Ting whose policies could be analyzed in the light of modernization theory. As one of the development theories, modernization theory holds the argument that technological change is essential in aiding one country's failing economy. Principally, modernization encompasses the intellectual, technological, economic, and political dimensions in its progress of development, following specific path of transition from traditional societies to modern societies. Modernization theory differs from other development theories in its spectrum of political approach, as evidently seen in the case of the Industrial Revolution which encompassed industrialization, urbanization, education, media participation, other socio-economic changes coupled with changes in political culture and political institutions.⁹

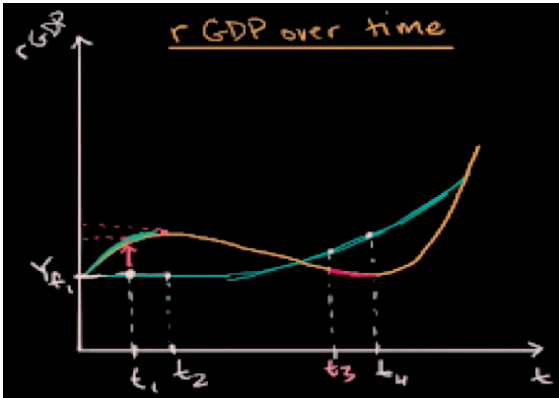
In this paper, the ultimate economic growth is not determined by simply monitoring the GDP growth. In its term, when the real GDP increases, it will be considered as an expansion while the contrary will be regarded as contraction. The economic growth model in open economy will include factors such as full-employment along with some models like Production Possibility Curve (PPC) and Aggregate Demand-Aggregate Supply (AD-AS) model. Gross Domestic Product (GDP) is the most common component used in determining a country's economic health. GDP itself is calculated by adding together private consumption, government expenditure, capital spending and exports net as a representative to the trade balance. As GDP is subject to inflation, it is divided into real GDP and nominal GDP. This research will utilize the real GDP where inflation factor has been added in.

In the economic growth model depicted in Figure 3, the orange line represents the fluctuating real GDP over time while the yellow line shows the full-employment output. In the first time period between t_1 and t_2 , it is shown that there is an increase in GDP, but the expansion does not immediately translate into economic growth as the full-employment output is not changing. In the period of t_3 - t_4 , despite the GDP is falling for contraction, theoretically this particular period of time experiences economic growth.¹⁰

Elaborating from the aforementioned economic growth model, the time period between t_3 and t_4 can be demonstrated in the Production Possibility Curve (PPC). Figure 4 is a mere model of PPC which simplifies real economy into two goods or services. The dot that is pushed to the other dot on t_3 curve shows that the negative output gap is pushed back to PPC in an expansion, not necessarily an economic growth. The real growth

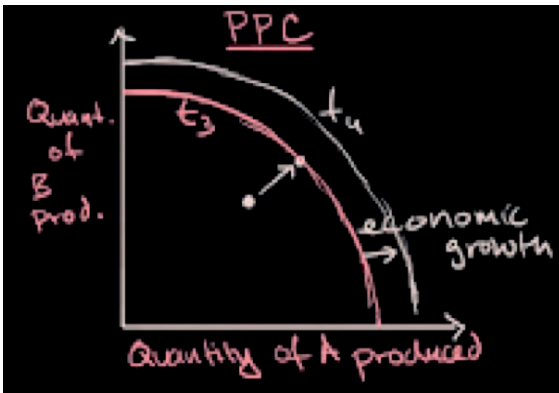
occurs when t_3 curve is pushed out to t_4 curve. The microeconomic factors might have been able to drive the growth such as technology development, more capitals or resources and better institutions.¹¹

Figure 3. Economic Growth Model with Real GDP and Full-Employment Output



Source: Khan Academy (2018)¹²

Figure 4. Production Possibility Curve in Economic Growth Model

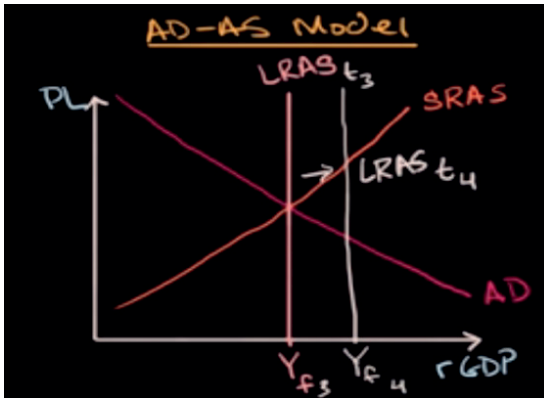


Source: Khan Academy (2018)

In full-employment output, there are two primary curves which are the aggregate demand and the short-run aggregate supply (see Figure 5). The pink curve that cuts through the equilibrium of the previous two curves represents the long-run aggregate supply. The LRAS curve, similar to the shift from PPC_3 to PPC_4 , can be operated to the right ($LRAS_4$) by the same factors driving PPC_3 to PPC_4 . This mixed model of economic

growth in open economy is best suited to represent Taiwan's economic reform, as it shares particularly similar microeconomic factors that drive the success of the reform.

Figure 5. AD-AS Model in Economic Growth Model



Source: Khan Academy (2018)

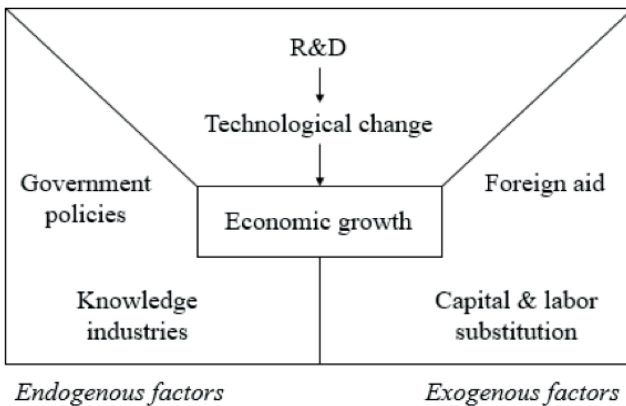
The first model is the neoclassical growth theory which is a more sophisticated theory of development. The economy will conditionally converge to the same level of income, given that they have the same rates of savings, depreciation, labor force growth, and productivity growth. The main points of Solow's model consist of capital, labor, and technology.

The exogenous model analyzes the change in output level dependent to the population growth rate, savings rate and technological progress. The mathematical approach of Solow's exogenous growth theory revolves around the assumption of constant-returns-to-scale (CRS) which focuses on output and capital per worker instead of the aggregate output and aggregate capital, meaning we can double the level of output if we double the level of labor and capital stock. As a result of the CRS assumption, this model also believes in little-to-none impact of increase in savings rate, that there might be temporary increase in labor or capital and output but will remain steady again at a higher level of output. In addition to savings, population growth also becomes a major key in Solow's model. Population growth will simultaneously affect the total output and capital stock's growth, despite at a lower rate. On the contrary, increase in productivity will raise per capita output and in the long run per capita income.¹³

On the other hand, Harrod-Domar's economic growth theory postulated that growth is generated endogenously by internal factors such as governmental policies, knowledge-based industries, and private sector's

investment in research and development. Unlike Solow's exogenous model, Harrod-Domar's model does not allow the substitution between labor and capital stock. The key role in this endogenous model revolves investment which leads to growth, provided investment comes from savings. Thus, the economic growth is determined jointly by saving ratio and capital-output ratio. The weakness to this model, however, is that low rate of savings in developing countries is equal to capital constraint which halts the economy. In relation with population growth, demographic transition is bound to affect per capita income. Government policies are expected to focus on enforcing more competitions in the market to endorse innovation, particularly in industries with increasing returns, such as education, health, and telecommunications.¹⁴

Combining both economic theories, the writer seeks to use both exogenous and endogenous factors that stimulate the economic growth. The economic growth practice in the case study of Taiwan Miracle occurred through the Export Oriented Industrialization boosted by the technological change which increased the exports, ultimately the GDP which resulted in higher level of income and higher rate of savings and investment, which stimulate the growth accordingly.



Export-Oriented Industrialization

To better understand this trading policy, two contrasting economics theories shall be presented. First, the Neoclassical Economics complied of founding father of economics, such as Adam Smith, David Ricardo, Alfred Marshall and John Maynard Keynes. On his book entitled

Wealth of Nation (1776), Adam Smith asserted on *laissez-faire*¹⁵ to endorse free trade for a more effective wealth system. Under the trade liberalization principle, David Ricardo elaborated on the distribution of wages to three classes of community, namely landlords, workers and capital owners which resulted in the challenges of inequality and pricing along with the solution of comparative advantage.¹⁶

In utilizing the comparative advantage, Alfred Marshall (*Principles of Economics*, 1890) emphasized on the driving factors of supply and demand. Export growth is most appropriately associated with John Maynard Keynes' *The General Theory of Employment, Interest and Money* (1936) endorsed the demand-side economy where economic policies by government to manage aggregate demand for full utilization. As most neoclassical economics pertain to the premise of rational choice, the actors in the market are presumably rational in the supply and demand flow, which ultimately drives production, pricing and consumption. In the context of export-oriented industrialization, the government, presumably rational, has the ability to subsidize industries of which will prove good investment in the future. Along with foreign direct investments from multinational corporations, the industries may potentially exploit comparative advantage.

Contrasting to neoclassical economics, heterodox economics argued more on demand-side of economy and endogenous factors in regard to investment. Narrowing down the school of heterodox, this review only takes Post-Keynesian's perspective. Assumably, effective demand is the key determinant of economic performance. However, effective demand is typically insufficient to generate full employment and full utilization of capacity. Furthermore, the prescribed state investment was not operationally constrained. Competition between the private sector and state hypothetically led to crowding out when the stimulus eventually discouraged private sectors. Mariana Mazzucato¹⁷ denied the claim that state was unable to engage in basic, primary and dynamic investment, especially in research and development.

Moudud (2000) first provided the Roy Harrod's growth theory focused on endogenous factors complying investment, capital stock, saving and output. In open economy, adding economic components, government spending, tax system, export, and import, the warranted growth rate can be calculated accordingly to the actual growth rate. Furthermore, Moudud elaborated Harrod's growth theory with its parallel, Thirlwall's Law.¹⁸ Post-Keynesian economist Anthony Thirlwall's demand-side model focused on the exogenous factors such as the exchange rate.

Presumably, countries grew at different rates because demand grew at different rates. Thus, when encountering difficulties in balance of payments, the demand would decrease and supply would not be fully utilized which resulted in a cycle of investment flop, reducing productivity and competitiveness and ultimately worsening the balance of payments. Under such factors, export same export growth rate among countries did not parallel the GDP growth due to different import elasticities for demand.¹⁹ Empirical review on Thirlwall's Law could be seen in East Asia (1960-1995)—i.e., while Japan's trade-to-GDP ratio constantly increased, the overall growth was declining. Although similarly the trade growth in South Korea constantly grew, the GDP was relatively stable.

Constructivism

In the context of power in constructivism, William Connolly (1974) argued that attributing power had the effect of politicizing issues. Conceptual analysis in constructivism also focused on the performative aspects of concepts, explaining what the power did. Guzzini (2005) also argued on the inability of neutrality in concepts when explaining perspectives. Furthermore, Guzzini also elaborated on Connolly that attributing power redefined the borders of what can be done in the sense of the 'art of the possible.' Connecting power attribution to the idea of the 'art of the possible' generated the notion 'we could have done things otherwise.' Thus, attributing power to issue immediately raised the stakes for political justification of action and non-action.²⁰

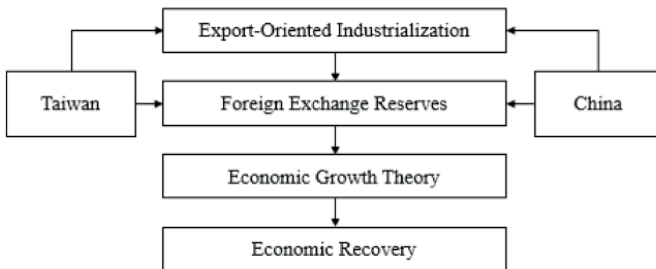
Constructivist conceptual analysis of power which emphasized on the performative effects encompassing the historical and social context was best suited to analyze the case study of Taiwan. Recent scholars on constructivism such as Cynthia Weber (2009) also elaborated that power was not limited to tangible element existing in a material actor or institution but can be measured through dispersion. Thus, intangible power such as national will or resolve was also prominent in constituting the politics of a nation.²¹

Constructivists' translation of balance of power was originated from the failure of traditional theories such as the realism and liberalism in the account of explaining the end of Cold War. While the traditional theories only focused on the state-centrist actors, they neglected the observation on the agency of individuals with self-driven interests, rendering the social

world the result of people's making. In its context of Taiwan, the tangible element of power was clearly evident in the economic strength and technology. In addition, principle of intersubjectivity was also reflected on the US-Taiwan and US-China relations in which through the US foreign policy, Taiwan Relations Act would pose strategic ambiguity.²²

Research Framework

The model of framework used in this paper will focus on two state-actors as the main unit of analysis: the governments of Taiwan and China—i.e., China Taipei and China Beijing, the Nationalist Kuomintang and the Chinese Communist Party in Cross Strait trade-relations, particularly Export-Oriented Industrialization and how it affects the foreign exchange reserves which would be assessed with neoclassical growth theory and hypothetically explained the economic recovery, also known as the Taiwan Miracle.



Research Methods

This paper is based on research utilizing qualitative method to measure how Taiwanese Export-Oriented Industrialization policy carries Taiwan's economy in regard to foreign exchange reserves with China. The relationship between Independent Variable (IV) and Dependent Variable (DV) can be explained by economic growth theory for open economy and analysis on Taiwanese foreign policy at the era in particular.

In analyzing Taiwan's export-oriented industrialization policy and how it affects the foreign exchange reserves, there are several measurements necessary to quantify in order to conclude the success of the trade policy in shaping the monetary, including the balance of trade, GDP, economic

growth, and foreign exchange reserves. The foreign exchange reserves grew in line exponentially with the trade surplus which propagated economic growth that is not independently reliant on GDP growth. One of the comparative advantages exploited was the excessive labor and as full output was followed by full employment, the economic growth would follow accordingly.

At the beginning of the research, the writer is fascinated by the issue on One Country on Each Side and began wondering why there was no plan for unification, despite different political spectrums upheld respectively, considering both countries—Taiwan and China—are great powers in economy of Asia and worldwide. Based on such perception, the writer conducted research on the background politically and economically and became interested in how Taiwan could revive its economy despite horrible loss when Kuomintang was expelled from the Mainland China. Further research showed monetary reserves was one essential factor that drove the economic recovery. And the initial capital injection was later developed through EOI in order to secure foreign reserves that advance the Taiwanese economy.

From the political perspective, most journals were found to be biased on how the United States became the benefactor of Taiwan while managing to maintain good faith with Beijing. Some other sources claimed that Taiwan was a renegade province which should have fallen under the jurisdiction of China Beijing. Ultimately, scholars also mentioned historical approach was important in understanding the odd relations between two Chinas and why unification was hardly ever being brought onto the table of discussion. To complement the research, the writer also conducted learning via audio-visual approach by watching some documentary and conducting interview to gather the opinion of the Mainlanders (Chinese in China) and Taiwanese (Chinese in Taiwan).

After understanding the Cross Strait relations, the writer then gathers data related to the economy of Taiwan. During the research however, the writer also found some clashing references which provided contrasting methods of production. Some scholars including Riedel (1975) and Braaten (2010) acknowledged Taiwan utilized capital-intensive-production, considering the dependency on the United States as patron, while other sources mentioned Taiwan practiced labor-intensive-production through the establishment of Taiwan's Export-Processing Zones to absorb the excess labor. The focus of industrialization also shifted from the Import-Substitution to Export-Oriented which significantly

carried Taiwan to become one of the Four Tigers of Asia.²³

Furthermore, it is proven to be challenging to find reliable sources amidst biased framing in the favor of Beijing. Nevertheless, the writer seeks to look for credible and reliable sources by providing backup data from other relevant sources, particularly the ones demonstrating trade composition and structures. Lastly, the writer would like to defend on the hypothesis that through the mixed theory of exogenous and endogenous economic growth, Taiwan managed to recover its economy and could potentially be a model for other developing economy under certain circumstances.

Cross-Strait Relations in International Community: Three Noes and One China Policy

Despite suffering great loss from the aftermath of the war, the KMT government remained uncompromised on stranding the ties with the PRC. Despite the United States' intervention breaking their diplomatic ties with the Kuomintang which was intended to convince them to have talks in response to PRC's Three Links proposal,²⁴ President Chiang Ching-kuo of Republic of China blatantly refused and continuously maintained his Three Noes policy of No Contact, No Negotiation, and No Compromise with the Communists.

Principally, the Three Noes policy was intended to reject Mainland China's proposal, Three Links. The latter proposal focused on direct exchanges in mail, transportation, and trading of which Mainland China endorsed in order to attain "One China". Kuomintang, however, viewed such action skeptically assuming PRC's hidden agenda was to suppress Taiwan in international community.

In international community, the status and recognition of "China" had been debated, particularly on how the Cross Strait carried out their diplomatic ties with the United States. In World Trade Organization (WTO), for instance, the relation between Beijing and Taipei is equal but asymmetrical, given China Taipei could be interpreted as a separate customs territory of China, similar to Hong Kong and Macau, "One China, Separate Interpretations."²⁵ According to Kong (2005),²⁶ there were two perspectives on how to view the Cross Strait trade relations within the WTO. Principally, both "countries" recognized the WTO Agreement which was considered as a case of special

international law. However, in practice, the concept of international law is law among nations, thus would not apply as long as Taiwan is viewed as a renegade province,²⁷ rendering the WTO Agreement compromise in Cross Strait trade relations.

During his authoritarian regime, President Chiang Kai Shek insisted on being the legitimate government of “China” encompassing the Mainland and Taiwan which to the extent of somehow jeopardizing its diplomatic space. China Taipei even withdrew their membership in the United Nations under the name “Republic of China” upon the admission of “People’s Republic of China.” However, it was a lamentable action, considering following democratization, Taiwan’s efforts to rebuild its image and rejoin the international community became vain, considering Beijing also hindered to it. The most significant international recognition, arguably, would be Taiwan’s accession into the WTO.

Where Three Noes policy focused solely on Cross Strait relations, One China policy exclusively appended the role of the United States. In addition to the former policy, 1979, United States President Jimmy Carter established formal diplomatic ties with PRC and closed its embassy in Taipei severing the diplomatic ties with ROC, despite concurrently passing Taiwan Relations Act to secure the good faith with ROC. Thus, the United States reassumed the role of mediator to pursue constructive dialogue although not as distinctly in support of the Nationalist as previous. Hitherto, the United States remain Taiwan’s closest ally in terms of security and trade, given Taiwan Relations Act mentioned the United States must assist Taiwan to defend itself to which the United States resumed selling arms to ROC.²⁸

The aforementioned One China principle was later modified in 1992 known as 1992 consensus.²⁹ The main difference between the 1979 and 1992 principles lies in the stance held by Kuomintang and Democratic Progressive Party (DPP) respectively. While Kuomintang claimed sovereignty over all and one China, including Mainland and Taiwan uncompromisingly, DPP (1992) agreed upon the existence of one sovereign China but disproved of which between China Beijing or China Taipei being the legitimate government. One China policy is still a topic for heated debate, considering respective successor of Taiwanese presidency held rather varying stance on the particular matter.³⁰

Balance of Trade in Cross-Strait Relations: Export Surplus

Balance of trade, also referred as trade balance, is a term that shows the value difference between imports and exports in a period of time. Trade balance is accounted for the difference between the two factors and is an important component of a country's balance of payments. As a result of the difference between imports and exports, when a country's imports are more than its exports, the country is said to experience a trade deficit. On the other hand, when a country exports more than it imports, the country manages to achieve a trade surplus. Balance of trade is an essential component in determining one country's economic strength though it is not necessarily viable in several conditions such as recession and expansion.

According to many studies, Taiwanese trade had managed to provide domestic market with sufficient capital goods and material which further endorsed the comparative advantage and created employment for excess labor, subsequently improving the income distribution. Over the decades (1960s-1980s), Taiwan's trade dependence index doubled. Thus, it is necessary to analyze its trade links and domestic economy.³¹

In Cross-Strait Relations, as seen in Table 1, Taiwan had sustained trade surplus with China since 1980. The major political economic reason behind the success lied in external factor where Mainland China had administered the economic reform in President Deng Xiaoping's regime. Simultaneously, internal macroeconomic policy of Taiwan was also imposed after analyzing Taiwan's trade dependence in 1970s.

Table 1. Bilateral Trade Balance between Taiwan and Mainland China

(\$ million)		
Year	Taiwan Exports to Mainland China	Mainland China Exports to Taiwan
1979	21.47	56.29
1980	234.97	76.21
1981	384.15	75.18
1982	194.45	84.02
1983	157.84	89.85
1984	425.45	127.75
1985	986.83	115.90
1986	811.33	144.22
1987	1 226.53	288.94
1988	2 242.22	478.69
1989	2 896.49	586.90
1990	3 278.26	765.36
1991*	3 267.24	769.87

* from January to September.
Source: Bureau of Statistics, Hong Kong Government.

In its early export expansion stage (1982), Taiwan exported labor-intensive products to which Taiwan later shifted to capital-intensive production to improve labor productivity.³² In order to absorb the excess labor, Taiwan established the export-processing industrial zones which will be thoroughly discussed in the following chapter. Thus, was demonstrated in the exogenous model of economic growth, labor and capital stock can be substituted in pursuit of output.

By the end of the 1970s, Taiwan experienced excessive influx of foreign currencies as a result of an oversupply of money generated by a great deal of trade surplus, simultaneously dampening the inflationary threat. The high savings and investment of the East Asian tiger were results of strategic macroeconomic policies. The inflation rate was also managed to be kept at average 6.2% throughout 1960s-80s, which was comparably lower from other developing nations of the same period. The low inflation rate was indeed essential considering Taiwan's export sectors were heavily affected by the price fluctuations on the international market.³³

Asides from the macroeconomic policies, Taiwan's success in keeping the inflation rate low was due to the extremely low unemployment rate with averagely 2-3% of said time. Despite the stagflation³⁴ caused by the oil price shock in 1980s, Taiwan had accumulated a substantial trade surplus and foreign exchange reserves which made Taiwan more of a net lender than a borrower in the international monetary market.

Early on, the deficits were mainly aided by the United States until Taiwan gradually increased their government revenues leading to huge budgetary savings. Correspondently, the United States became Taiwan's major trade partner in the 1980s. The World Bank (1993) also noted that High Performing Asian Economies (HPAEs) such as Taiwan responded to external shocks more quickly and effectively than other developing countries as a result of a strategic management of fiscal contractions.³⁵

The turning of the tides in Taiwan's EOI took decades to prevail. In the early stage of the export promotion in 1960s, the trade grew at averagely 21.57% and rose to 30.73% in the 1970s. Concurrently, the exports also grew faster than imports with 25.32% against 18.40%. although the trade balance was accounted negative in 1970, it soon recovered positively in 1971. The first half of the 1970s could have been the golden time for Taiwan should there not be the energy crisis. Even so, Taiwan managed to boost up the exports in the second half of the 1970s and gained a total of USD4.48 billion trade surplus, ostensibly resulted from the shrinking of imports in addition to the export expansion.

Apart from the shrinking of imports, the change in the composition of trade commodity was also arguably essential in Taiwan's economic growth. In the 1980s, Taiwan primarily exported manufactured goods where in 1982, 92.4% of the exports were dominated by manufactures and the rest of processed and non-processed agricultural products. This significantly increased from 1970 in which Taiwan's non-agricultural products constituted 78.6% of the exports and 32.3% in 1960. Within the manufactures composition, some commodities such as textiles and plywood showed significant decrease over the past two decades while electrical equipment, electronics, and machinery remarkably grew despite at a slower rate for the latter.³⁶

On the other hand, imports composition was relatively stable over the two decades. As indicated in Table 2, the majority of imports consists of raw materials which declined from 64.0% in 1960 to 62.8% in 1970 and grew to 67.3% in 1982. Similarly, consumption goods also followed the same pattern turning from 8.1% to 4.9% in 1960 and 1970 respectively before eventually rising to 7.9% in 1982. On the contrary, capital goods experienced increase from 1960 to 1970, from 27.9% to 32.3%, and significantly dropped to 24.8% in 1982.

Table 2. Taiwan's Trade Composition 1960-1982

The Trade Commodity Structure of Taiwan (percentages)												
A. Exports												
	Processed Agric. Products				Manufactured Products							Total Exports
	Agric. Products	Sugar	Canned Food	Total	Textiles	Plywood	Plastic Products	Metals & Metal Products	Machinery	Elect. Eq., Electronics, & Appliances	Total	
1960	12.0	44.0	4.79	55.7	14.2	1.7	—	3.99	0.20	0.59	32.3	100.0
1965	23.6	13.1	10.47	30.4	15.8	5.9	—	4.75	1.30	2.67	46.0	100.0
1970	8.6	3.1	5.73	12.8	31.7	5.3	—	6.31	3.27	12.32	78.6	100.0
1975	5.6	5.0	2.90	10.8	27.6	3.3	6.5	4.79	3.62	14.72	83.6	100.0
1980	3.6	1.2	1.42	5.6	22.6	2.1	7.4	6.35	3.75	18.17	90.8	100.0
1982	1.9	0.4	0.90	5.7	21.6	1.5	6.8	7.58	3.80	17.60	92.4	100.0
B. Imports												
	Capital Goods		Materials and Intermediates				Consumer Goods	Total Imports	Elect. Eq. & Electronics	Trans. Vehicles		
	Machinery	Total	Crude Oil	Iron & Steel	Chemicals	Total						
1960	15.5	27.9	6.4	9.5	6.7	64.0	8.1	100.0	5.3	6.3		
1965	12.4	29.3	2.3	11.9	10.5	65.5	5.1	100.0	6.3	10.3		
1970	13.3	32.3	3.1	7.8	11.0	62.8	4.9	100.0	11.7	10.7		
1975	16.2	30.6	10.5	6.6	12.1	62.6	6.8	100.0	8.5	5.3		
1980	12.14	23.4	20.8	6.8	7.8	70.8	5.8	100.0	9.8	3.7		
1982	10.40	24.8	20.5	8.7	8.0	67.3	7.9	100.0	10.6	5.5		

Source: CEPD, *Taiwan Statistical Data Book 1983*.

Conclusion

After thoroughly breaking down the period of the so-called Taiwan Miracle economic dimension, the writer would conclude that the economic recovery was due to the appropriate trading policy coupled with strategic monetary policy which ultimately boosted growth. First of all, it was necessary to understand that the political conundrum was the primary reason that drove the Nationalists' exodus from the Mainland to the island of Taiwan. At that time, there were many arguments to why the CCP did not bother to go after the KMT. Additionally, when backing off to the other side of the strait in late 1949, the KMT also packed some national treasury, gold and reserves—which to some extent was considered looting by the CCP—of which was acknowledged by then President Chiang Chingkuo to have played vital role in rebuilding the new economy.

It was important to understand that the Civil War was crucial, particularly in terms of international recognition of the legitimate government of China, KMT or CCP. With the United States in the frame, the recognition for the legitimate China initially stayed with the Nationalist KMT even when they escaped to the island across the Mainland, to Taiwan. The United States even aided Taiwan financially through Marshall Plan summing up to USD300 million. However, in 1979, upon the establishment of "One China," the United States later practiced strategic ambiguity by recognizing CCP as the legitimate government of China while maintaining good relations with Taiwan through the TRA (Taiwan Railways Administration). With the shift of the United States' support, Taiwan struggled to acquire the acknowledgement from the international community while simultaneously rejecting the Mainland's proposal, the Three Links by asserting the "Three Noes."

Nevertheless, considering international recognition was essential for enhancing trade, Taiwan's obstinacy was loosened up, one of which was in the case of its accession to the WTO. Not only Taiwan had to acquiesce being recognized as equal but asymmetrical to Mainland China in a case of special international law within the WTO, Taiwan had to open up its market and began investing in Mainland China. Additionally, in early 1980s, Deng Xiaoping's peaceful unification regime was met with warm welcome by Taiwan's President Chiang Chingkuo. Fortunately, the positive change in political regime in both Chinas also supported the warming up of the two Chinas which endorsed better Cross Strait economic relations.

With the evolving Cross Strait Relations, although Taiwan and China

maintained the animosity, the trade between two Chinas was established and even culminated in the 1980s. In the trading strategy, Taiwan had practiced ISI prior to the EOI in 1960s by establishing several Export Processing Zones (EPZs) throughout the island. Many scholars agreed that the trade surplus resulted from the exports activity was partially due to Taiwan's low balance of imports which generated high trade dependence index. Also, it is equally important to look into Taiwan's trade pattern and trend. Considering the limited natural resources Taiwan owned, coupled with excess labor, the labor-intensive production was initially deemed favorable thus resulting in Taiwan exporting more labor-intensive or unskilled-labor-intensive products while importing more capital goods. Along with the capital & labor substitution, Taiwan's industries also underwent changes, for instance the manufactured goods export-industries sustained approximately 15% increase between 1970 and 1982.

In the latter half of the 1970s, Taiwan had enjoyed the trade surplus despite experiencing stagflation in 1975. During this decade as well, Taiwan learnt a noteworthy experience in terms of regulating the monetary policy. At first, Taiwan practiced a less flexible exchange rate pegged at 1:40 to the USD. However, seeing that this could not adapt with dynamic changes of the supply and demand of the international trade, the SAFE was amended to liberalize capital movement in all manner. Ostensibly, the elimination of exchange control enabled Taiwan to better deal with inflation resulted from trade surpluses.

Taiwan's monetary strategy following to the trade surplus was to accumulate foreign reserves which devalue the value of New Taiwan Dollar (NTD) thus stimulating exports and gaining trade surplus. In addition to the aforementioned lucrative cycle, the Central Bank also provided the TFECM to expand investments overseas. Through exercising strategic management of exchange rate, not only that Taiwan became a leading exporter in manufacturing industries, but also a regional capital exporter with its currency circulating in East Asia, including in Mainland China.

To conclude, Taiwan's Miracle could be thoroughly explained with the theory of economic growth in which the trading and monetary policies exercised by the government influence the exchange rate which boosted investments. In line with the modernization concept, Taiwan's exports grew significantly in the sector of manufactured products exceeding the previously immense processed and non-processed agricultural products. In addition to the internal factors such as the government policies and

reform in the industries, external factor such foreign aid from the United States also assisted Taiwan's economic recovery.

Furthermore, domestic industries also demonstrated comparative advantage in utilizing the excess labor which generated employment and ultimately full output. Subsequently, labor productivity was also pushed through capital to labor substitution, further proving Solow-Swan's exogenous model of economic growth. Hence, it can be concluded that the recovery of Taiwan's economy resulted from the factors of economic growth as explained above.

Endnotes

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