

**Taiwan Economic and Political Miracle;
Lessons for Oil Exporting Countries in the Middle East**

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1. Introduction

Taiwan is a relatively small island with a population of about 23.5 million, yet it plays a leading role in the international high-tech industry. Taiwan that was a backward and poor country in the early 1950s, changed significantly in the past four decades and got the ranking of 22nd country in the world regarding GDP per capita (about USD 25,000 in 2018) richer than the European Union member state Portugal (about USD 23,200 in 2018) with especially a very competitive information technology sector. The economic development of Taiwan was one of the remarkable transformations after the Second

¹ Information and Communications Technology

World War. Taiwan, like Japan raised from the grossest poverty, and entered into the world international markets for advanced technology products.

Various important factors contributed in creating a successful transition from a backward agricultural economy to a country based on high tech industries in Taiwan. Supportive foreign aid, good opportunities to get access to international markets for modern technologies and exports of its products, sound economic policies implemented by a competent state, and creative small and medium sized firms have played vital roles in Taiwan's economic success.

This paper investigates the major causes of Taiwan's success story. The paper is consisted of 8 parts. Part 2, after the introduction, examines the importance of Taiwan economic and political relations with US, Japan and China, as well as investment of overseas Chinese in the economic development of the Island. Part 3 is allocated to the role of government in Taiwan economic changes to show whether Taiwan has been a laissez faire model. Part 4 studies the role of private sector in Taiwan's economic transformation. In this part the share of large, small and medium size enterprises is investigated. Unlike South Korea that the contribution of large companies was significant during the process of economic transition, in Taiwan small and medium sized firms have a great impact in the Island's economy, especially in the initial stage of development. In part 5 income inequality and poverty in Taiwan is studied to explain the most important policies to combat poverty and to establish a relatively fair distribution of income. Part 6 studies about the roots and consequences of political changes in Taiwan; how a military government transformed into to a modern democracy and what is the effect of the political transformation on Taiwan's economic development. Part 7 presents lessons from the Taiwan successful experience for the Middle East oil exporting countries. In the last section conclusion is presented.

2. The Role of International Trade, Foreign Investment and Loans

Initial conditions have a great impact on the evolving trajectories over time. The initial conditions of an economic system affect the subsequent growth, trend, and the structural change of the economy. Economic systems

that are initially bound up in unproductive constraints can very well become mired in such impediments, even with the passage of decades. By contrast, countries which are

the recipients of timely aid can pursue a new and successful path towards economic development.

In the late 1940s, Taiwan was an underdeveloped, poor and agricultural country. More than 75 percent of the population lived in rural areas; and 60 percent of the labor force worked in the agricultural sector, and produced 36 percent of gross domestic product of the country. In 1952, per capita income of Taiwanese was USD 42.9 (Chang 1974). In such a dire situation saving and investment to stimulate growth and structural change was impossible. Foreign aid for stimulating the economy in the initial stage of economic development was vital. Generous aids and access to international markets to import new technologies and needed materials and to export domestic products had a significant effect on Taiwan's economic development (Fei 1992).

In 1950s, Taiwan became an attractive place for foreign investment from Japan, the US and overseas Chinese. As Table 1 indicates the investment of overseas Chinese were very important in 1950s, but its importance declined in the 1960s when Taiwan got a huge amount of loans for new investment, especially from US.

Table 1. Taiwan's Foreign Investment and Loan

USD 1000

	Overseas Chinese	Foreign Investors	Loan for Investment	Total
1956	2,243	1,998	1,653	5,894
1957	1,246	48	1,294
1958	2,147	36	1,214	3,397
1959	1,492	98	8,457	10,047
1960	922	493	2,831	4,246
1961	3,498	1,923	2,296	7,717
1962	2,894	4,134	14,253	21,281

Source: Chan 2000

For example, in 1957 Chinese overseas investment in Taiwan consisted more than 96 percent of total foreign investment and loans to the country. This ratio declined to 13.6 percent of the total inflow in 1961, when 67 percent of the foreign money was provided by foreign loans, which was mainly supplied by the US government (Chan 2000).

Although FDI represented a relatively small share of capital formation, it played an important role in Taiwan's early exports takeoff. Between 1960 and 1973, exports (as a

percentage of GDP) quadrupled, whereas FDI's share of fixed capital formation tripled. FDI and foreign trade served as an important conduit for technology transfer and economic development (Ranis and Chi 1985)

2-1. US – Taiwan Economic Relations

Taiwan benefited greatly from its economic, social, and political conditions at the end of World War II. Similar to South Korea and West Germany, Taiwan was on the frontline of the fight against international communism. The supply of US financial and technical aid to Taiwan gave the initial stimulus for industrial development (Jacoby 1966). Different American institutions were responsible for supporting Taiwan economic and social development in different times for various goals with comprehensive and thoughtful aid program.

In the early 1950s, the Nationalist government main objective was to retake the mainland, so to cover military expenditures was more important than economic development for KMT government. But US advisors insisted that economic development must be in focus to create legitimacy for the Nationalist government in Taiwan (Maguire 1998).

In the early 1950s, with the influx of nearly 1.5 million refugees from the mainland, there was a significant problem of maintaining basic needs for the rapidly raising population. Taiwan faced with hyperinflation and economic depression. So US Aid, in the form of commodity imports, helped to moderate the inflation and to stabilize the economy. US Congress decided the aid to be renewable each year. Thus, Taiwan needed to show improvement to get the aid for the following year. The major aim of providing aid step by step was to encourage Taiwan to get ready for financial independence to US aid (Chiang 2014).

Between the years 1951-1965 US assistance was about USD 4 billion; close to one quarter of this aid was gained during 1951-1954 in the initial period of economic change. All military expenditures were covered by the US. Considering huge military costs and the economic chaos at that time, there would be no economic development in Taiwan without financial injection from the US (Cullather 1996).

In the early 1950s, The USAID Mission supported Taiwan to implement infrastructure projects. USAID hired an engineering company (J.G. White Engineering Corporation of New York) to consult on technical matters concerned with proposed

aid projects. This engineering firm reviewed and evaluated the economic and technical feasibility of projects for the USAID Mission to Taiwan and it also consulted the Taiwanese government. The USAID Mission was also involved in planning, coordination, and review of economic and monetary policies, agricultural and industrial projects, and the utilization of US aid for the purpose of stabilization of Taiwan's economy. The Sino-American Joint Commission for Rural Reconstruction (JCRR) was another organization that had played a vital role in the land reform in Taiwan. "JCRR" is viewed by many experts as the most effective US development assistance institution (Wang 1997).

During 1956-60, US aid was allocated for larger and more lasting investments in the Taiwan's government projects, such as large scale public works and industrial plants. Accordingly, imports of capital and raw materials surged as a percentage of total imports and the share of imports of consumer goods decreased. The main objective of US aid to Taiwan was to create a "*showcase of a free market economy*" in the Island and suggested economic reforms such as liberalized exchange controls, and the sale of government enterprises to private companies, Kuomintang (KMT) government accepted the proposed reforms (Tsai 1999).

It is worth noting that in 1950s and 1960s major military hardware was supplied by the US that reduced considerably the burden of military expenditure off the government shoulder. Generous US economic aid (more than USD 1 billion during the 1960s) equaled more than 40 percent of gross investment and accounted for nearly 90 percent of the flow of external capital (Chang 1965). Furthermore, Taiwan's technocrats with the collaboration of the American experts worked on a package of fundamental reforms to speed up development and push the Island to the point where it would no longer require US assistance.

US aid created an encouraging business environment that helped creation of a booming private enterprise, which, by 1965, became the mainspring of Taiwan's economy. While in 1952, 45 percent of output was produced by the private sector in Taiwan, by 1963, this figure raised to 62 percent. Between 1971 – 1978 exports and imports between Taiwan and US soared from USD 1.3 to USD 7.4 billion with a heavy balance in the island's favor. While in 1952 consumer imports consisted about 20 percent of total imports, this rate in 1965 declined to 5 percent; by contrast, capital goods as a percentage of total imports increased from 14 percent in 1952, to 29 percent in 1965 (Jacoby 1966).

2-2. Japan – Taiwan trade

Japanese contributions to Taiwan's economic and social development during her occupation (1895-1945) was considerable by the construction of modern infrastructure such as roads and railways, hospitals, schools and universities. Taiwan's traditional agriculture changed dramatically under Japanese rule. New technologies such as improved seeds, chemical fertilizers, new agricultural implements, and investments in human capital set a firm base for modern agriculture that served to the country's economic development during the post war period (Ho 1975). Although during the Second World War Taiwan economy suffered greatly, it could revitalize very soon. The outbreak of the Korean War, in the early 1950s, promoted the rapid growth of the Japanese economy, which led to the economic development of Taiwan and other Asian countries. Once again, Taiwan and Japan were economically joined and their economic exchanges became even more active than before World War II (Roy 2002).

Japanese capital, ranking the second place in foreign investments, after the US, was one of the important factors of Taiwan economic development. Since the early 1950s, Japanese enterprises supported Taiwan's economy, in terms of employment and advanced technologies. During 1961-76, 380 Japanese technicians and experts were dispatched to Taiwan. Japan also assisted Taiwan in setting up vocational training centers in different parts of the Island (Maguire 1998).

Taiwan imported capital goods and intermediate goods from Japan, and exported products overseas. This pattern linked "increased exports of Taiwan to increased imports from Japan" with a trade surplus for Japan. Japanese investment in Taiwan escalated by the establishment of the Kaohsiung Export Processing Zone in the early 1960s. Taiwan becomes the preferred choice of Japanese overseas investment (Jung and Tseng 2013).

Opening up of the Chinese market created an excellent opportunity for cooperation between Taiwanese and Japanese enterprises adept in direct investment. In 1980s, Japan-Taiwan economic cooperation developed to become known as "investment in China by taking advantage of Taiwan". Due to China's rapid economic development, many Japanese companies specified Taiwan as a forward base with the same culture and language as mainland China. Japanese companies employed Taiwanese personnel that understood Japanese business culture and the Japanese language, as well as Chinese language and culture, and furthermore, successfully and smoothly transferred technology and management to mainland China.

Taiwan became an important location of overseas branches of Japanese enterprises, major destination of technology supply, and the historical background of close trade relations between Taiwan and Japan also played an important role in facilitating such collaboration (Jung and Tseng 2013). For example, Nissan's first overseas cooperative partner is Yulon Motors of Taiwan that produce car under the license since 1960.

Japan is Taiwan's second largest trading partner and the main source of foreign capital and technology. According to the Statistics of the Bureau of Foreign Trade, the 2018 Taiwan-Japan bilateral trade volume was nearly USD 70 billion. In terms of the amount of the balance of trade, Japan trade surplus amounted to USD 21.05 billion (Taiwan Ministry of Economic Affairs 2019). In the past two decades, due to the increase of Chinese exports to Japan, the market share of Taiwanese labour intensive products in the Japanese market has declined.

2-3. Taiwan – China Relations

Since the establishment of People Republic of China in 1949, Taiwan and China had no direct economic and political relationship. Taiwanese firms had indirect trade with China, mainly through Hong Kong. Taiwan - China trade started to increase significantly after reform policies that were implemented by China reformist leader Deng Xiaoping in the early 1980s. China had abundant resources and a large market, making it a perfect fit with Taiwan's economy. In 1980, Formation of Xiamen special economic zone in Fujian province, close to Taiwan, speeded the flow of capital from Taiwan into China; and indirect trade between Taiwan and China reached to about USD 300 million. Taiwan formal ban against trade with china continued, but fishermen who transported these goods directly to China paid little heed (Wang 1991).

In 1985, Taiwan government publicly announced that do not interfere with indirect trade with China. The government also suggested a new quarterly journal to be published providing information on markets in China. Therefore, Taiwan's exports to China increased very rapidly and reached to about USD 700 million (80 percent of Taiwan's exports). Many Taiwanese firms opened labour intensive factories to produce consumer goods in China (Chen 1996).

For encouraging Taiwanese to invest in China, a guideline was approved by China in 1988 that guaranteed that Taiwanese establishments in China would not be nationalized, and Taiwanese exports to China were free from tariffs; and Taiwanese

businessmen would be granted multiple visas for easy movement. So, Taiwanese businessmen became optimistic about the prospects of the Chinese markets as a natural outlet for Taiwanese machine tools and consumer goods. Due to these facilitating measures from Chinese and Taiwanese governments, trade between Taiwan and mainland China grew considerably in the 1980s; and Taiwanese investments into the mainland steadily increased. Similar culture and language, and the mainland's huge market potential and cheap labor, encouraged many Taiwanese businesses to relocate to China (Chen 1996).

Relations with China played a major role in Taiwan's economic development. China was a land of opportunity for the Island's investors, it helped many small and medium enterprises (SMEs) to capture overseas markets by producing at lower cost. Trade with China compensated the fall in Taiwanese exports to the American and Japanese markets in consumer products. Although the Taiwanese firm obtained great profits with the trade with China, in turn, they helped China's economy during its reform and transformation era by providing badly needed capital and technology (Li and Yu 2010).

Today, China accounts for over 40 percent of Taiwan's exports, of which 80 percent is intermediary goods that are assembled in China before being sold domestically or exported. Though Taiwan tries to form regional, multilateral free trade agreements, but many Taiwanese firms are still interested to pursue bilateral deals with China. Many Taiwanese high-tech companies, especially in the fields of electronics and semiconductors², rely heavily on the Chinese supply chains for assembly and export opportunities. About 90 percent of Taiwanese-branded computers, laptops and mobile phones are produced outside the country, with a majority being produced in China. Chinese companies struggle to move up the value chain; and tries to absorb talented youth from Taiwan and other parts of the world to her high tech industries to close the technological gap as soon as possible. So, Taiwanese firms face with harsh competition from Chinese rivals in electronic industries (Yu 2014).

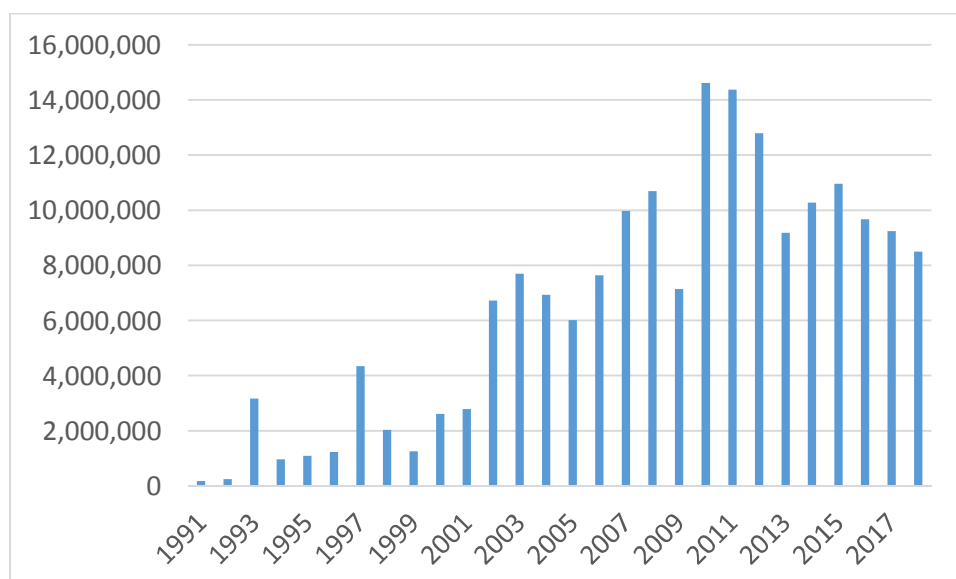
According to Taiwanese government statistics, China is the biggest trading partner of the country. Taiwan's exports to China in 2017 were USD 89 billion (28 percent of Taiwan's total exports). Taiwan imports from China reached the record high USD 50 billion (19.3 percent of Taiwan's total imports). By increasing the value of trade between two countries, China's trade deficit also has raised. While China's trade deficit

² Electronic and semiconductor industries account for about 25 percent of Taiwan's gross domestic product

with respect to Taiwan in 2003 was USD 24.40 billion, it has increased to USD 39 billion in 2017 (Taiwan Ministry of Economics Affairs 2019a).

Taiwanese FDI in China was officially permitted in 1991. But it is estimated that China attracted over USD 2 billion in investment from Taiwan in the 1980s, about 40 percent more than Taiwan’s outward FDI to all other countries in the 1980s (USD 1.46 billion). The most popular target for Taiwan’s outward FDI in the past four decades (Figure 1). Although Taiwan Direct investment in China has declined in the recent years, China still is the most popular target for Taiwan’s outward FDI. In 2017 Taiwan investment in China was USD 9,2 billion (44.4 percent of total outward FDI).

Figure 1. Taiwan’s Direct Investment in China (USD 1000)



Source: Ministry of Economic Affairs, 2019b.

3. The Role of government in fostering economic development

In contrary to the neoclassical school that governments maximize budgets and have rent-seeking behavior that cause government failure, various experiences, especially in east Asian countries show that government can act as machinery for coping with complexity and uncertainty during the difficult process of economic development.

In 1949, Taiwan Nationalist (KMT) government wanted to retake the Mainland; and initial aims were so clearly to strengthen its military and geopolitical power rather than economic development (Winckler 1984). In the early 1950s Taiwanese lived in difficult conditions and hated the KMT government and considered it as their enemy. The massacre of Feb. 28, 1947, after a massive demonstration in the Island, had deepened the hostility of Taiwanese against KMT officials. It was possible that the KMT government decided to suppress more and concentrate on strengthening army; but the government understood that cannot survive if continued the policies and the same corrupted manner that had before in China. Defeat of KMT larger and stronger army in the war against a smaller and weaker “*peasant army*” of the communist party, showed the KMT leaders that if they wanted to compete with the communist regime in China, they should establish a competent government to guarantee economic success in the Taiwan. Furthermore, to gain the legitimacy of ruling in Taiwan, the government should be capable to raise the living standard of the people (Ho 1978). In other words, political success was dependent to the economic development, and economic growth could guarantee political stability and legitimacy of KMT regime (Manthorpe 2005).

The role of government in Taiwan's development has been somewhat controversial. The initial interpretation was that Taiwan represented a case of neoclassical success (Balassa 1981; Meier 1984). Because the island had moved to a market-oriented export promotion strategy quite quickly; and became very competitive in international markets; and state policy evolved over time from massive intervention to a much more *laissez-faire* position (Bhagwati 1988). Furthermore, the size of the government, as measured by the proportion of GNP consumed by the state budget, was fairly low by international standards. But many experts believe that Taiwan's government was the main director of the economy and was successful to guide the private sector to the path which was determined by development plans (Amsden 1985; Chang and Rowthorn 1995). In fact, Taiwanese government controlled the economy heavily at the early stage of industrialization and implemented market friendly policies at later periods. Huge investment in infrastructures, such as highways, railways, and utilities, establishment of science and technology parks, allocating large amounts for R&D in government research centers, and providing generous subsidies for innovative private firms, paved the way for a rapid economic growth and structural change. Yet government and private sector needed each other to function effectively. To reach a high position in the international economy, Taiwan government implemented various economic policies in different stages of economic development (Stiglitz and Yusuf 2001). The major policies were import substitution and export promotion.

3-1. Import substitution (in 1950s)

When China gets Taiwan from Japan in 1945, the economy of the Island was in chaos. The large degree of government control was necessary for stabilizing the economy. Nationalist government got the control of various activities from distribution of tobacco, sugar and salt to petroleum and its products, banking, and foreign trade. The government Government was in full alert to the Communist attack and imposed martial law to the Island. Governed “*war economy*” continued until the end of 1950s (Roy 2000).

To cure the stagnant economy, the First Four-Year Economic Plan (1953–1956) was designed and implemented, by prioritizing light and labour intensive consumer industries, such as food processing and textiles, focused on local market. Interest rates were fixed at low levels to help infant industries. The government also used multiple exchange rates to support domestic industries and imposed tariffs and quotas on imports of goods that were substitutes for Taiwanese products. Average tariffs in 1950s were around 47 percent (Lau 2002).

By the mid-1950s, Taiwan passed the “easy stage” of import substitution, and the economy faced the challenges of market saturation, slowed growth and low investment, an overvaluation of the exchange rate, and sluggish export performance. The United States was concerned about the increasing Taiwan’s aid burden. It was clear that the US could not continue to subsidize the economy of the Island for a long time; thus, the United States had a direct interest in promoting both exports and investment to reduce its aid. US signaled that would phase out its aids by the mid of the 1960s. So, there was no way to obtain the badly needed hard currency, except raising exports (Liu 2000).

3-2. Export Promotion (since 1960s)

The small size of domestic markets necessitated a policy change towards export promotion in the early 1960s. The government used exchange and trade policies again, but for encouraging exports. Export processing zones were established in Kaohsiung (in 1969) and Taichung (in 1971) to attract foreign direct investment. The low wage labour and friendly business environment attracted foreign capital to these regions and increased exports and created new job opportunities and facilitated the transfer of modern technology. This policy was successfully implemented and new modern industries grow very rapidly. By the late 1960s, the electrical and electronic goods became an important source of exports and in mid 1980s they overtook textiles (Fei

1995).

3-2-1. Export Processing Zones (EPZ)

The first Taiwan's EPZ, Kaohsiung Export Processing Zone, started its work in 1969. In addition to the tax incentives, firms established in the zones enjoyed additional benefits. They were entitled to import intermediate inputs duty-free, and a duty exemption on imported plant equipment was granted to all plants without exception. 17 industries with a high value-added ratio were allowed to be located in EPZs (Fitting 1982). The initial regulations also stated that products manufactured in the EPZs could not be sold in the domestic market. Later on, regulations were eased to permit limited sales in the domestic market upon approval and payment of customs duty.

The Kaohsiung Export Processing Zone was an immediate success. Between 1966 and 1970, it attracted USD 33 million in FDI, which constituted 80 percent of total investments. By the end of the 1960s, the saturation of the space stimulated the government to establish two additional zones, the Nantze EPZ in the south and the Taichung EPZ in the center of Taiwan. Both were established in 1969 and were open for production in 1971 (Chi 1990).

By 1986, the three EPZs had attracted US\$459 million, more than 20 times the initial expectation in 1966, and almost 10 percent of private foreign and overseas Chinese investment in Taiwan for the period 1966–83. Total exports from EPZ-based firms in 1966–78 accounted for US\$3.7 billion and averaged 9–10 percent of Taiwan's exports. The majority of investors came from Japan (42 percent of the total number of firms) and the United States (13 percent). However, the zones also attracted overseas Chinese, generally from Hong Kong and Southeast Asia (Li 1988).

Gradually the advantage of EPZs eroded as Taiwan liberalized its domestic market (Li 1988). Between 1966 and 1970, 13.8 percent of foreign investment went into the EPZs, but this figure declined to 11 percent between 1976 and 1980 and to 4.7 percent between 1986 and 1990. The contribution of EPZs to exports also declined over time. Nonetheless, the zones had performed the crucial function of establishing Taiwan as a credible investment location.

3-2-2. Shift to Capital-intensive industries (Since 1970s)

In 1970 Taiwan government planned 10 big construction projects, such as railways, expressways, harbors, airports. Furthermore, government prioritized investment in petrochemical industries, Iron and Steel, aluminum and copper industries; and invited technocrats for assistance. The government implemented these projects by using domestic saving (60 percent of the required fund) and loans from abroad (the remaining 40 percent). Raising government expenditures stimulated the economy. In 1974 the projects created an integrated industrial complex and infrastructure that would support the coming surge in a high tech business (Chan and Clark 1992).

During 1970s a number of major US multinationals started to search for subcontracting parts of their production in Taiwan. Many Taiwanese small and medium size enterprises produced various parts of goods in accordance to the specifications that were given to them by the US companies. This subcontracting stimulated SMEs in Taiwan (Hsiao 1995).

Since early 1980s government pushed the industrial sector for upgrading technology and entering into the production of more sophisticated consumer goods, to increase value added in line with changing comparative advantage. In this period some Taiwanese companies forged ahead and established brand names such as Acer (Haggard, and Pang 1994).

Between 1952-96 the value of Taiwan's exports increased by 1000 times! from USD 116 million in 1952 to about USD 116,000 million in 1996 (Table 2). By 1995, mechanical appliances and electrical machinery made up 43.7 percent of exports. The information industry production increased to USD 19.6 billion, making Taiwan the third largest player in the global information industry after the US and Japan. Taiwan conquered markets of PC accessories such as 72 percent of the world market in computer mice, 65 percent of motherboards, and 64 percent of keyboard and scanners. However, Taiwan imported integrated circuits for its IT products from Japan (Council for Economic Planning and Development 1996).

Table 2. Composition of Taiwan's Exports (1952-96)

USD 1000

	Total	Agricultural products	Processed Agricultural Products	Industrial Products
1952	116.5	25.7	81.3	9.5
1960	164	19.7	91.3	53
1970	1481.4	126.7	190	1164.7
1980	19,810.6	712.2	1108.7	17,989.7
1990	67,214.4	431.4	2578.7	64,204.2
1996	115,942.1	465.2	3618.5	111,858.2

Source: Council for Economic Planning and Development 1996

During the 1960s-1980s textile was the forefront of Taiwan's exports, but its importance declined during 1990s, when textile was replaced by electrical equipment and electronics. To stimulate the growth of the domestic electronic components industry, the government imposed local content requirements for electronic products sold in Taiwan. The requirements had the effect of forcing Japanese television makers to transfer technologies to their Taiwanese partners or local parts makers. It must be mentioned that economic and political relation between Taiwan and Japan were very friendly since the early 1950s and Japanese government supported the transfer of advanced technology to Taiwan (Jung and Tsung 2013).

Obtaining the license from US and Japanese companies enabled Taiwan to enter into the global semiconductor industry. The gap between Taiwan and international IC industry leaders had shortened very quickly. Technical innovation fueled an investment rush in the sector, and by 1995 many new firms joined the ranks of the island's semiconductor makers. Improvements in quality and manufacturing know-how in Taiwan's consumer electronics sector set the stage for the rise of the semiconductor industry, the island's major driver of economic growth since 1990s. So in the mid 1990s, Taiwan with high economic growth rate, and per capita income more USD 12,000 became one of the wealthiest state in Asia; and 14th largest trading nation in the world (National Statistics of the Republic of China 2019). Export oriented industries were successful to sell increasingly in the competitive international markets, thanks to the access to advanced technology from the US and Japan, huge US markets for consumer goods, and government supportive measures such as tax cut, low interest loans and other financial helps. So, Taiwan that had trade deficit during 1950s- 1970s, since 1980s gained trade surplus (Table 3) which is continued by now.

Table 3. Exports and Imports as Percentage of GDP

	1953	1965	1970	1980	1989	1992	1996	2006	2017
Exports	8.5	20	30	54	50	49	48.6	64.2	63.2
Imports	14	22	30	53	42	41	44.7	58.6	50.8

Source: National Statistics of the Republic of China 2019

Agricultural products that comprised the major part of Taiwan exports (in 1952 about 92 percent) entailed a very small part of Taiwan's raising exports. In 2017 manufacturing products consists 98 percent of total exports and the remaining 8 percent included all non-manufacturing exports (UNCTADSTAT 2019). Successful implementation of government projects in line with increasing private investment raised the share of industries in Taiwan's gross domestic products which reduced the share of agriculture accordingly. Although the share of industries has fallen, it is not very sharp. Compared to industrial countries like US (18.88 percent) Japan (29.3 Percent) the share of industries in Taiwan still is high; although it is lower than South Korea (44.32 percent). Table 4 indicates the structural change of the Taiwan economy during 1952-2016.

Table 4. Changing Share of Agriculture, Industry and Services in Taiwan

	1952	1960	1970	1980	1990	1996	2016
Agriculture	34	30	15	7	4	3	1.3
Industry	18	26	37	46	42	35	34.2
Services	48	44	48	47	54	62	64.5

Source: National Statistics of the Republic of China 2019

In 2018, Taiwan was the 13th most competitive nation in the world out of 140 countries (World Economic Forum 2018). Taiwan has exceptional strength and capacity for innovation, firm-level technology absorption, university/industry collaboration in research, and pre-eminent position in the use of the latest technologies, from mobile telephones to personal computers and the Internet. So, Taiwan became a model of economic growth and a peaceful democratic transformation. The state has had a very significant role in this process.

4.The Role of Private Sector

Few of the mainland capitalists followed Chiang Kai-shek to Taiwan. Most of them relocated their businesses to the more politically secure places of the US or Hong Kong (Hagard and Peng 1994). The distance between the government and the domestic private sector, as a result of the divide between KMT mainlanders and the local Taiwanese, as the KMT was concerned about the threat of political competition if private business—dominated by indigenous Taiwanese firms, explains the statist approach of early KMT economic policy and the fact that it did not pursue the Korean government's strategy of building "national champions."

In the late 1950s, the government's relationship with the private sector began to change, and the United States was at least partly responsible. In the 1960s and 1970s, although the government had begun to privatize public enterprises in some labor-intensive industries, it was reluctant to promote large private enterprises. But Nationalist government understood that economic development is necessary for the regime survival and a dynamic private sector is its major pillar. So creating an investment climate conducive to domestic private investors became the focus of the development strategy. In the early 1950s the share of state owned enterprises in Taiwan's total production was more than 50 percent, but since the 1960s, by the rapid growth of private firms and gradual process of privatization of public owned factories, the share of private firms raised considerably. During the 1960s, the average annual growth rate of industrial production in public and private companies were 9.3 and 21.9 percent accordingly (Aberbach and Sokoloff 1994).

The case of the petrochemical industry illustrates the government's attitude towards private firms. The government started promoting the petrochemical industry in the 1960s. The China Petroleum Company distributed its production among as many independent firms as possible. Until the 1980s, The Formosa Plastics Company, the largest conglomerate in Taiwan, requested many times to build its own petrochemical complex, but this request was repeatedly rejected, because the government did not want to allow monopolization of upstream supplies to leave rooms for smaller firms (Aberbach and Sokoloff 1994).

The policy of preserving large public enterprises continued till the late 1980s, when the privatization policy was implemented. The pace of privatization was slow because

of resistance from labor and various other difficulties. Nonetheless, it provided more opportunities for SMEs. Various policies such as preferential exchange rates, tax incentives and low interest rates motivated high investment by the private sector, especially in the industrial sector. Many Taiwanese firms which had access to huge US and Japanese markets for consumer goods, increased their production and exports very rapidly. Exports surged from 40 percent of GDP in 1991 to over 60 percent of GDP in 2008. Large enterprises played a key role in Taiwan's production and exports growth; and stimulated the growth of SMEs that produced components for the larger firms. In 1997, private sector produced about 85 percent of Island's goods and services, while the share of public enterprises declined to 15 percent (Taiwan's Ministry of Economic Affairs 2019c).

Most industries, especially IT and electronics, are mainly export oriented, but all Taiwan's large manufacturers are not successful exporters. Taiwanese car manufacturing industries that were faced harsh competition from Japanese counterparts, decided to collaborate with global major car manufacturers and produce cars under their license in Taiwan. Various Japanese, Korean and European cars, such as Toyota, Nissan, Mazda, Honda, Daewoo, Hyundai, Renault, Ford, Škoda, and Daimler Chrysler are produced by Taiwanese large private companies that supply their products mainly in the domestic market. Taiwan car manufacturers once ruled the market, aided by high tariffs on imported autos. But after entering into the World Trade Organization (WTO) in 2002 lowered tariffs. So, the share of imported cars has raised considerably; and the share of Taiwan manufacturers in the domestic market declined from 80 percent in 2002 to less than 50 percent in 2017 (International 2017).

Taiwan, with a dynamic and competitive private sector, is still a successful export-oriented country. In 2017, exports account for more than 73 percent of total GDP and its composition have changed from predominantly agricultural commodities to industrial goods (now 98 percent) during the past 40 years. In 2017, electronics (33.1 percent of total), information, communication and audio-video products (10.8 percent) were the main exports of the Island (National Statistics of Republic of China 2019).

4-1. The Share of ICT in Taiwan Economic Success

Good economic policies over the past few decades, changed the position of Taiwan to one of the most prosperous and competitive countries in the world. Today Taiwan ranks among the world's top producers of notebook personal computers, flat panel displays,

modems, motherboards, and many other electronic components and products. ICT, and especially semiconductor industry, have become the major driving force of Taiwan economic success.

The Taiwanese government has contributed to the development of the ICT industry since the 1970s by encouraging the acquisition of foreign technology and introducing it to local companies, establishing science parks, and promoting the expansion of ICT related education. The brightest young Taiwanese went overseas for university and advanced studies, often to the United States, and since there were few career opportunities available in Taiwan, they stayed abroad and advanced in industry and academia. This brain drain seemed disadvantageous at the time, but, in fact, it allowed Taiwan to build a large pool of qualified and experienced people before its economy was ready to absorb them (Chiang 2012).

During the 1980s, Taiwan began producing basic ICT products and components for foreign multinational corporations (MNCs). In 1980, the share of ICT in Taiwan's manufacturing value added was about 5 percent. Thanks to its on-time delivery, strict quality control and production flexibility, Taiwanese producers have gradually gained large orders from foreign firms in the manufacturing of ICT related products, and the share of ICT in industrial production increased very rapidly. But ICT industry was dominated by export processing and assembly, and was becoming uncompetitive in the international market because of rising labor costs (Dahl 2005). Moreover, the small scale of most local firms meant that they were unlikely to be able to make significant technological upgrades on their own. Even with financial and administrative support, there was no guarantee that SMEs would automatically invest in technological innovations without worrying about the opportunity costs. The government had to reassure those firms that advanced technologies will be commercially viable once they mature (Amsden and Chu 2003).

It was recognized from the outset that domestic efforts were unlikely to succeed, either technologically or with respect to marketing and branding, in the absence of a strong foreign presence; therefore, domestic efforts were coupled with new inducements to foreign investment. With the support from the government, Hsinchu Science Park was established in 1980. It was supposed that the science park to attract foreign high-tech companies and to create an interacting cluster that included domestic firms, to capture spillover from foreign high-tech firms, through training, technology transfer, and direct cooperation with local firms, including suppliers and subcontractors. The

enrolled firms in the park had to be “science-based,” defined in terms of R&D expenditure and training for domestic technical personnel (Taipei Trade Office 2019).

Since mid. 1980s, the government offered incentives to Taiwanese expatriates to return to the Island as entrepreneurs, to create startups in the science parks, or to take up research, academic, and management positions. These people not only brought their knowledge and experience back from places like Silicon Valley, but also their networks of contacts and working relationships with leading international companies.

The government allocated huge money for R&D in ICT and encouraged national universities to create close ties with private firms, especially in science parks. So, much of Taiwan’s achievement in science and technology is attributable to the public sector’s support for applied scientific researches. Since the beginning of 1980s, numerous highly productive science parks have been established to provide ideal conditions for high-tech business operations, and especially to address development of telecommunications industry (Taipei Trade Office 2019).

These productive policies paid off quickly by the rapid growth in ICT production, employment³ and exports. By the late 1990s the share of ICT in industrial value added reached to about 24 percent. After opening formal trade with China, in the late 1980s, a great part of manufacturing activities have moved into China where operating costs were considerably lower. A large proportion of Taiwan’s investments in the ICT industry (in 2011, 91 percent) has been in China. At present, Taiwan is concentrated on manufacturing the key ICT components. Electronic integrated circuits and liquid crystal devices (LCD) are the two major ICT components in Taiwan’s exports and most of them are exported to China for assembling into final products (National Statistics of the Republic of China 2019).

Since 2013, the ICT industry has accounted for over 50 percent of Taiwan’s manufacturing value added and about 30 percent of Taiwan’s manufacturing employment. About 70 percent of R&D of manufacturing in Taiwan is concentrated on IT industry (National Statistics of the Republic of China 2019). Taiwan’s concentration in ICT production made it the third largest ICT producer in the world, after the US and Japan.

³ In 2016, total workforce of three science parks in Taiwan was 269,041 persons.

Many of Taiwan's information and communications technology (ICT) companies are moving up the global supply chain by building their own brands. Taiwanese companies today account for about three-quarters of the world's production of PCs and half of the world's liquid-crystal displays (LCDs). Acer and Asus are among the largest laptop makers of the world. Regarding memory cards, notebooks and cables, Taiwan took almost all the global market share (over 90 percent in 2010). The most important ICT companies' headquarters are located in science parks. In 2013, 850 companies were active in the science parks. Their combined revenues of about NT\$2.19 trillion (US\$73.56 billion). In 2016, Taiwan's science parks total revenues reached to NT\$2.38 trillion (US\$78.02 billion). ICT sector is the top revenue generator at the science parks, with NT\$1.57 trillion, or 66.18 percent of the overall total (Ministry of Science and Technology 2019).

The best examples of government policies to change the structure of ICT industry were the establishment of the United Microelectronics Corporation (UMC) in 1980 and the Taiwan Semiconductor Manufacturing Corporation (TSMC) in 1987, the headquarters of both companies are located in the Hsinchu science park. The government held the largest share in these companies, but also invited some major private enterprises to take stakes in the new venture. In 2018, Taiwan Semiconductor Manufacturing Co., Ltd. with about 47,000 employees and USD 34.382 billion annual revenue, and United Microelectronics Corp. with 12,000 employees and annual revenue of USD 4.941 billion were dominant companies in the global market for custom-designed integrated circuit (IC) chips and a vast variety of other products. Taiwanese giant semiconductor companies have subsidiaries in various countries such as the US and Singapore. Giant private ICT sector is a powerful engine of Taiwan economic development. Therefore, Hsinchu science park that was established in 1980 to serve primarily as a low-cost manufacturing base for foreign subcontractors in the personal computer industry, very quickly became the base for a cluster of innovative ICT firms and a powerful engine for moving ahead the Taiwan economy. In 2018, 516 companies with 153,925 employees located in the Hsinchu science park, in which 74 percent is concentrated in ICT (Hsinchu Science Park 2019).

4-2. Small and Medium Sized Enterprises

When the Nationalist government got the control of Taiwan in 1945, it was able to take over the largest industrial enterprises that were owned by Japanese. Thus, the major part of industrial activities in the earliest stage of postwar industrialization were in the hand

of government. Nationalist government did not have trust on Taiwanese and was cautious in fostering private Taiwanese enterprises; unlike the way the Korean government promoted the private chaebol. Therefore, restrictions on the growth of large private businesses created more room for the SMEs to grow (Chu, 1999).

Small and medium sized enterprises became the backbone of the Taiwan economy, and provided the bulk of the employment opportunities to the population. The effect of rising number of small and medium sized firms which provided high quality goods and services to export companies was an important factor in Taiwan's economic development.

The different structure of the footwear industry in South Korea and Taiwan is a good example of different share of SMEs in these countries. Footwear industries in both countries were successful in the global market. But Korea relied upon chaebol (conglomerate), while Taiwan on SMEs. Total export value of footwear in 1983 was USD 1.3 billion in Korea and USD 1.8 billion in Taiwan; while the number of exporting firms was 50 in Korea and 884 in Taiwan (Levy 1991).

Bicycle sector structures in Taiwan and Korea are similar to footwear industries. The industry began under import substitution policy in Taiwan, and grew when export opportunities came in the early 1970s. By the arrival of large export order from the US around 1972, numerous SMEs emerged in short time. So, a network of bicycle assemblers and parts producers established. So bicycle industry in Taiwan was dominated by SMEs, unlike the case in Korea, where the number of firms in the industry is much smaller. In 1990, 1307 enterprises were active in the bicycle industry, while only 67 firms were in the same industry in Korea (Chu and Li 1996).

During the late 1960s and 1970s, Taiwan's export growth relied very much upon labor-intensive products, which were mainly produced by the SMEs. Initially, most export-oriented firms were in the food and textile industries. Later on, it was enterprises in the electromechanical, electrical appliance and plastics industries that had the highest production value and export growth. Increasing exports expanded the market size for the Taiwanese products, which in turn created an encouraging environment for the emergence of SMEs to provide necessary intermediate goods and services for large export companies.

The unification of the dual exchange rate and elimination of exchange quotas increased significantly the exporters' earnings in local currency. Export loan program also made export financing readily available to SMEs. Thus, SMEs, which usually have much more

limited resources than the large enterprises, were particularly helped by these export-promotion measures (Chu 1999).

While SMEs (firms with less than 100 employees) are one of the main pillars of Taiwan economy, but their structure has changed dramatically during 1950s-1990s. The share of micro enterprises (with less than 10 employees) declined from 90.73 percent in 1954 to 70 percent in 1996, while the share of medium size enterprises (with 10 to 99 employees) raised from less than 10 percent to 30 percent respectively (Table 5).

So, in line with economic development, traditional micro family businesses lost their importance in Taiwan economy. While in 1996, SMEs consisted more than 98 percent of Taiwanese firms, their share in total employment was about 58 percent; and large companies that comprised less than 2 percent of all Taiwanese firms, created more than 52 percent of job opportunities in the Island (Industrial and Commercial Census of Taiwan).

Table 5. Manufacturing Firms in Taiwan- by number of employees

	No. of Employee (Percent)					
	1-9	10-29	30-99	1-99	100-	500+
1954	90.73	6.87	1.84	99.44	0.50	0.07
1961	89.49	7.51	2.26	99.25	0.62	0.13
1966	72.11	13.45	11.66	97.22	2.31	0.47
1971	68.66	18.26	8.51	95.43	3.82	0.75
1976	68.12	18.02	9.11	95.26	4.10	0.64
1981	69.88	16.99	8.93	95.80	3.63	0.57
1986	63.60	21.92	10.50	96.03	3.54	0.43
1991	66.06	22.91	8.61	97.58	2.12	0.30
1996	70.00	21.04	7.03	98.07	1.67	0.26

Source: Chu 1999

Between the early 1980s to the late 1990s the value of exports by Taiwanese SMEs increased very rapidly and reached from USD 155 million in 1982 to about USD 60 billion in 1997; but their share of in total Taiwan's exports dropped from about 70 percent to less than 50 percent. In other words, exports from large enterprises raised more dramatically in the same period (Hu and Chi 1998).

Since 1990s, many Taiwanese SMEs has switched from export-oriented to domestic-market-oriented firms; as labor-intensive production has mostly moved to China, the SMEs exports share in Taiwan's total exports declined from 50 percent in 1997 to about 14 percent in 2017. However, the share of SMEs in total manufacturing

employment has remained in high level, 78 percent of total industrial employment during 2003-2017. But while in 1985 about 70 percent of SMEs productions were sold in international markets, this share in 1995 declined to 32.5 percent (Ministry of Economic Affairs 2019d).

Although Taiwan's SMEs are mainly concentrated in the domestic market, but SMEs that are active in the electronic parts and components manufacturing are very competitive in the global scale. In 2017, the share of SMEs in total exports of ICT was about 30 percent. SMEs in machinery and equipment sector and metal production also had high shares (14.5 and 12.3 percent respectively) in total exports of related industries (Ministry of Economic Affairs 2019d).

SMEs function as a stabilizing force in the labor market and a key driving force of the country's economic development with significant contribution to job creation. In 2017, 1,437,616 small and medium size enterprises accounted for 97.7 percent of all firms in Taiwan and had about 8,904,000 employees (78.44 percent of all employment in the Island). About 80 percent of SMEs are mostly concentrated in the services sector. Highest proportion is in Wholesale and Retail Trade (48 percent of SMEs), followed by accommodation and food services industry (11 percent). Manufacturing consists about 10 percent of Taiwan's SMEs. Among Taiwanese SMEs, Chinese family businesses have an important share (Ministry of Economic Affairs 2019d).

5. Poverty combatting policies in Taiwan

One of the most important features of Taiwan economic miracle was high economic growth with relatively equal distribution that eradicated absolute poverty in the country. During the Second World War, Taiwan that was under the rule of Japan, was heavily bombarded by allied forces. Infrastructures, industries and agriculture damaged seriously. In 1945, Taiwan was a ruined country with a very poor population. More than 75 percent of the population lived in rural areas; and 60 percent of the labor force worked in agricultural sector, while the sector produced 36 percent of gross domestic product. Over 50 percent of the island's population was farmers, of whom 70 percent were tenants. In 1952, per capita income of Taiwanese was USD 42.9 (Chang 1974).

In 1949, when the Nationalist government retreated to Taiwan, the leaders of KMT understood that their inability to combat rural poverty and controlling hyperinflation in the mainland China was among the major reasons of their defeat in the war against China Communist Party. KMT had to change the situation to create legitimacy for the

new political regime. US that was the main supporter of the Nationalist government, encouraged implementation of a vast reform to combat poverty in the Island and to gain the satisfaction and trust of Taiwanese people. The United States insisted that Taiwanese government would carry out sufficient reforms by the financial and technical assistance from the US. A gradual but far reaching land reform program designed by Sino-American Joint Commission on Rural Reconstruction, which was established in 1948 in mainland China, and after the Chinese Civil War, moved to Taiwan (Taylor 2000).

5-1. Land Reform

In 1949, the first phase of the land reform reduced the rent paid by tenant farmers from 50-70 percent to 37.5 percent. In 1951, the government sold public land to tenant farmers; and the land price to be paid by installment in ten years. In 1953 the last phase of land reform program, "land to the tiller" was implemented. Landowners were compensated over a period of 10 years; receiving 70 percent of the price in kind, rice or sweet potatoes, with interest at 4 percent per annum. The remaining 30 percent was paid with stocks in government-owned industries (Chang 1974).

Land reform increased agriculture productivity significantly and reduced the gap between the rich and the poor. The income of farmers in small and medium size farms increased considerably, that supported farmers' children attendance in schools and reduced child mortality rates in the rural areas. Land reform created tremendous support for the KMT government from Taiwanese peasants.

The government, with US aid, improved land productivity through improved seeds, irrigation projects, and the development of farmers' organizations. Agricultural products in 1986 was 3 times that of 1952. Farmers benefited from agricultural growth and raising productivity and gained higher income (Taylor 2000).

5-2. Cash Transfer and Health Insurance

In 1951 "Winter Relief for Poor People" and the "Free Medical Services" were implemented. "Winter Relief for Poor People" later became the "Three Festival Grants" which government provided during the Chinese New Year (Feb.), the Dragon Boat

Festival (May) and Mid Autumn Festival (Sept.) for poor families, helpless and lonely elderly and children in shelters. The number of aid recipient increased from 540,000 persons in 1951 to 924,000 persons in 1960. Implementation of Social Aid Act caused the decline in the number of subsidy recipients (Fei et al. 1979).

Free Medical Services helped enormously to ease the burden of low income families from the threat of large medical expenses, as poverty and illness always arise with each other. In addition to social aid for low income families, other types of aid, such as care for the disabled, pregnant women, infants, children and the elderly, vocational training and low interest loans for those in poverty, were also implemented.

In the early 1970s, Social Department was established to design a plan for eradicating the poverty. This plan was named “Project of Prosperity”. It was the first large scale anti-poverty program that should cover about 400,000 poor persons across Taiwan. The Project of Prosperity had two main goals: To encourage employment and production amongst those who were poor, but were capable of working; and to provide appropriate help and care for the weak, elderly, disabled and the poor with no working capabilities. Furthermore, the government tried to win the popular approval, especially among workers and the middle class, via the construction of new public housing and housing loans, and increasing welfare payment for poor families (Ministry of Health and Welfare 2015).

In 1980, the Ministry of the Interior introduced the “Social Aid Act”. The purpose of this act was to take care of low income families as well as families encountering emergencies and unexpected disasters. High economic growth, low inflation and unemployment rates and sound poverty combatting policies together reduced inequality and the share of low income families in Taiwan.

Since early 1990s, there were huge increments in the allocation of resources to social development in Taiwan. Between 1981-93 around 20,000 families received living assistance. Since 1994 the number of recipients increased sharply, as the government extended the scale of minimum cost of living for identifying low income families.

National Health Insurance scheme for all citizens was introduced in 1995, and thus the possibility of any families falling into poverty due to unaffordable medical expenses because of illness or accident was completely ruled out. This represented a considerable progress in fighting against poverty and in avoiding families being caught up in the poverty trap. By 2000, taking care of low income families in Taiwan were fairly comprehensive and covered the registered low income families.

At present there are different kind of social assistance to low and middle income families, such as cash payment for poor, elderly aged over 65, over 6-month pregnant women, and for mentally/physically disabled persons, and rental assistance. Citizens over 55 years of age with disabilities can apply for daycare service. Parents paying income tax at rates lower than 20 percent are eligible to apply for a monthly payment for each of their first two kids aged 0 to 4 and an additional financial support for the third child (Ministry of Health and Welfare 2015).

Self-sufficiency and anti- poverty programs help children and youths from low-income households to escape poverty. To help the next generation from disadvantaged households obtain human capital, miscellaneous school fees for high school/vocational school and above have been completely waived for low income households. The government also provides a living assistance subsidy for children from low income households, and an education and living assistance subsidy for each student in high school/vocational school and above. Social assistance measures, relatively cheap public transport and sport facilities and very well organized health care system are powerful means for increase welfare of Taiwanese households and preventing them to fall in the poverty trap. In 2018, about 1.5 percent of Taiwan population was considered as poor or belonging to the low-income household and more than 98.5 percent of the population enjoyed the benefits of Taiwan's economic prosperity and greatly improved quality of life; much better situation, even if it is compared to the UK with about 15 percent of the population under the poverty line (Grant 2019).

5-3. Raising Inequality Since 2000s

Table 6 shows that the remarkable achievement of economic growth was accompanied by more equal distribution of national income between 1964-84 (Chen 2012). During 2000-2010, Gini coefficient increased, that showed the rising inequality in income distribution, but it started to decrease again.

Table 6. Income Distribution Change (1964-84)

	Gini Coefficient
1964	0.360
1984	0.322
2000	0.326
2010	0.342

2017	0.337
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Source: Chen 2012 and Statista 2019.

According to formal statistics, income inequality is relatively low and declining in Taiwan. Gini coefficient that was 34.5 in 2009 reached to 33.6 in 2016; but increased slightly in 2017 and reached to 33.7. Some researchers believe that inequality is raising because of low interest rates, booming stock market and profitable real estate business in Taiwan that generated huge profits for a very tiny group and widened the gap in income distribution between rich and poor that is not reflexed in Households Income-Expenditure Survey, but tax data can illustrated raising inequality clearly. Tax data show that the share of the top 5 percent of income earners in total national income is twice as much of as official statistics would suggest. It seems that Taiwan follows the international trend of wealth distribution; as Taiwan's wealth is rapidly being concentrated in the hands of the wealthiest 1 percent at the top of the income pyramid (Chang et al. 2014).

Since 1998, wages and salary income as a percentage of GDP have fallen steadily while corporate profits as a percentage of GDP have been on the rise, but Taiwan's tax base continues to depend largely on salaried workers; while taxes collected on stock and property sales account for less than 1 percent of tax revenues (Chang et al. 2014).

Many Taiwan's industries do not upgrade their operations and rely on low wages to stay competitive, making it nearly impossible for salary levels in Taiwan to rise. Harsh competition from China create serious challenges for industrial exports and reduce the incentive for investment on new technologies. Therefore, investment is focused on the equity and property markets rather than on industrial innovation. In contrary, the potential profit, risk and tax burden associated with speculating in real estate and stocks are far more advantageous than investing in new businesses or research and development. In such a situation real estate has become more lucrative and attracted great part of financial resources to this sector and widened the income gap in Taiwan. So, it seems that significant success in bridging the gap between rich and poor is reversing.

6. Political Reforms

Taiwan was ruled by an authoritarian government in the early stage of economic development and then experienced a smooth democratic transition while maintaining sustained economic growth. Samuel Huntington categorized Taiwan's path to

democracy as a top-down process in which the elites in power took the lead in bringing about democracy. The ruling Kuomintang would agree with this explanation, although the opposition Democratic Progressive Party (DPP) which was established in 1986 in defiance of martial law would argue that Taiwan's liberalization and democratization was carried out through a process of transformation which was the result of the joint action by government and opposition groups (Leng and Lin 1993). Socio-economic development, raising number of the middle class and the growing strength and maturity of the opposition groups in the mid. 1980s created favorable conditions for Taiwan to move from an authoritarian regime to democracy.

In 1949, after the retreat from mainland China, Chiang Kai-shek headed the army, the political system, and an increasingly centralized party apparatus in Taiwan, and crushed all alternative centers of political power—leftist and Formosan nationalist forces, labor, students, and landlords. KMT government announced martial law and enforced the White Terror and brutal and ruthless suppression in the Island. KMT leadership believed that Taiwan's conditions were quite different from western countries, and an open democratic society was a distant goal for the country. They believed that if the government gave in even minimally to the demand for more civil rights would soon be surrendering power. Even mild criticism of the regime could result in arrest and disappearance. Every major business had to have a retired security or military officer in a high position in its personnel office to control the security (Roy 2003).

In the Mid 1950s, there were about 14000 political prisoners in the Island. About 30,000 persons were arrested under martial law from 1949-1987, and about 15 percent of those arrested were executed (Taylor 2000). Harsh security controls effectively discouraged even mild expressions of opposition. Thousands of political prisoners were serving as living lessons to potential activists.

KMT government justified the harsh political suppression by the need to struggle against communists. The vast program to prepare people for fighting communism was 30 percent military and 70 percent political that was the foundation of schools' curriculum. Army units were allocated in high schools and universities for military and anti- communist training (Ranis et al. 1999).

It was not coercion alone that maintained. The government enjoyed support in varying degree among farmers and businessmen, who continued to be beneficiaries of economic policies and political stability. But the support of farmers and businessmen would rapidly diminish if a vigorous and free opposition was ever permitted. By expanding

industries in different cities and villages that strengthened the middle class, demand for political reforms and the number of civic organizations in Taiwan started to rise. In 1971 there were unprecedented student meetings in NTU on free speech. Hardliners among KMT leadership wanted to suppress the students' protests, but instead of clamping down, Chiang Ching kuo, the son of the President Chiang Kai-shek, that actually had the highest power in the government, sent an invitation to the leading participants and listened to the group opinions and declared that youth should speak out more and should be more concerned with national affairs. He also granted amnesty to small group of political prisoners. In fact, Chiang Ching-kuo responded to the changing environment by starting the transition process. Internal pressure, influence from the US for political reforms, and the threat of the China all affected Chiang's decision (Taylor 2000).

Some young intellectuals were invited into the government with promises that they could bring about the reforms that they desired by working within the system. Intellectual advisors who mostly were educated in the US contributed to balanced and reasoned analysis of world events. Development in South Vietnam and total collapse of the Saigon regime in 1975 was an important lesson pointing out to the critical need for a supportive population. US President promotion of human rights also had an impact on Taiwan. President Carter refused to continue the past practice of overlooking the human rights abuses of US allies, and was tough on human rights abuses in Taiwan. Chiang Ching kuo, following US policy, initiated Taiwan's human rights year in 1976. In 1980s, most senior officials of KMT, except to the ultra conservatives, accepted to allow oppositions to emerge in the parliament. They were a tiny group that could not pose any threat for the foreseeable future. It was relatively a harmless way to let the opposition blow off steam and also to appeal to American that Taiwan implemented political reform and accept the right of opposition groups to enter into the parliament (Taylor 2000).

In 1978 Ching kuo became President. He eased the pressure on opposition groups. The number of non-KMT members in legislative body increased. They demanded the end of martial law and an amnesty for all political prisoners. But Ching kuo was cautious did not accept a serious change in the political environment; as authoritarian governments could be in greatest danger when they begin to reform themselves (Leng and Lin)

In 1979, political relaxation led to even stronger pressures from dissidents; and in the meantime conservative pushed more for counter-pressures. Street demonstration

became violent, and conservative parliamentarians demanded an end to the “thought pollution” and warned that the opposition was opening the way for the “communization” of Taiwan. They were concerned that Ching kuo and the reformers were heading down a slippery slope in attempting “controlled liberalization” and called for eradication of the disloyal opposition. But dissident groups were growing more impatient and popular; and KMT no longer could justify continued restrictions of the opposition, and denying them the right to have an opposition party and an organization. The new journal *Formosa* was published by reformist intellectuals, very quickly became so popular, with circulation ranges between 100,000 to 300,000 copies. *Formosa* had in fact begun to act as a party organization that sponsored street activities; but it was banned in 1980, when in a violent demonstration many were arrested. There was growing sympathy for the accused. More importantly, in US the media and human rights organizations portrayed the opposition leaders as victims. Military court proceeding was open and statements of the accused made in court reported in the local press, that created a negative public reaction. The process of accusation against dissidents turned into a victory for the democratic movement. But the government continued to suppress its enemies. More dissidents were arrested and even murdered by security police. The Killing of a Taiwanese journalist in the US created a great scandal that badly tattered the political influence and moral authority of the government (Taylor 2000).

In 1986, a group of activists founded Democratic, Progressive Party (DPP), although to organize political parties was illegal under national law. DPP attracted many people very soon. They organized big demonstrations against the KMT authoritarian rule and martial law. President Chiang Ching kuo was to decide whether to intensify the suppression of increasing number of protesters or accept a political reform. Finally, he accepted that the time is changed and KMT cannot act as before. He decided to avoid further conflict and to stop the detention of opposition groups as he understood that to arrest people cannot solve any problem (Roy 2003).

Ching kuo reformed the structure of intelligence service to change the internal and external image of the government. He decided to implement a full range of democratic reforms, and ordered to convene ad hoc study groups for informal discussion of political change and to brainstorm positive and negative consequences of specific political reforms. The participants included high ranking officials of military and security institutions and conservative parliament members and respected academics. Finally, in 1987, martial law was lifted after more than 38 years (May 1949 – July 1987) and the ban on organizing new political parties was removed. A great political change with a very low cost. While DPP could send

some of its members to the parliament, until 2000 KMT had the majority seats and the Presidency and up to now is a strong party in Taiwan (Taylor 2000).

Why Chiang Ching kuo and the majority of KMT leadership accepted to lift the ban on political parties while in most authoritarian regimes such changes are very costly and even cause civil wars? Undoubtedly, the role of the President Chiang Ching kuo was critical in Taiwan political reforms. Since mid. 1980s Ching kuo was seriously ill and had a hospital – type bed set up in his bedroom and conducted much of his business there with a small bed-side elite. It seems that Chiang Ching kuo health and the sense of mission might have been important factors in his decision to stop conflicts with opposition groups (Nathan and Ho 1997). Perhaps he wanted to be remembered as a modern patriot and pragmatic politician that brought prosperity, prestige and peace for his people. Furthermore, positive public opinion and international image about the Taiwan political situation, was important for conserving close ties with the US. Anyhow, successful economic and political transformation guaranteed the sustained Taiwan's multi-dimensional development.

After the death of Ching kuo in 1988, his Vice President Lee Teng hui, a native Taiwanese became the President and the head of KMT party. He deepened Taiwan's new born democracy. He diffused the tensions between KMT, DPP, and other political rivals. The parliament that historically was an inactive and underperforming body, became increasingly significant in the policy-making process (Nathan 1993). In the 2000 election DPP got the majority seats in the parliament and won the presidential office. Since then the political power has transferred from KMT to PDD and vice versa without any violence. Political parties and media are free to criticize the government and there is no pressure against dissidents.

At present, Taiwan is a multiparty democratic regime headed by an elected president. Freedom House gave Taiwan a ranking of 93 out of 100 in 2018, the second highest in Asia after Japan; for its freedom rating, political rights, and civil liberties (Freedom House 2019).

Taiwan experienced economic transformation and political transition simultaneously. The Taiwanese government, under pressure to upgrade the industrial structure and deliver sustained economic growth, adjusted its institutional arrangement to signal its commitments to different investors.

7. Lessons from Taiwan Success for the Middle East Oil Exporters

Oil exporting countries in the Middle East region have different economic and political structure and face different problems, but very important challenges, such as their heavy reliance on oil revenue, uncompetitive industrial sector, high unemployment rates, serious poverty and high income inequality as well as the prevalence of authoritarian regime and weak civil society are more or less common in these countries. Due to these long lasting and unsolved problems, the Middle East oil exporters are prone to economic instability, social unrest and political turmoil.

Middle East oil exporting countries can learn many important lessons from the Taiwan successful experience in transition from a backward and poor country to one of the global dynamic economy with democratic political institutions.

The most important lesson is that Taiwan's government accepted that the economic development is the first priority of the KMT regime to gain legitimacy and political stability in the Island. At first, KMT leadership puts military strength as the most important aim of the Republic of China to combat the communist regime in the mainland. But very soon, by the advice of US consultants, changed its priority to economic development and started the land reform in the early 1950s. Taiwan had the advantage of US military aids that eased the burden of military expenditure. Prioritizing economic development in the oil exporting countries also means a drastic reduction in military expenditures, by reinforcing friendly relations with neighboring countries, to focus on economic development and structural change towards a dynamic economy with declining share of oil revenue in their GDP.

The second lesson is that good foreign relations with developed countries paved the way for technology transfer, FDI attraction, and access to their markets for Taiwan. Hostility with US and her allies caused harsh and long lasting sanctions for Iran and Iraq that damaged their economy, especially their industries.

The third lesson is the macroeconomic stability (low inflation and unemployment rates, and suitable exchange rate) and promising business environment to encourage private investment and to attract FDI. Taiwan's private sector benefited from a stable macroeconomic environment that prevented high fluctuations and uncertainty for businesses. Even during the East Asian Crisis in the late 1990s, Taiwan was the least

affected country that recovered very soon. High inflation and unemployment rates and misguided economic policies in most oil exporting countries increase uncertainty and are harmful for economic stability and the private sector activities.

The fourth lesson is the necessity to create a comparative advantage in a dynamic and promising industries. Taiwan's government supported generously the science-based industries, especially in the ICT sector, by offering incentives to highly educated diaspora to return and collaborate in setting up new competitive firms with the collaboration of domestic and foreign companies. Establishment of these industries guaranteed the long lasting economic success of the country in the global level. Governments in many oil exporting countries reject any contact and collaboration with their diaspora, as they are the enemies and are ready to destabilize the society and demolish the political order. Middle East oil exporters even have not able to create globally competitive petrochemical industries; and in most cases petrochemical sector is reliant on huge subsidy in the form of very cheap oil input.

The fifth lesson is related to combatting poverty and inequality. One of the most important characteristics of Taiwan economic transformation was high growth with declining poverty and inequality. Since the early 1950s, land reform and social policies, like cash transfer and health insurance for low income households have been important measures to eradicate poverty in Taiwan. In 2017, Gini coefficient in Taiwan (33.7) was lower than Japan (33.9), UK (35.1) and US (39.1). The income distribution in the Middle East oil exporting countries is among the most unequal in the world. There is no record about Gini coefficient for Saudi Arabia, Kuwait, Qatar, Oman and U.A.E., and the coefficient for Iran is 40 for 2016. Populous oil exporters like Iran, Iraq and Algeria are faced with the challenge of increasing poverty and non-populous oil exporters have the problem of raising inequality that are the roots of discontent and decreasing social capital in these countries.

The last, but not least, the lesson is Taiwan's government acceptance of the necessity of political reform, because of the increasing demand for freedom of organizing political party and free and fair election. Conservatives in the KMT leadership believed that dissidents must be suppressed. But reformist President Chiang Ching kuo insisted that the old leverages for preventing political unrest do not work anymore, and for creating stability and social cohesion the right of opposition groups to set of political parties must be recognized. Since 1987, Taiwan has moved towards democracy; and at present the country has a stable political and economic situation with very high ranking regarding freedom; and created a very good image about democracy and human right

in the public opinion in the world. Most oil exporting countries in the Middle East are too cautious to open up the political arena. They are afraid that accepting the freedom of the opposition groups for establishing political parties and competing in the election will destroy the stability. But raising suppression is the cause that these regimes are prone to social unrest and political chaos.

7. Conclusion

According to institutional economists, economic and political decision making in every country is path dependent. By other words, the past history has deep effect on the current situation. But economic and social changes following internal and external shocks have serious impact on policies as well. So, objective forces such as physical environment, external conditions, and subjective forces like belief, experiences and the attitude of policy makers govern policy evolution.

After the Second World War, Taiwan experienced great economic and political changes that mostly was caused by external factors. Retreat of the Nationalist government to Taiwan after the defeat from the China Communist Party, caused a huge exodus to the Island, that was badly damaged by the war, and increased its population more than 20 percent. The country faced food shortage and rampant inflation. Because of the threat from the mainland China, the Nationalist government was extremely dependent on military and financial aid from US to strengthen its military might and to revitalize its economy.

US financial aid helped Taiwan to repair and expand its infrastructure that was necessary for private investment. Thus, as physical capital on the island was increasing, access to better infrastructure encouraged more private investment. Outward-looking orientation was an essential element of Taiwan's success. In later stages, exports to China and Hong Kong was a vital factor for boosting exports and motivating businesses for more investment and innovation.

During the initial stage of economic development between 1951-1965, the US aid, technology transfer, and access to US and Japan markets permitted Taiwan to jump from its low initial capital stock and escape the poverty trap, and to move from farming to the industrialization process by supporting private sector activities and promoting exports. During this period Taiwan, like many other developing countries, was concentrated in light manufacturing and consumer products, but was challenged by raising competition from rival countries. US aid could not be continued for unlimited

period; so the Taiwan economy must become self-financing and self-sustaining by creating a comparative advantage in capital intensive and technology – based industries.

In analyzing the causes of Taiwan economic miracle, it is not possible to dichotomize government versus market. Taiwan case shows clearly that state and market are complement instead of being substitute. Competent governance, good policies, effective institutional arrangements, and good macroeconomic management have provided a stable foundation. So, strong government intervention and a dynamic private sector have been important in Taiwan's success story. Encouraging business environment in the Island created a highly competitive private sector that gains a niche of comparative advantage in the global economy. The state played a significant role in boosting the island's competitiveness by creating good infrastructures and favorable business environment for entrepreneurs, channeling foreign capital into a few vital sectors. Another great achievement of Taiwan's development is that the fruits of its progress were widely distributed among farmers, villagers, industrial workers, professional and civil service personnel, and business enterprises. Social policies have been successful in combatting poverty and supporting low income families.

Government's role in human capital accumulation was also vital. Generous budget allocation for education and research and various incentives to encourage overseas scholars and engineers to return to Taiwan and set up new plants in science parks provided a good structure for a technology-based economy. By public-private partnership Taiwan pushed the limits of its static comparative advantage and attracted investors to engage in high-tech manufacturing, particularly in the semiconductor industry. So, it would be misguided to see Taiwan as laissez-faire economy.

Economic growth strengthened the middle class in Taiwan that demanded for political openness. Raising tensions and unrest created a turning point for the government. Either protesters had to be suppressed more violently to silence the opposition groups, that the final result could not be predicted, or to accept the request of the increasing number of intellectuals, academia, professionals and students to respect human rights and to lift long lasting martial law and remove the ban on organizing political parties. Since the mid. 1986 Taiwan's government decided to accept the necessity of political change. So, Taiwan witness a successful political transformation, that imposed a very low cost to the country, compared to other developing countries with authoritarian regimes who resist against any political reform.

Over the past decade, the domestic and international economic environment has changed drastically. The rapid rise of China and other emerging economies,

globalization led by multinational corporations, and waves of regional economic coalitions around the world all have created challenges to Taiwan economy. But Taiwan still is one of the most competitive economies, with high position in the international market, especially regarding ICT, with a very good reputation in precision machinery and biotechnology as well.

Taiwan's successful economic and political transformation provide important lessons for the Middle East oil exporting countries. First, economic development must be the main priority of the governments. Second, friendly relationship with advanced country is necessary to transfer technology and attract capital. Third, macroeconomic environment should be stable to prevent serious uncertainty for businesses. Fourth, creating a viable comparative advantage in especial industry to decrease the reliance on oil revenues. Fifth, implementing sound economic and social policies to combat poverty and income inequality; and the last, but not the least, opening the political arena to opposition groups is a complementary measure for moving towards dynamic economic conditions and a modern democracy.

Oil exporting countries need meritocratic and transparent governing institutions to be able to learn from the experiences of successful countries, like Taiwan, to design and implement effective policies to support entrepreneurs and motivate the return of their highly educated and specialists who live and work outside their countries and mobilize all resources at the service of economic development and democracy beneficial for all citizens.

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