Social and Cultural Aspects in Taiwan's Economic Development with Special Focus on the Education System and Gender Equality

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DOI: 10.29180/9786156342393 7

1. Taiwan's Economic Achievement

Taiwan (officially known as the Republic of China, ROC) as one of Asia's Four Little Dragons (Wong, 2003) has gained economic strength by the end of the 20th century and became an important regional player. Its democratic achievements and economic prosperity have won recognition internationally (Mahbubani, 2011).

Amidst the significant changes and reordering of economic powerhouses in terms of world geopolitics, academics and researchers have constantly made efforts to understand the main factors driving economic growth in countries the world over. As part of this process, Taiwan has also gained international attention and experts hope to learn from the Taiwan experience.

Taiwan's history in brief: mostly independent existence until the 15th century followed by episodic, periodic, and extended periods of rule by mainland Chinese dynasties, interrupted by the presence of Portuguese explorers, Spanish settlers, Dutch colonizers, and Japanese colonial rule (1895-1945) until it reached its present status, and the country has been operating with a democratically elected government since 1996.

Since the 1990s, Taiwan has been a vibrant and an increasingly prosperous democracy. In 2020, Taiwan's gross domestic product (GDP) amounted to around 668.51 billion USD (almost 20 times the world median). Using purchasing power parity (PPP) dollars, Taiwan's GDP per capita (59,398 USD) is more than in the EU (44,539 USD) or in Japan (42,248 USD) (World Data Atlas, 2021).

2. Factors Contributing to Economic Growth in Taiwan

When trying to identify factors that have contributed to this significant economic performance, several elements can be mentioned from geographical location to cultural traits (Huntington – Harrison, 2000), from education to female empowerment. In this paper, we will briefly highlight the last three, those that in the author's view have had the strongest input in supporting economic growth.

2.1. Cultural Traits

Taiwan has gone a long way in forming and evolving its modern culture: beginning with indigenous people of Austronesian origin, Chinese ethnic, linguistic and cultural heritage, and Japanese colonial rule, just to mention the most important formative phases, all adding up and contributing to the shaping of its values, mentality and lifestyle. For understanding modern Taiwan, we turn to Geert Hofstede's Cultural Dimensions Model (Hofstede, 1997). Its latest elaborated version, the 6-D (six dimensions) model (Hofstede Insights, n.d.), gives a brief but characteristic overview about Taiwanese culture.

Power Distance Individualism Masculinity Uncertainty Long Term Indulgence Avoidance Orientation

Chart 1: Six cultural dimension scores of Taiwan

Source: Hofstede Insights, (n.d).

- *Power Distance* (it is the extent to which the less powerful members of institutions and organizations within a country expect and accept that power is distributed unequally): Taiwan has a relatively high score of 58 (out of 100) on

this dimension, which indicates that it is a hierarchical society. This means that people accept a hierarchical order in which everybody has a place, and which needs no further justification. Hierarchy in an organization is seen as reflecting inherent inequalities, centralization is popular, subordinates expect to be told what to do and the ideal boss is a benevolent autocrat (Hofstede Insights, n.d.).

- Individualism (it demonstrates the degree of interdependence a society maintains among its members): It has to do with whether people's self-image is defined in terms of "I" or "We". Taiwan, with a score of 17, is a collectivistic society. This is manifest in a close, long-term commitment to the "member" group, be that a family, extended family, or extended relationships. Loyalty in a collectivist culture is paramount and overrides most other societal rules and regulations. Such a society fosters strong relationships, where everyone takes responsibility for fellow members of their group. In collectivistic societies, offence leads to shame and loss of face. Employer/employee relationships are perceived in moral terms (like a family link), hiring and promotion take account of the employee's in-group position, management is the management of groups (Hofstede Insights, n.d).
- *Masculinity* (the fundamental issue here is what motivates people, wanting to be the best, i.e., Masculine, or liking what you do, i.e., Feminine). Taiwan scores 45 on this dimension, a lower intermediate, and it is therefore considered a slightly Feminine society. In Feminine countries, the focus is on "working in order to live", managers strive for consensus, people value equality, solidarity, and quality in their working lives. Conflicts are resolved by compromise and negotiation. Incentives such as free time and flexibility are favored. Focus is on wellbeing, and status is not shown. An effective manager is a supportive one, and decision making is achieved through involvement (Hofstede Insights, n.d).
- Uncertainty Avoidance (it demonstrates the extent to which the members of a culture feel threatened by ambiguous or unknown situations and have created beliefs and institutions that try to avoid these): Taiwan scores 69 on this dimension and thus has a high preference for avoiding uncertainty. Countries exhibiting high Uncertainty Avoidance maintain rigid codes of belief and behavior and are intolerant of unorthodox behavior and ideas. In these cultures, there is an emotional need for rules (even if the rules never seem to work), time is money, people have an inner urge to be busy and work hard, precision and punctuality are the norms, innovation may be resisted, and security is an important element in individual motivation (Hofstede Insights, n.d).

- Long Term Orientation (how every society has to maintain some links with its own past while dealing with the challenges of the present and the future): Taiwan scores 93, making it a pragmatic, long-term orientation culture. Societies with this orientation show an ability to adapt traditions to a modern context, i.e., pragmatism, a strong propensity to save and invest, thriftiness, perseverance in achieving results and an overriding concern for respecting the demands of virtue. The countries of East Asia are typically found at the long-term end of this dimension and Taiwan is no exception (Hofstede Insights, n.d).
- *Indulgence* (it shows the extent to which people try to control their desires and impulses): Taiwan has a very intermediate score of 49, which does not indicate the dominant preference on this dimension (Hofstede Insights, n.d).

What becomes clear from this characterization—which is predominantly applied for business purposes—is, that modern Taiwan, whilst maintaining several elements of its historic cultural heritage (Confucianism), has also incorporated a number of values that are attributes of a democratic society.

However, in the author's view, the following two factors—that is education and female empowerment—had an even greater impact on the growth of economic performance in Taiwan.

2.2. Education's Importance

Taiwan's central educational authority is the Ministry of Education of the Republic of China. It is responsible for setting and maintaining education policies and managing public institutions of education throughout Taiwan. Compulsory education comprises: elementary education (6 years), junior high school (3 years), and—since 2014—senior secondary education (3 years), i.e., altogether 12 years.

Taiwanese students regularly achieve one of the world's best results in mathematics, science and literacy, as tested by the Program for International Student Assessment (PISA), a worldwide evaluation of 15-year-old school pupils' scholastic performance. Taiwan is one of the top-performing among the OECD countries in reading literacy, mathematics, and sciences with the average student scoring 523.7, compared with the OECD average of 493, placing it seventh in the world, and has one of the world's most highly educated labor forces among OECD countries (PISA results from 2018, 2018).

In Taiwan, adhering to Confucian values, parents believe that receiving a good education is of high priority and an important goal in their children's life. Many parents in Taiwan are convinced that effort and persistence matter more than innate ability if their children want to receive better grades in school. These beliefs are shared by teachers, guidance counselors, and schools as they regularly keep the parents abreast on their child's overall academic performance in school. Many parents have high expectations for their children, emphasize academic achievement and actively intervene in their children's academic progress by making sure that their children receive top grades, and would even make great sacrifices, including borrowing money, to put their children through university. On all levels of public education, supplementary cram schools (after-class private education) or *buxiban* are the norm. The cram school system is one of the remnants of Japanese colonial education. Another one is the practice of day-to-day cleaning of classrooms and school-facilities by the pupils.

Due to its role in promoting the country's economic development, Taiwan's education system, high test results, and high university entrance rate, has won worldwide recognition. The literacy rate, as of 2021, is 98.5 percent. Well over 5 million Taiwanese (2019) hold post-secondary degrees; an estimated 1.3 million have graduate degrees, up from 570,000 in 2005. Between 1984 and 2014, the total number of higher education institutions in Taiwan jumped from 105 to 159—a growth rate of 66 percent (Magaziner, 2016). Presently, the number of tertiary education institutions is 152 (Education, 2022).

Students in Taiwan are faced with immense pressure from their parents, teachers, peers, and society as a whole to succeed academically, thus securing prestigious white collar job positions, while eschewing vocational education, critical thinking, and creativity.

The language of instruction is Mandarin Chinese. Due to the multicultural heritage and multiethnic composure of the population, however, additional language classes in Taiwanese and Hakka Chinese, as native languages, are gaining popularity. Nevertheless, this fact does not overshadow the importance of the lingua franca of our age. For any individual or nation that attempts to remain advantageous in global competition, the command of the most important language for international communication, English is imperative. In order to enhance the English abilities of students in the Republic of China, the Ministry of Education (MOE) promulgated the policy of The Program on Bilingual Education for Students in College (BEST) in April 2021. It is intended to strengthen students'

English proficiency and promote an English-taught environment or courses. Mr. Pan Wen-Chung, Minister of Education, elaborated on this policy: "To carry out bilingual teaching, the MOE will assist schools in recruiting international teaching talents for co-teaching with domestic faculty and for setting up an Englishtaught system. In addition, more teaching assistants will be introduced, and scholarships will also be established for the construction of an English-taught environment" (BEST 2021, p. 2). "Cultivation of major domains" and "Popularized enhancement" are the two themes in the BEST program. First of all, as to the cultivation of major domains, the Ministry of Education will select the universities and colleges which are more developed with international competitiveness to be transformed into beacon bilingual schools and will select professional domains academies to be transformed into beacon bilingual colleges and serve as models for promoting bilingual education for domestic universities and colleges (BEST, 2021). A beacon school is a notably successful school whose methods and practices are brought to the attention of the education service as a whole in order that they may be adopted by other schools.

Concerning the "cultivation of major domains" for universities and colleges, the two goals set by the MOE to be achieved step by step are "25-20-20" by 2024, and "50-50-50" by 2030. The goal of "25-20-20" means that at least 25 percent of sophomores in 3 beacon universities and 18 colleges will reach effective operational proficiency and mastery above The Common European Framework of Reference for Languages (CEFR) B2 in listening, speaking, reading, and writing by 2024, and at the same time, at least 20 percent of the sophomores and first-year graduate students will take more than 20 percent of English-taught course credits for the year (BEST, 2021).

The goal of "50-50-50" means that at least 50 percent of sophomores in 6 beacon universities and 30 colleges will reach effective operational proficiency and mastery above CEFR B2 in listening, speaking, reading, and writing by 2030, and at the same time, at least 50 percent of the sophomores and graduate students will take more than 50 percent of English-taught course credits for the year. In addition, the graduation certificate with English-Medium-Instruction Courses (EMI) certification will be promoted in order to be in line with international trends and the business world. The realization of the goal to build ROC (Taiwan) as a bilingual nation by 2030 starts with the cultivation of college and university students with the ability to communicate in English (BEST, 2021, p. 3).

This ambitious goal reminds the author of the report of a Hungarian colleague, whose article gives an account of her impressions upon meeting Taiwanese athletes. She entitled her writing as "From illiteracy to bilingualism" (Bérces, 2004), thus appreciating the rapid growth of Taiwanese society in terms of education.

As pointed out by Jessica Magaziner (2016, p. 3), "over the last 30 years, Taiwan's higher education system has undergone rapid massification, transforming from an elite system to a universal one." This paradigm change explains not only the impressive economic achievements, but also serves as a prerequisite for tackling challenges of our global age, of digitalization—a telling example is the way how Taiwan combatted Covid-19. This will be discussed in chapter 3 of this writing.

2.3. Female Empowerment

The figures and data depicting the rate of female employment; political and economic empowerment of women; gender wage gap; the ratio of women in managerial positions—all reveal conditions that manifest the deprivileged status of women in several countries of the world. This happens in spite of the fact that, unlike in the past, nowadays, most women of the developed world are raised to get proper education, make a career and be able to support themselves. More women than men pursue higher education worldwide. In this day and age, women are more educated than men: today women earn more bachelor's degrees than men. In fact, the ratio of women in the labor force has been steadily growing in most countries of the developed world and has almost reached the level that of men. Therefore, it is no longer assumed that only men will be the "providers". Women—if they wish to do so—can often provide for themselves now. The result is a growing number of career women, a growing number of singles, or late marriages at the least, with obvious consequences like decreasing number of children per family, if any.

Taiwan—like many countries of the world—had to go a long way until gender equality issues have been put on the agenda of social narratives, of policy making and of legislation (Hidasi, 2016). The first wave of Taiwanese feminist movements started in the Japanese colonial era (Chen, 2012), and the second wave was the feminist activism that Nationalists' anti-communist political forces enhanced in Taiwan. However, some scholars consider the period that followed after the appearance of Annette Hsiu-lien Lu's *New Feminism* in 1974 as the first wave of Taiwan women's movement. Lu, who was Taiwan's foremost women's rights activist in the 1970s, advocated that the following four views from the Confucian

teachings were the root of the problem, i.e., women's low position and lack of self-confidence: "continue the family-line"; "three obediences and four virtues"; "men outside – women inside", and "one-sided chastity".

The emergence and evolvement of women's movements in Taiwan during the subsequent decades arose from the interplay of several impacting factors: liberalization (human rights), modernization, and democratization. In the meantime, the attitude and perception of gender issues have greatly improved, and with the growth of feminist consciousness, the need to tackle gender disparities has also appeared at the level of legislation and governance (Chang, 2022). The Ministry of Education established the Gender Equity Education Committee in 1997 for promoting substantive gender equality and equity. After the announcement of the Gender Equity Education Act on June 23, 2004, the Committee was renamed the Gender Equity Education Committee and a budget was drawn up for executing relevant projects every year, including developing the policies in gender equity education, promoting the ideals and supervising the practices of gender equity education, as well as designing the courses and teaching materials for it, evaluating the effectiveness in teaching, and subsidizing activities held by NGOs, along with popularizing gender equity education through media.

In December 2011, following numerous dialogues between the government and the civil society, the Committee on Women's Rights Promotion (now renamed as Gender Equality Committee) of Executive Yuan issued the Gender Equality Policy Guideline as a blueprint for building a more diversified, inclusive, and sustainable society in Taiwan. "The Gender at a Glance in R.O.C.(Taiwan) – Version 2021" (published by DGBAS, DG of Budget, Accounting and Statistics/ Executive Yuan) gives a comprehensive overview of the gender status quo in Taiwan in an international comparison. It uses the composite Gender Inequality Index (GII) —proposed by United Nations Development Program (UNDP) in 2010 (Gender Inequality Index, 2021). This methodology measures gender inequalities in 3 dimensions: reproductive health, empowerment, and labor market. The overall GII score for Taiwan in 2019 stood at 0.045. Since it measures inequalities, the closer the scores to zero, the better the performance. This is the sixth best rank in comparison to the 155 countries of the Human Development Report of 2019 (Human Development Report, 2019). It is remarkable that Taiwan scores much better than South Korea (0.062, 12th in the rank) or Japan (0.094, 25th in the rank).

Looking at Taiwan's achievements from the point of view of the *Gender Equality* ranking, it can be affirmed that Taiwan had the second highest gender equality ranking in the world already back in 2012. In 2020, 41.6 percent of the parliamentary seats were held by women in Taiwan. Cross-national studies in terms of women's share of parliamentary seats have shown that proportional representation (PR) has been identified to have strong and significant effects on women's parliamentary representation as opposed to the single-member district system (SMD). Gender quotas have been used as a highly effective way of increasing the number of women in public office—both candidate quotas and reserved seats. Taiwan's electoral system (partly proportional representation system) and the constitution's mandate for reserving seats for women (25 percent since 1999) in the Legislative Yuan are assumed to have contributed to the high participation rate of women in politics. However, it is widely argued in scholarly literature: what does "representation" in fact mean? Is it "descriptive representation" or "substantive representation"? Statistical figures do not reflect the differences: descriptive representation means "standing for", while substantive representation means "acting for" (Pitkin, 1967). To represent women substantively, it is not enough to be in an elected position of power, one also has to get engaged in enhancing women's interests and enacting policies that would improve women's status.

The overall increase in women's economic status and visibility in Taiwan are likely to have contributed to women's political power: women accounted for 37.5 percent of county magistrates or mayors, and 35.8 percent of municipal counselors in 2018.

Since May 2016, Taiwan has had a female president, Tsai Ing-wen (Pletcher, 2021). As the seventh president of the Republic of China, she is the first woman elected to the office, and also the first president to be of aboriginal (Hakka) descent. She was one of nine children born to a wealthy business family—but without political dynasty background. She received a degree in law (1978) from the National Taiwan University in Taipei, then attended the Cornell University in Ithaca, New York, and the London School of Economics, earning, a master's (1980) and a doctorate (1984) degree in law, respectively. Mme Tsai then returned to Taiwan, where, until 2000, she taught law at universities in Taipei. As a member of the Democratic Progressive Party (DPP), she has served as Chair of the DPP since 2020, and previously, from 2008 to 2012, and 2014 to 2018. Her strong commitment to Taiwan's independence and sovereignty resonates well with many Taiwanese voters. Mme Tsai was included in Time Magazine's 100 Most Influential People of 2020 (Time Magazine, 2020). Considering the issue of tendencies, it becomes clear that the

increase of women's share in managerial positions has accelerated considerably in Taiwan, which might be partly attributable to demographic changes. An increasing number of families are left but with a single female heir: hence their fortune or business will be taken over by a female successor, and unlike in Japan, where the unique adoption system (either for passing on the family name; or for passing on business or inheritance) creates "artificial", but legal male heirs, the entrepreneurial spirit and skills of Taiwanese women have been traditionally outstanding.

Despite Taiwan's relatively late expansion of higher education, the percentage of high school graduates entering university has exceeded 95 percent since 2008. Women's educational attainment ("population with at least some secondary education" in 2019 stands at 82.4 percent for women; in 2019, women accounted for 48 percent of tertiary education students in Taiwan) is on the rise (Education, 2022.

For small enterprises, which make up the majority of businesses in Taiwan (in 2011, 49 percent of Taiwanese workers were employed by firms with less than 30 employees), it is more beneficial to keep women in the workplace after marriage and childbearing than bear the costs of job turnover. Therefore, companies (particularly SMEs) have been traditionally more willing to accommodate family obligations and needs of their employees with children by facilitating work-family compatibility. The increase in married women's employment has ultimately led to a large percentage of dual-income families—particularly among the well-educated, the white-collar workers. In 1990, the Taiwanese government removed the tax penalty for dual-earner families. As a contrast, in Japan for instance, the tax penalty on double income is still in place, which prevents many women from taking jobs or at least from taking full-time jobs. The increasing tendency of Taiwanese women to continue their jobs after marriage and childbearing is an important driving force for closing the gender gap in the workplace. Female hourly wages have been increasing since the early 1990s, reaching 86 percent of male wages in 2019, which results in a 15.5 percent pay-gap calculated on the OECD's definition. The gap is much bigger in Japan (26.6 percent) and in South Korea (36.6 percent). Like many countries in the world, Taiwan has undergone a steady increase in women's participation in the labor force during the past several decades. Whereas 38 percent of women over 15 were in the labor force in early 1978, by 2020, this rate rose to 51 percent. Although women in their 30s were also less likely to participate in the workplace than those 25-29 years old, the rate of female employment between ages 25-40 in Taiwan was markedly higher than those in Japan or Korea. Older women, at the same time, had lower levels of labor force participation in Taiwan than in Japan and Korea. The role of women in

many parts of the world remains bound by traditional views, but more and more women come to power in the economic, academic, or political arena. Women can contribute to the economy as much as men in today's knowledge-based era. Therefore, it is in the best interest of a country to adopt a new mindset with regard to gender roles, so as to make full use of the ability and talent of both sexes to create a better, sustainable society. Taiwan has taken significant steps on this route.

The question arises as to why is Taiwan performing best in terms of gender equality in the East-Asian region? One might assume that countries of East Asia sharing a similar ethical and philosophical background (Confucianism) might have similar gender equality scores. However, statistical data and reports confirm, that notwithstanding the common ethics denominator—Confucianism—there are considerable disparities in gender issues among Taiwan, Japan, and South Korea, taking only these three countries of East Asia for the purpose of comparison. Statistical data and resources prove that Taiwan stands way ahead in terms of gender equality in the region. Therefore, in spite of the long-lasting impact of Confucianism in these countries, the status of gender equality shows different outcomes and levels of development in the first decades of the 21st century:

- a) Taiwan is more international than its Asian neighbor countries. International in the sense of multiculturalism, not only because of indigenous communities and minorities, but also because of the relatively great number of mixed marriages, and the influx of workers from countries of East Asia. And most importantly, international in the sense of the mindset of its people: proportionally, there is a great number of intellectuals with a highly and internationally educated academic background. Many of them studied abroad, lived abroad, worked abroad, and their openness to the world and societal issues must have greatly contributed to the acceptance of diversity, to the appreciation of diverse values and to the respect of diverse mentalities. Taiwan's international mindset can be compared only to that of Singapore's in Asia.
- b) In Taiwan, women's liberation and gender equality evolved hand-in-hand with political liberation from autocracy to democracy and human rights movements. These movements exerted a cross-fertilizing influence on one another, and hence, proved to be very powerful. It was well understood that "advocacy alone is not enough, that power is needed to make a difference, and political will, financial resources and action are indispensable to accomplishing desirable objectives" (Lu, 2012, p. 6). In other countries of East Asia, these processes were happening more or less independently and therefore the synergy that could have resulted from their working intertwining each other could not

- be attained to that extent as it did in Taiwan. We can see in Taiwan that the process of gender equality evolvement is embedded in other important social processes, and therefore it has become an irrefragable part of them.
- c) In Taiwan, the idea of gender equality is conceived, and its implementation is happening not as an isolated concept, but as an integral part of several modernization accomplishments: legislation endorsed Gender Equality in Employment Law (2002, amended in 2007); the Gender Equality Education Act of 2004; the Sexual Assault Prevention Act of 1997; the Domestic Violence Prevention Act of 1998; the Sexual Harassment Prevention Act etc. Organizations and agencies—inter-agency Committee of Women Rights Promotion (CWRP) in 1997; The Foundation for Women's Rights Promotion and Development (FWRPD) in 1998; the Committee for the Equal Rights and Advancement of Women; the Gender Equality Committee (GEC) in 2012 etc. —have been working and acting in a cooperative manner to promote the rights and wellbeing of women. Presently, the DGE (Department of Gender Equality/Executive Yuan) coordinates gender equality policies across various government bodies. In a sense, in Taiwan, law is ahead of collective thinking!
- d) In Taiwan, gender equality is part of the curriculum, however, it is not something young people have to learn about and become aware of after growing up, but they grow up in fact with this notion. The Ministry of Education initiated the Gender Equity Education Committee in 1997. Since the implementation of the law (Gender Equality Education Act) in 2004, it underwent amendments on some 18 occasions, which only proves that experts keep their eyes on the changes in society, on the changing needs, and make efforts to include these evolvements into the law. Accordingly, the concept of gender equality, as part of the education content, is not a static law that stayed intact ever since its formulation, but it is an ever-improving construct, undergoing amendments, necessary improvements, and reforming. This assures that it does not get outdated, but rather renewed and accommodated to emerging changes.

According to the author's observation, the above four factors are the main drivers behind the undeniable accomplishments of gender equality in Taiwan. These results definitely set Taiwan apart from other countries in the region, which—for several particular reasons—are far behind in terms of gender equality. As international research emphasizes (Matsui, 2014), female empowerment ultimately leads to a better utilization of manpower and of intellectual potentials which can contribute to the improvement of economic achievements.

3. Global Challenges, Local Solutions for Sustainability – Lessons from Controlling the Covid-19 Pandemic

Taiwan's response to the Covid-19 pandemic has been among the world's best. It has reported a total of 16,056 confirmed cases of the disease and only 837 deaths until September 2021 (COVID world statistics, 2021). Taiwan was among the first countries in the world to detect and respond to the virus, thanks to crowd-sourced, collective intelligence through online bulletin boards. A "humor over rumor" strategy has also been very successful to combat misinformation, fake news, and disinformation. Taiwan is engineering memes to spread public awareness of positive behavior through the virality of social media algorithms. Citizens learned to interact with live maps, distributed ledger technology and chat bots to find the nearest pharmacy to claim free masks. Taiwan's experience in controlling the virus and curbing the impact of Covid-19 on its economy proved to be successful, particularly in comparison with other nations not only in the East Asian region, but worldwide (Sachs, 2020).

The factors that contributed to Taiwan's early success in fighting Covid-19 can be summarized as follows:

- the early establishment of a command center: timely government reaction to set up a centralized command center helped to prevent the virus from spreading in the initial stages;
- the "precision-prevention" model of strategies that included tight border control and strict quarantine policy: an affordable and high-coverage national health insurance system (99 percent of the population is covered) also played a crucial role in tightly tracing cases;
- as an island, Taiwan has a geographic advantage. Without land borders with other countries, it was relatively easier for Taiwan to enforce border control;
- the procuring of sufficient anti-pandemic medical supplies: the Taiwan government's intervention to secure relevant medical supplies also contributed toward ensuring public confidence and also prevented the medical system from being overloaded;
- information that was provided regularly and transparently by the government also eased public uncertainty caused by the Covid-19.
- educating residents regularly and continuously about public health awareness (e.g., promoting face mask wearing in public, maintaining proper social distance, and handwashing procedures). Its previous SARS experience made the

Taiwanese populace a highly alerted society that was willing to cooperate in practicing hygienic habits;

- the country's medical facilities and a national health insurance program that were already in place could be instantly mobilized and utilized;
- it was also quickly understood that medical supplies are essential, strategic
 products are as important as national defense equipment. It is better for countries to manufacture medical supplies themselves rather than rely on supply
 chains from abroad;
- the use of technology and big data—that Taiwan is highly advanced in—for
 contact tracing and isolation of those potentially exposed to the virus was crucial to Taiwan's successful efforts to prevent the spread of Covid-19 at the early
 stage. Taiwan applied its artificial intelligence and big data technology not only
 to detect and track cases, but also to enforce and monitor the home quarantine
 process.

Taiwan's success story may open up opportunities for the country to assume a leading role as a facilitator in the reallocation of the global supply chain, to ensure sustainability not only of manufacturing, but also of the society and the creation of a new worldwide health coalition that includes Taiwan. Due to the close economic and geographic ties between Taiwan and China, the relatively low figures of infections were impressive, which has gained Taiwan widespread acknowledgment and respect from all countries. Taiwan's earlier detection and aggressive responses tended to be better than those in other countries. The government's prudent and immediate response is characterized by the term "advanced deployment" (*chāoqián bù shǔ*). Taiwan is one of the few places in the world that allowed its citizens to have a near-normal life during the pandemic—for instance, citizens went to work and attended school (Kuo, 2021).

Government statistics indicate that more than 1 million Taiwanese live or work in China and travelers between Taiwan and China numbered about 10 million annually during the 2016-2018 period. There were thousands of regular cross-strait flights every week before the outbreak. On January 26, 2020, five days after its first confirmed case, Taiwan rapidly acted to ban all arrivals from Wuhan. It also substantially reduced the existing 50 flight routes between China and Taiwan and limited them only to five airports, permitting only Taiwanese nationals to enter the country. Being one of China's close neighbors with inseparable economic ties, Taiwan's situation looked dim and pessimistic when the first wave of Covid-19 infections started from China in January 2020. China and Hong Kong account for nearly 40 percent of Taiwan's exports and over one-fifth of Taiwan's imports. China

is also Taiwan's main overseas manufacturing production site. As the virus spread globally, the Taiwan government responded quickly with simultaneous plans of disease prevention, industrial relief, and economic stimulus packages (Kuo, 2021).

The pandemic, which has made many countries aware of their growing economic dependence on China for goods in several critical sectors, has led to calls to delink global supply chains of major industries from China. Taiwan's successful handling of the pandemic makes the country an attractive and relatively safe place for manufacturing. This may win more long-term contracts from both returning Taiwanese and foreign businesses. International companies have been searching for supply chain providers outside China since the 2019 US-China trade war. If the pandemic continues while Taiwan maintains its good epidemiological performance, it can have opportunities to gain a more important role in the future realignment of the global supply chain in industries such as 5G, artificial intelligence, big data, printed circuit assembly supply chains, and the semiconductor subsector (Kuo, 2021).

Taiwan's culture of civic participation follows the model of open-source software communities. This means working from the bottom up, sharing information, improving on the work of others, mutual benefit, and participatory collective action. Other countries might like to pick up both lessons and digital solutions from Taiwan's innovations. Taiwan with its experience and innovation potential could creatively contribute to the challenges of sustainability and the solution of global issues of our age.

4. Summary

Taiwan's economic performance and achievements can be attributed to the synergy of contributing factors, several of which are cultural and societal in nature. Investment in and modernization of education and growing female empowerment stand out of these. Taiwan is more international than its Asian neighbor countries. International in the sense of multiculturalism, not only because of indigenous communities and minorities, but also because of the relatively great number of mixed marriages, and the influx of workers from countries of East Asia. And most importantly, international in the sense of the mindset of its people. In Taiwan, women's liberation and gender equality evolved hand-in-hand with political liberation from autocracy to democracy, and human rights movements. These movements exerted a cross-fertilizing influence on one another and hence proved to be very powerful.

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