

The Unsuccessful Transformation of Taiwan's Economy: Democratization and Economic Development

Wan-wen Chu
Research Center for Humanities and Social Sciences (RCHSS)
Academia Sinica
Taipei, Taiwan
wwchu@sinica.edu.tw

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Abstract

Taiwan's economic development in the early post-war period was remarkable, and the democratic transformation over the past 30 years is also considered a major achievement. However, nowadays, Taiwan's economy is clearly in a difficult situation, with sluggish investment, stagnant wages, unbalanced industrial growth, and lack of prospects. This paper explores the causes of the predicament and the impact of democratic transformation on economic development. The developmental state model that Taiwan relied on for its early postwar growth included the rulers' will to develop, the ability and autonomy of the economic bureaucrats, and the prioritization of overall development. However, this model failed to transform successfully during the democratic transition: first, the policy goals failed to balance development and other considerations; second, the policies turned populist and short-termism; third, the dominant ideology changed to neo-liberalism and denied the priority of development; fourth, the emphasis on building a new nation in Taiwan conflicted with the economic reality, resulting in a lack of forward-looking development strategies. South Korea has also undergone a transformation, but the difference is that it still has a unified national identity and a consensus to pursue overall economic development, which has led to better development results after the transformation. Therefore, cross-strait relation presents the most critical challenge. It is crucial to find sensible ways to respond to it, so as to re-establish a realistic and forward-looking economic vision.

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Introduction

It has been widely recognized that Taiwan's postwar economic performance has been outstanding, along with that of other East Asian countries (see Table 1). Subsequently, Taiwan has undergone democratization effectively and peacefully since the 1980s. The shine on these "twin economic and political miracles," however, has faded significantly due to problems in transforming the original development model from the 1990s.

According to International Monetary Fund (IMF) estimates, Taiwan's per capita GDP based on purchasing power parity in current international dollars was \$9,854 in 1990 and \$55,078 in 2019, a very respectable 5.6-fold increase. Current IMF estimates rank Taiwan the 17th in terms of global rankings of real per capita GDP in 2019, even ahead of some advanced countries like the United Kingdom and France. However, Taiwan's nominal per capita GDP was only \$25,893 in current U.S. dollars in 2019. This probably reflects the fact that Taiwan still relies upon its export-promoting growth model, which includes an undervalued exchange rate along with a stable price level.

The pace of overall economic growth has slowed in the new century. The average annual growth rate in the first three postwar decades was around 9 %, but it dropped to

3.5 % during 2001-2017 (Table 1). The slowing pace of economic growth starting in the 1990s is understandable, because Taiwan has become a mature industrialized economy. There is, however, clearly a lack of direction in terms of future development. The rapidly increasing degree of integration with the Chinese economy has posed not only political challenges, but also an economic policy conundrum, that is, how to reconcile political and economic goals. This “China factor” and the associated political uncertainty about Taiwan’s future create great anxiety and dominate other issues, such as economic uncertainty and worsening income distribution.

A comparison of the growth record of the four East Asian tigers (EA4 in short) from 1990 to 2017 shows that Taiwan ranks at the bottom. That is, Taiwan’s economic performance lags behind other tigers, especially in the 21st century (see Table 2). Before the 1990s, each of the EA4 had been growing at nearly 10% annually on average, and their growth slowed significantly afterward, especially after entering the new century. It is believed that many overall factors contributed to the slowdown, such as intensified global competition, the maturing economic structure, and an aging population. Though all of the EA4 had to adapt to the challenges, their performance obviously differed. Among them, Singapore has had the best performance. South Korea’s record has been more volatile, but it managed to catch up and overtake Taiwan. Hong Kong’s case will not be included in the comparison here, because of its special circumstances.

Furthermore, judging from “growth dynamics”, Taiwan also clearly lags behind. From 2000 onward, Taiwan’s investment has barely grown. Its ratio of investment to GDP was only 21% in 2018, while that of Singapore and South Korea reached 27% and 30% respectively

(Table 1). It is well known that these three economies had relied upon their developmental states to lead their extraordinary economic growth in the early postwar period. However, unlike Taiwan, the original developmental state continued to function in the latter two countries, as evidenced in their apparent developmental and forward-looking predisposition in economic policies. On the other hand, Taiwan's economic policies no longer manifested developmental and forward-looking inclination.

In short, regarding the transformation of the developmental state, Taiwan went on a path different from those of Singapore and South Korea. Judging from the growth record and other indicators, it is argued here that Taiwan's transformation has been less than successful. This chapter will investigate why and how. In particular, this essay will examine how the process of democratization has affected the transformation of Taiwan's economy.¹ The focus will be on the government policy, especially industrial policy, because it is believed that the role of the state in promoting economic development is always crucial. The following discussion will hence center upon how the model of policy making has changed, from that of the original developmental state to the current model, and how political transformation has affected the making of economic policy.

Pressure to Transform the Development Model

As stated above, the original development model in Taiwan's early postwar period had been one guided by a developmental state. Industrial policy had been crucial in promoting new industries at each stage of development. Targeted industries mainly included

¹ This chapter draws much from Chu (2017, 2020).

textiles in the 1950s, petrochemicals and steel in the 1960-1970s, and high-tech starting from the 1970s. The government switched from import substitution to export promotion around 1960, and began to subsidize exports while protecting the domestic market. The success of this model, however, created conditions which made it necessary to change the model subsequently.

Starting from the 1980s, Taiwan faced tremendous pressure to change its development model. Internal economic forces, including a ballooning accumulated trade surplus and the resultant booms in the asset markets, necessitated great changes in the successful early postwar growth model. In a way, the success of the postwar export-promotion regime brought about its own demise. Besides, at that time, the US began to exert strong pressure on the EA4 to liberalize the economy. After the Plaza Accords in 1985, the East Asian tigers were forced to open their economies.

Therefore, in the late 1980s onward, Taiwan began a simultaneous great transformation in the economic, political, and social spheres. External economic liberalization began in earnest in 1986 due to US pressure. The government lessened foreign exchange controls and began to reduce tariff rates, remove non-tariff trade barriers, and phase out the tariff rebate program. The liberalization of domestic markets went in tandem with the pace of democratization. After the lifting of martial law in mid-1987, the government began to open up (to both foreign and local firms) various restricted domestic markets, in which the number of operating licenses had been limited and more or less remained frozen since the early postwar period. Significantly, at the same time, the government began to improve the Cross-Strait relationship by allowing citizens to visit

relatives on the mainland for the first time. Privatization of state-owned enterprises began two years later. Thus, democratization, liberalization, and globalization went hand in hand within a short period of time.

Democratization and the difficulties of transforming the development model

It was not an easy task to change the original model in which development had priority. Once there emerged societal pressure that made development no longer come first in policy priority, the difficult question was how to prioritize various competing claims. Economic policy then needed to take into account other policy concerns, such as environmental protection, labor rights, women rights, etc. Democratization allowed room for social movements. These non-growth considerations are outside the usual realm of economic affairs. Democratization helped to bring out the various voices, but it would not automatically create effective mechanism to coordinate the conflicting claims. Reconciling conflicting claims demands political leadership and coordination among different government agencies. That may be a tall order especially for a new democracy.

Before examining how the economic policy model actually transformed, this section will briefly describe the process of political change and hence its possible impact on the economic policy sphere.

The Nationalist Party (KMT) has always professed to represent all segments of the society, not any particular class. When promoting economic development in the early

postwar period, it tried to separate the growth-oriented industrial policy from the patronage type of distributional policy. This distinction also helped to maintain the relative autonomy and hence the quality of the industrial policy. The economic bureaucracy was responsible for promoting industrial development. It was accomplished mainly through exports expansion, of which the success was determined by international competitiveness. On the other hand, the domestic market enjoyed protection and often involved internal politics. For example, the zoning of industrial districts often was influenced by local interests and led to inefficient land use; entry into the cement, finance and transportation industries was restricted, and the allocation of licenses involved political considerations; elected representatives often got involved in the state-owned enterprises' (SOEs) purchases. Globalization, economic liberalization, and democratization brought changes to these arrangements. Partisan politics began to challenge the autonomy of the economic bureaucracy, and to blur the division between the export-oriented and domestic-oriented spheres in terms of industrial policy and resource allocation.

In general, from the 1980s on, many latecomers began to transform their political systems, a phenomenon called "the third wave" of democratization by Huntington (1991). The way the transformation took place might differ, but it all entailed challenging or replacing the old authoritarian rule, and using Western liberal democracy as the ideal model. However, starting from the new century, the tide has shifted and there have been many reversals among the "third wave" countries.

A new and dominant discourse emerged from the democratization process in Taiwan beginning in the 1990s. It essentially argues that the KMT rule in the postwar period is

authoritarian and lacks legitimacy, and should be subject to reform. The objective of “reform” is to rid the authoritarian rule of any legitimacy, but it is not clear what exactly “reform” entails in concrete terms. Nonetheless, “reform” has become the undisputable social ideal, commanding moral high ground, especially for the younger generation. The past KMT rule is considered outdated, conservative and illegitimate.

This discourse mainly is a nativist one, and considers the KMT government a foreign or occupying power. It argues that the KMT played no role in promoting Taiwan’s postwar development. The latter was caused by other factors, such as the Japanese colonial legacy, the US aid and the people’s effort, that is, anything but the KMT rule. Recently, as the tension of Cross-Strait relations rises, the role of Japanese legacy began to be stressed ever more in order to de-emphasize the China factor. In sum, because the KMT government should not get any credit for Taiwan’s economic growth, neither should the role of the developmental state and industrial policy. Therefore, the discourse allows room for neoliberalism as the new guiding principle instead.

South Korea has followed a route similar to Taiwan’s in postwar development, including democratization. Their democratization movement, however, had a broader societal base. In challenging authoritarian rule, they relied upon ideals of social democracy rather than liberal democracy. This makes the Korea’s democratization discourse more balanced than that of Taiwan. Taiwan’s democratization discourse has relied mainly upon liberal democracy, neoliberalism and nativism.

In the early 1990s, some economists proposed a term, “party-state capitalism”, to characterize the KMT’s economic rule, stressing its “monopolistic” traits.² This term successfully caught on and helped to challenge the authoritarian rule, and it also brought in free-market neoliberalism as a major part of the democratization discourse.³

Gradually, the democratization movement became more of nation building, building up the new Taiwan state. As shown in Chu (2017), in the early postwar period, the KMT’s Chinese nationalism provided motivation for it to proactively promote industrialization and modernization in Taiwan. However, in this newly formed Taiwanese nationalism, the political objective of state building was distinct, and it lacked clearly defined economic objectives. After all, Taiwan successfully industrialized under KMT rule. Anti-development sentiment became more pronounced in this new discourse. This was especially pertinent when the to-be-built Taiwan nation had to face the Cross-Strait relations. To be independent politically implies independence from Mainland China, but, at the same time, economic integration has increasingly deepened ever since the two sides began to interact in the late 1980s. It has been difficult to reconcile the political objective with the economic realities. Therefore, the new democratization discourse cannot produce a coherent economic blueprint for future development. It certainly has presented a major obstacle in the transformation of the development model.

In the early postwar period, the KMT’s policy of putting development first was successfully practiced by its bureaucracy and supported by the society. And this

² See Chen et al. (1991). For a review of this work, see Chu (1995, 2004).

³ See Chu (2017: Ch.7), for a discussion of the rise of local businesses during the early postwar period in Taiwan.

“development” more or less represented society’s overall interests, because the fruits of growth were widely shared. Moreover, after democratization, election politics have often entailed competition among different interest groups. Partisan politics have gradually begun to affect economic policy making. As a result, it is not certain who will represent the society’s long-term interests, and whether the latter will enter into policy considerations.⁴

The transformation of Taiwan’s development model started in the late 1980s, when the government implemented economic liberalization. Besides external factors like globalization, political changes arguably have had the greatest impact on the transformation of the development model.

In short, the economic bureaucracy used to take development as its institutional mission before transformation began. However, due to intensified election politics, politicians did not always follow the growth-first objective. Partisan politics, along with the new dominant ideology, neoliberalism, often gradually affected the working of the economic bureaucracy.

In the past, the successful East Asian developmental state had several key components: the leaders had strong political will to promote development; there was social consensus supporting the development policy; and the economic bureaucracy, with embedded autonomy, was capable and highly motivated.⁵ All these components have undergone substantial changes starting from the 1990s, as will be discussed below.

⁴ Chu (2017: Ch.8) discusses the growth of the cotton textile industry in Taiwan, to illustrate the pattern of industrial policy in the early postwar era.

⁵ See Johnson (1982) and Evans (1995).

After political transformation began, this original development model faced challenges from the following areas. 1) There emerged social movements advocating various causes, such as environmental protection, and labor and women's rights, among others, demanding that development should no longer enjoy priority in policy. Though it is necessary to broaden the scope of policy objective to accommodate these other concerns, it is not easy to reconcile different claims. It is simply not easy for the society to reach consensus on these issues. 2) Election and partisan politics have eroded the consensus of promoting overall long-term development. The industrial policy often failed to maintain its goal of furthering overall growth rather than particular vested interests. 3) The influences of neoliberalism grew stronger and became the new guiding principle, and the society began to harbor anti-development sentiment. 4) Cross-Strait relations present challenges. Economic integration continues to progress despite political forces pushing to go the other way.

These four factors will be discussed in turn in the following sections.

Failure to Broaden the Scope of Industrial Policy

In Taiwan's early postwar period, social concerns were severely suppressed. The authoritarian state ruthlessly eliminated the left, and suppressed political opposition as well as labor and student unrest. Within this environment, it was relatively easy to put development first in terms of the priority policy goals. As discussed above, however, in the 1980s, the success of development brought about strong pressures for changes to the model.

When martial law was lifted in 1987, the flood gates were opened. Various kinds of social movements flourished, including labor, student, women's, and environmental movements, among others. These presented new challenges to the policymakers and affected the economic policy process.

In the past, the economic bureaucracy had been in charge of promoting development, and the political leaders had ensured that development demands received priority. At that time, with a relatively low level of income, there was a social consensus in support of development. Then when the social movements emerged, however, their demands were outside of the usual economic sphere, and presented difficulties for the economic bureaucracy. Coordination by higher offices was necessary to reconcile different demands within the various responsible ministries. Nonetheless, the democratization process introduced a new type of political competition, and improving economic policy was not the focus of that competition. The new generation of political leaders did not necessarily have a strong motivation to attend to the difficult task of policy coordination, but that input was essential to reconcile the different demands, to broaden the scope of industrial policy, and to address the challenges in the new policy environment.

In reality, it turned out to be a painfully long and difficult process to reconcile the various social demands with economic development policies. This has been an ongoing process since democratization began in the late 1980s. The economic bureaucracy was passive in responding to social demands, and the political leaders often failed to provide leadership due to the new rule of political competition. During the democratization process in Taiwan, political competition focused on political issues, such as ethnic identity and issues

of nativism. Although this competition helped to bring about democracy peacefully, confrontation on identity issues inevitably made the political process rather partisan and divisive. This development was not helpful in terms of fostering rational debate on policy issues or forming consensus on policy options. Thus, transformation of the original developmental model has not been easy.

Lacking Consensus to Pursue Overall Growth

In the early postwar period, the success of industrial policy in the East Asian countries was dependent on the fact that the policy goal was to pursue overall growth rather than to foster advancement of particular vested interests. The requirements for promoting new industries had priority over those for protecting existing industries. This was easier to accomplish under an authoritarian regime which, for historical reasons, was determined to promote development.

After democratization in Taiwan, have the political leaders demonstrated the same kind of resolve to put development first? The answer arguably is no. The strong political will of the earlier generation to promote development was due to its historical legacy and experiences, and could not and need not be duplicated. Development still is of great concern, but it is no longer accepted as the undisputed priority goal.

There is no doubt that at this stage of development in Taiwan, the previous “development first” policy orientation needs to be modified. What should take its place? During the democratization process, has there emerged a new social consensus in terms of

forming a vision for future development? The answer is mixed.

The democratization movement successfully established a new social discourse, which argued against the KMT's authoritarian rule mainly on "ethnic" grounds, in addition to the usual issues of liberty and democracy. To deny the KMT's achievements in economic development, the discourse downplays the role of industrial policy, emphasizes the downside of development, and is essentially anti-development. It also advocates political autonomy from China. In the meantime, the influence of developmentalism is still strong. Thus, the picture for the future remains complicated.

The economic bureaucracy has a legacy from the developmental state period, and hence its institutional mission remains the promotion of development. However, as political leaders often put political considerations ahead of development concerns, the former model gradually eroded. Two main factors enter into the political considerations. One is the new social discourse, which is anti-China and anti-development. The other relates to pressures from intensified electoral competition.

Industrial policy: Short-termism, failure and absence

Pressures from short-term electoral competition tend to force politicians to seek quick-fix types of policy measures which often resemble mere slogans, and to utilize public resources for partisan purposes. The short-term nature of the political competition, of course, does not help to form a social consensus to forge a forward-looking vision for future development. In the past, while the development consensus still prevailed, GDP and investment growth rates used to be performance indicators of the economic bureaucracy.

After the pace of electoral competition sped up, officials held office for shorter periods, leading to unstable policy. Every new Minister of Economic Affairs would bring out new policy for promoting growth, and the quality and feasibility of the “new” policy inevitably became suspect.

Let us take the average tenure of the Minister of Economic Affairs for example. In the 1950s, the average tenure was only 1.5 years because the Ministry was under reorganization after the move from the Mainland. The period between 1958 and 1984 was the time when Taiwan’s postwar economic development took off in earnest. There were only such six ministers in this period, in turn Yang Ji-zeng (tenure 6.8 years), Li Kuo-ting (4.4 years), Tao Sheng-yang (who passed away after 3 months in office), Sun Yun-hsuan (9 years), Chang kuang-shih (3.5 years), and Chao Yao-tong (2.5 years). Excluding Tao, their average tenure was 5.3 years. During the transformation period, 1984-2000, the average was around 2-3 years. In the new century, during the first 8 years of DPP rule, the average dropped to 1.3 years. After the KMT returned to power, the average was also merely 1.4 years during 2008 to 2016. After 2016, the first Economic Minister lasted 1.2 years. That shows that the mode of political competition has changed, and short-termism is now bipartisan.

This kind of short-term policy making mode certainly does not help the government to solve long-term problems and draft forward-looking industrial policies. In addition, after democratization, local factional forces entered politics at the central level and competed for resource allocation. The relative autonomy of industrial policy, as shown in the original development model, began to be affected by domestic politics. Regional policies also began to be influenced by political considerations for the sake of winning elections.

As mentioned above, Taiwan had managed to continually upgrade its industries, because its industrial policies had been effective and had adapted to the changing environment in the first four postwar decades. That is, the government actively and successfully promoted new industries when entering a new stage of development. By the late 1980s, the government had effectively helped to establish a high-tech industry. The public research institute, ITRI, was the main agency in facilitating technology transfer and promoting import substitution of key components. However, after the late 1980s, the government gradually discontinued the practice of promoting major new industries. The government set up TSMC, the world's first dedicated semiconductor foundry, in 1987. TSMC actually grew out of a public semiconductor project and was a spin-off from the ITRI. It is the last and the most successful product of the industrial policy.⁶ After that, in the high-tech area, the government's major promotion efforts were less successful, like the Vanguard International Semiconductor Corporation (VIS) project in 1994, or even failed, as shown below.

After the new century, since 2002, the DPP government invested enormous resources in the so-called “two trillion double star project” to promote mainly DRAM, WiMax and the flat panel industries. All these attempts failed in the end, however. After the KMT returned to power in 2008, there were no longer big plans to promote major new industries. In contrast, although South Korea has also been undergoing political transformation, it can still continue to effectively execute industrial policies. For exactly the same DRAM and flat panel industries, Korean firms have not only been successful, but also become global leaders.⁷ South Korea's success is in stark contrast to Taiwan's failure in the same fields. This part will be discussed later in the chapter.

⁶ Amsden and Chu (2003), and Chen (2019).

⁷ Thurbon (2016, 2017) and Lee (2014).

Lack of new leading industries, sluggish investment, weak industrial upgrading, and excess funds

The effect of the fact that Taiwan lacks new leading industries from the start of the new century becomes ever more apparent as time passes. On the one hand, it is shown in the rising proportion of high-tech in total manufacturing value-added, which reached 54% in 2017 (see Figure 1). On the other hand, in 2001-2017, the average growth rate of investment (gross fixed capital formation) was only 0.7%. The comparable rate was 14% from 1950 to 1980, and 8% from 1980 to 2000.

We usually use gross fixed capital formation to represent the amount of investment. We can further divide it into two parts, depreciation (fixed capital consumption) and net fixed capital formation. The latter item of course is of more significance for understanding future growth. However, because depreciation has to be an estimated amount, calculated by the government statistical office, it can be controversial, so the gross amount is generally used to represent the investment figure.

The trend in the changes in the “net fixed capital formation” is alarming though. After 1990, this net investment amount reached a peak of NT\$1.86 trillion in 1998, and started to decline, falling to half of that amount, NT\$0.95 trillion, in 2018. As shown in Table 3, the ratio of net fixed capital formation to GDP clearly exhibits a downward trend, which averaged 22% in the 1970s and fell to 7.2% in 2001-2017. Actually, it has dropped to an alarmingly low 4.9% in 2017. Furthermore, if we distinguish between government and business net investment, it can be seen that in the 1990s, the net government investment

still accounted for about 30% of the total net investment, but this ratio has continued to decline and reached only 8.2% in 2017.⁸ In other words, since the new century, the business net investment has stagnated, and the government has lacked the ability and will to use public sector investment to make up the slack.

In short, if using the gross investment figure, Taiwan's investment has near zero growth since the new century. If looking at the net investment figure, Taiwan's net investment has dropped to half of its peak level, which was reached in the 1990s. The decline was partly caused by the decrease in high-tech industry's net investment. Future economic growth and industrial upgrading must rely on today's investment. The warnings contained in these investment data are self-evident.

After the US launched a trade war against China in July 2018, some Taiwan businessmen moved some of their production lines back to Taiwan, to avoid an increase in tariffs on exports from China to the US. The reverse flow of production lines will certainly increase local investment, GDP and employment. Its extent remains to be seen. However, mere relocation of existing production lines will not help to promote industrial upgrading.

Since the beginning of the new century, the propensity to invest has been low. On the other hand, Taiwan's supply of funds has been extremely abundant. Therefore, the total deposits of local banks have exceeded the amount of loans. The difference between deposits and loans reached NT\$5 trillion in 2011, and rose to NT\$8.2 trillion in 2018. As a result, there has been a net outflow of funds to purchase foreign assets. According to the Central Bank,

⁸ Thanks to Mr. Yeh Wan-An, a former Vice Councilor of CEPD (a government economic planning agency), for pointing this out.

by the end of 2018, the net assets of Taiwan's foreign investment reached US\$1.28 trillion, ranking it as the fifth largest net creditor in the world.⁹

A country produces an annual output value, and the part that is not consumed immediately is savings. When there is a surplus of savings after being used to finance investment, it is called excess savings, and the ratio of which to national income is called excess savings rate. Since the new century, this ratio has shown an upward trend. In the 1990s, the average was 2.9%; in the first decade of the new century, it was 7.5%; and it rose to 11.8% in 2011-2017. Moreover, unlike the earlier situation, now the excess savings mainly come from the corporate sector, due to lack of investment growth. For example, the corporate excess savings rate reached 7.4% in 2017. This development probably contributed to the rise in the share of the capital compensation in GDP since the 1990s. Another aspect of this phenomenon is the continuous rise of the trade surplus, especially the surplus in trade with Mainland China.

All these phenomena show that Taiwan is already a rich economy with ample accumulated funds. Though the industry still requires further upgrading, due to lack of proactive industrial policy, there is a shortage of investment targets. That is a paradox of coexistence of excess funds and lack of investment.

In the early postwar period, in terms of using industrial policy to promote leading industries, it can be said that there were four major phases. The first was the promotion of the textile industry in the 1950s, then the switch of policy direction from import substitution

⁹ Brad Setser's blog. This development also shows that the local capital market does not function efficiently. See Lu (2018).

to export promotion around 1960, then the secondary import substitution policy promoting intermediate input production of the export sectors, and finally the fostering of the high-tech industry starting from the 1970s. Fortunately, thanks to the prevailing conditions and the active efforts of the economic officials, the industrial policies were very successful.

Figure 1 shows the resulting shifts in the industrial structure. For example, textiles were still a leading industry in 1971, accounting for 23% of the manufacturing value, and by 2017 only 1.8%. Heavy industry became an important sector in the 1980s-1990s. From the 1970s onward, the share of the electronics industry continued to rise, reaching 26.9% in 2000, and even 54.2% in 2017! (See Figure 1.) This shows that Taiwan has successfully established its high-tech industry, which is quite an achievement. However, it also shows that Taiwan is increasingly dependent on this single sector, while necessary upgrading and diversification lag.

Could the biotechnology industry be the next leading sector? Indeed, in recent years, the emerging biotech industry has attracted worldwide attention. Many regions, including Taiwan, have been making effort to develop this sector. Although the possibility that this industry may improve human health is alluring, and some biotech companies can get listed on the stock market mainly based on expectation, this is undoubtedly an area that is not easy to industrialize. For example, after years of development, the global biotech output value was only US\$269.5 billion in 2016, and the average growth rate was less than 1% from 2012 to 2016. Nearly half of the biotech companies are American. The production value of Taiwan's biotech was US\$2.56 billion in 2016, less than 1% of Taiwan's manufacturing

output. The average annual growth rate was 2.8% from 2012 to 2016.¹⁰ In other words, this is still a relatively small sector. Besides, this field is highly dependent on scientists, and its employment effect can be extremely limited. In the foreseeable future, biotech will not be able to assume the role of a leading industry.

Some scholars argue that Taiwan's economic difficulties in recent years are due to the increasing monopolist power enjoyed by large business groups. This development also raised the level of inequality and weakened the economy's competitiveness. However, this only covers part of the story. This argument overestimates the importance of the domestic market. In fact, Taiwan is still an export-oriented economy, and the leading industry is always export oriented. For example, although electronics is the dominant industry in Taiwan, it is mostly for exports, and its leading firms do not hold monopoly power at home. But its socio-political influence is another matter. It is true that the degree of concentration in the domestic market has increased significantly since the turn of the century. Less competitive pressure usually leads to reduced investment level and effort to improve efficiency. This impact is arguably reflected in the lack of productivity growth and stagnant wages of the service sector since the new century.

As stated above, Taiwan has successfully industrialized by implementing industrial policies in the early postwar period. However, since the 1990s, many politicians and economic officials no longer take promoting development as their foremost responsibility. Industrial policies became more short-term and resemble mere slogans, often lacking

¹⁰ See Hsu (2017). The biotechnology industry here does not include the pharmaceutical and medical equipment industries.

feasibility.

In the early postwar period, the economic bureaucracy was built with a mission to pursue overall economic development in Taiwan. For example, in the late 1960s, when the plan to establish the heavy industry was firmly in place, senior officials like Sun Yun-hsuan, Li Kuo-ting and others began to worry about “where Taiwan’s new industries would be twenty years from now”, so they started a plan to promote high-tech industry. We as their descendants now all benefit from their vision, forward planning and sense of responsibility decades later. In contrast, since the new century, the situation is different. Taiwan’s economic growth lacks momentum and vision, and the government no longer practices that type of industrial policies. Political competition is no longer based on economic performance. Few people in power now worry about “where Taiwan’s new industries will be twenty years from now”.

Neoliberalism as a New Guiding Principle

Since the 1990s, one of the pillars of Taiwan’s new dominant social discourse has been neoliberalism. There are two main reasons for its rising influence. To deny the KMT any credit for economic successes, the democratization movement denies the role of the developmental state in promoting economic development. Neoliberalism is not only consistent with this political logic, but also provides theoretical support to the opening up of previously restricted domestic markets. Furthermore, after becoming the economic orthodoxy in the United States in the 1980s, neoliberalism spread easily to Taiwan via the

return of an entire generation of U.S.-trained scholars.¹¹ Since then, neoliberalism has dominated both the economy and society in Taiwan.

In the past, although the Nationalist government suppressed the opposition, it adopted policies to spread the fruits of development so as to maintain the legitimacy of its rule. Thus, the income gap and the urban-rural divide were not serious in the earlier postwar period. Its rule was both egalitarian *and* authoritarian.

Beginning in the late 1980s, liberalization and globalization went hand in hand with democratization in Taiwan. The old social contract, including government–business and capital–labor relations, under authoritarianism began to be dismantled. The old-style egalitarianism was gradually replaced by neoliberalism and populism.

The government bureaucracy in general has been affected by this neoliberal trend. It began to farm out various tasks, using open bidding to allocate projects and applying cost-effectiveness tests almost indiscriminately. This new mode of political competition also contributed to making policymaking more short term and populist oriented. Moreover, the new neoliberal trend began to change the institutional mission of the economic bureaucracy. For example, in 2006, the chair of the Council for Economic Planning and Development (CEPD), the government planning agency, announced that the government no longer needed to guide the direction of development.¹²

Although these changes could complement the liberalization that began in the late 1980s, they would not help the transformation of the economic bureaucracy to meet the

¹¹ Amsden (1994) discusses the case of South Korea in this respect. She describes how the “American-trained Korean economist” tried to promote laissez-faire in place of industrial policy.

¹² Chuang (2006). In the past, CEPD staff had to report on the current economic situation to President Chiang Ching-kuo every two weeks. This practice was discontinued in 2000.

new challenges of the globalized era.

Stagnant wages, increasing inequality

Unfortunately, this move toward laissez-faire occurred at a time when polarizing forces were intensifying. In the early postwar period, the KMT government tried to ensure that the real wages of the manufacturing industry continue to rise with economic growth.¹³ The annual growth rate of real wages averaged around 5 % during the 1960s and the 1970s, and 7.4 % in the 1980s, indicating a more equal sharing of the fruits of growth. However, the average annual growth rate of real wages began to decline after the liberalization of the late 1980s. The rate dropped to 3 % in the 1990s, and in the new century it has even edged close to zero.

Figure 2 clearly shows that the wage level became stagnant after the Asian financial crisis in the late 1990s. The monthly wage level was NT\$46,605 in 2000, and only NT\$46,650 in 2017, about the same level. The share of labor compensation in GDP also exhibits a decreasing trend from the late 1990s, dropping from 51% in 1991 to 44% in 2017.

Why did the wage rate become stagnant in the new century while the economy continued to grow, albeit at a slower rate? Lin and Yang (2018) finds that the prices of Taiwan's industrial exports have been declining faster than those of imports, therefore the terms of trade have been worsening in the new century. This contributes to the decline of the real wage rate, in which imports have great weight. They and Lu (2018) also find that the

¹³ Hsu (2000).

total factor productivity turned stagnant in this period, especially in the service sector. Lack of productivity growth certainly does not bode well for wage increases.

Undoubtedly, it takes sustained investment to raise productivity and upgrade industries. The worsening of terms of trade and lack of productivity growth are both caused by insufficient investment. Therefore, the stagnation of the wage rate is caused by a vicious cycle, i.e., low investment, low growth, low expectation, low price level, and stagnant wage level. The government's failure to practice effective industrial policy to promote new industries is the main contributor to this vicious cycle.

Meanwhile, social movements often split along partisan lines rather than class lines. This helped to reinforce the move toward neoliberalism. For example, the partisan split in the labor movement, along with the influence of neoliberalism, contributed to the failure of the social security campaign.¹⁴

Taiwan used to be one of the exceptional cases in which income distribution improved with growth, i.e., the ratio of the income shares of the top quintile to the bottom quintile declined from 5.25 in 1965 to 4.17 in 1980 (see Figure 3). However, this ratio has shown an increasing trend since 1980. It averaged 5.37 in the 1990s, but 6.39 in the new century. In fact, in the crisis year of 2009, if we disregard the equalizing effects of transfer payments, the ratio would have been 8.22.¹⁵ In sum, income distribution has been worsening at an alarming rate. Even though social welfare expenditures have been increasing in recent years, the related policy-making process has been highly politicized and

¹⁴ As a result, the *Labor Pension Act* followed the neoliberal principle and had few social security aspects. See Chen (2010).

¹⁵ DGBAS (2019).

shaped by partisan concerns and election considerations. The anxiety caused by the so-called “China factor” has been politicized and only reinforced the partisan politics. This has not been helpful to establishing a rational social welfare system in Taiwan.¹⁶

The above indicator of income distribution is based on the family income survey of the Directorate General of Budget, Accounting, and Statistics (DGBAS), of the Executive Yuan. It is the only official database on income distribution, and has been compiled by DGBAS for decades. However, it is generally believed that the household survey method has the problems of underreporting income, especially capital gains. Piketty and his colleagues have used an innovative approach to estimate the income and wealth of the high-income groups. Hong and Zheng (2013) adopted Piketty’s method and used Taiwan’s tax data to make estimates. Between 1977 and 2010, their estimates show a much larger degree of inequality than that of the previous method (see Figure 4). They estimate that the share of total household income of the top 5% ranged around 26% to 31% in this period, much higher than the 10% to 15% in the official estimate. The share of the top 1% reached 13.8% in 2010 in Taiwan, much higher than in Japan and France, close to the 17% in the US.¹⁷

The fact that the government has repeatedly reduced taxes for the wealthy since the 1990s must have contributed to the increase in income inequality. In recent years, tax-reduction measures included reducing the maximum tax rate on personal income, reducing land value-added tax rates, reducing the inheritance tax rate to 10%, etc. When Fei, Ranis and Kuo (1979) published their book on Taiwan’s postwar economic development, they

¹⁶ Chen (2010).

¹⁷ This set of estimates of the share of Taiwan’s high income earners has been included in the World Inequality Database, set up by Piketty and others. See DGBAS (2018).

titled it “Growth with Equity: The Case of Taiwan”. It seems that it is no longer the case.

Furthermore, Table 4 shows that the wealth accumulation gap has also widened. The rapid deterioration of the situation in the bottom 20% income group is alarming. The average saving rate of this group remained positive before 2000, but it has been negative since then. As Table 4 shows, from 2000 to 2018, the lowest 20% group has accumulated debt amounting to NT\$370.9 billion, while the highest 20% group had accrued NT\$19,447.8 billion in savings.¹⁸

As Piketty (2014) pointed out, the history of wealth distribution has always been highly influenced by political factors. For example, after WWII, due to experiences of hardship caused by the war and depression, Europe and the US paid more attention to equality issues, built up the social welfare states, and enjoyed two decades of the golden age of capitalism. Nonetheless, after the 1970s, with the rise of neoliberalism and neo-conservatism, the government policies changed direction, reducing taxes on the wealthy and relaxing many regulatory controls on corporate operations. In a way, Taiwan has been following the lead of the developed countries.

It is well known that the worsening of income distribution is not conducive to economic growth, because the consumption propensity of the poor is much higher than that of the rich. An increase in inequality will slow the growth of domestic demand. Indeed, at the aggregate level, the share of consumption in national income has declined from 70% in 2000 to 65% in 2017 in Taiwan. That is, sluggish consumption, along with sluggish investment, then led to increasing excess savings and sluggish economic growth.

¹⁸ Again, thanks to Mr. Yeh Wan-An for pointing this out.

Globalization and neoliberalism have also eroded some of the existing public assets in other areas. For example, the focus of health policy has shifted from building preventive public health infrastructure to increasing private medical institutions. In the field of education, the new policy became more market oriented and shifted away from the old policy, which centered on public schools, low tuition, universal education, and pragmatic vocational education. The neoliberal education policy does not help to lessen the effect of increasing inequality.

As mentioned above, in the process of democratization, Taiwan has focused more on nativist concerns rather than distributive issues. Therefore, there is not enough attention paid to the challenges discussed above.

Declining tax revenues, lessened social welfare

Election politics also has eroded the tax base in Taiwan, with consequences relating to development. Politicians have consistently advocated tax reductions. Tax receipts (excluding social security contributions) as a ratio of GDP have been declining ever since the 1990s. This ratio has dropped continuously from a high of 19% in 1990 to 12.8% in 2016 (see Figure 5). This has to be one of the lowest tax burdens in the world. For example, among OECD countries, the tax revenue as a percentage of GDP averaged 34.3% in 2016, the lowest of which was 17% in Mexico. Taiwan's ratio is less than half of that of OECD countries, but also lower than other East Asian countries.¹⁹

¹⁹ OECD (2017).

The reason for the continuous erosion of the tax base is mainly due to election politics. Various tax relief measures continue to be released to please the voters, especially during election times. The tax burden, however, is highly uneven, and falls mainly on the salaried employees, while there is no tax on capital gains.

Therefore, the fiscal deficit as a percentage of fiscal revenue continues to increase. It averaged -0.4% in 1981-1988, and from 1989 to 1995 increased to -5%. This ratio has averaged around -2% in the new century. It goes without saying that this severely limits the government's ability to respond to the polarizing effects of globalization and neo-liberalism.

Since the 1990s, Taiwan's economy has been highly subject to the impact of globalization and the rise of China. It should be noted that numerous people in Taiwan have benefited from the change, as shown in the fact that Taiwan has accumulated a huge amount of wealth and continued to export its excess savings so as to have become the world's fifth largest creditor nation. However, the local industrial and social policy necessary to adapt to the negative impact has been far from perfect. Economic development has slowed and lacked prospects, reducing the opportunities for victims of globalization's impact. The National Health Insurance program, which has been in effect since 1995, provides a significant force of social stability. Other than that, the income disparity has increased, and the society's bottom stratum has begun to accumulate an increasing amount of debt in the new century. Under the new rules of political competition, these issues have not gotten the attention they deserve, nor has the crucial issue of managing the Cross-Strait relations.

Challenge of Cross-Strait Relations

In addition to the above-mentioned transformation difficulties, there is a more critical challenge. In the late 1980s, Cross-Strait exchanges and interaction became possible after decades of isolation. Ever since then, the economic interaction between the two sides of the Strait has become increasingly frequent, and economic links ever closer.

In the early 1990s, Mainland China's economy was still relatively backward, and Taiwan's investment was particularly welcome. Taiwan's SMEs of traditional labor-intensive export industries took the lead in setting up factories on the Mainland, and later the high-tech industry followed. These Taiwan firms brought with them management skills and international business opportunities, and they themselves got the opportunity to expand due to the large pool of quality local labor. For example, when Hon Hai invested there in the 1990s, it was still a medium-sized company. It quickly expanded its scale, employed more than a million workers, diversified its operations, and became a world-class enterprise.

Both sides of the Strait joined the WTO at the end of 2001. Unexpectedly, China's economy developed quickly, so that when the global financial crisis occurred in 2008, the Chinese government was able to implement a large-scale stimulus package and play the role of the locomotive of the world economy. Therefore, China has become the second largest economy in the world in 2010. Its share of the world's GDP rose from 4.1% in 2001 to 15% in 2018. According to a Nikkei estimate, 34 regions in the world have China as the largest export market in 2018. Regarding Cross-Strait relations, although political factors continue to change, this has not prevented the economic links from becoming closer.

Trade

Taiwan's main trade partner has changed from the US to China after the late 1980s. In the early postwar period, Taiwan mainly exported to the US. With Cross-Strait opening and the economic growth of the Mainland, the Chinese Mainland gradually replaced the US as the major export market for Taiwan (see Figure 6). Much of Taiwan's exports to China are intermediate products, which are then used to assemble final goods destined for the US market. Even though the final destination is the US, the division of production connects the two sides of the Strait. In the new century, China's local supply chain has grown to partly replace imports from Taiwan, but the proportion of Taiwan's exports to China still is around 40% of total exports.

In addition, in Cross-Strait trade, Taiwan has always maintained a large surplus, which is much larger than Taiwan's total trade surplus. For example, in 2018, Taiwan's total trade surplus was US\$ 49.6 billion, and that with China (including Hon Kong) was US\$83.2 billion, 1.7 times that of the former. This ratio averaged 3.4 times in 2006-2010, and 2.5 times in 2011-2018. This means that without the trade surplus with China, Taiwan's total trade would be a significant deficit. Regarding trade with Taiwan, the Chinese government has tolerated this persistent trade deficit and some discriminatory trade practices against China's exports, obviously for political considerations. In other words, Taiwan is highly dependent upon the Chinese economy and its favorable policy toward Taiwan.

Investment

Regarding the flow of capital, starting from 1990, China has become the main destination of Taiwan's investment. At the same time, Taiwan's capital outflow began to exceed the inflow and it became a net capital exporter. As for the geographical distribution of its investment, ever since this capital outflow began, Mainland China has been the major destination. The amount of officially approved investment destined toward the Mainland clearly shows a rising trend since 1991. This was a period in which Taiwan's labor-intensive export firms quickly moved their production abroad, and about 60% of the investment has gone to China since the 1990s. In addition, the approved amount should be an underestimated value, because many of Taiwan's firms invested in tax havens in the Caribbean, and most of it probably went to China. What is more, Taiwanese firms mostly did not repatriate the profit accrued on the Mainland, but reinvested the surplus locally. Over the years, the amount of reinvestment should have accumulated to a considerable sum, but it is not included in the official statistics.

In short, Taiwan's economy has become more globalized in terms of trade and investment from the 1990s onward. However, the extent of geographical dispersion of globalized activities has been limited, and Mainland China has been the major partner. The reasons are manifold; besides the obvious geographical and cultural factors, the attraction of the Chinese economy should be the key, including a favorable investment environment, a large pool of quality labor, and rapid market growth. Therefore, even if Taiwan's officials have often introduced policies to hinder Taiwanese firms from investing on the Mainland, their efforts have not been too effective.

In 2018, the US started a Sino-US trade war, which affected Taiwanese firms that export to the US market, and some of which then planned to shift some production lines back to Taiwan. However, the extent of relocation remains limited, because the factors contributing to the emergence of China as the world factory are still mostly in place. The changes tend to be marginal adjustment, rather than major reversal of the investment trend. Besides, the Taiwan Federation of Industry has repeatedly complained to the government about the local “five shortages” (water, power, labor, land, and talent shortage).²⁰ Whether Taiwan’s investment environment and the supply of the related factors will improve much in the future remains to be seen.

Cross-Strait policy

Ever since the 1990s, Cross-Strait relations have become a major policy challenge. In the initial period of restarting exchanges, the two sides jointly established a system and organization for conducting exchanges. However, in 1991, the opposition party, the DPP, officially adopted the Taiwan independence platform and advocated drafting a new constitution. Under the joint efforts of both sides in the early 1990s, there occurred comprehensive easing of Cross-Strait relations. The first Ku-Wang talks were held in April 1993. They signed an agreement, agreeing to “one China, respective interpretations”, which later was called the “1992 Consensus”.²¹

²⁰ Chinese National Federation of Industries (2019).

²¹ Su (2014).

However, in 1995, the US granted the late President Lee Teng-Hui a visa to visit his alma mater, Cornell University. The incident caused serious consequences. The mutual trust between the two sides of the Strait and with the US was lost. China froze talks and held military exercises to test-fire missiles off the Taiwan Strait. Though the US dispatched aircraft carriers to assist Taiwan at that time, it also adopted a position of not supporting Taiwanese independence. Lee was elected president in 1996 with the help of the missile crisis. From then on, he began to promote policies in favor of Taiwan's independence.

In 2000, Chen Shui-bien was elected president. In his eight-year tenure, crises continued to arise, due to his pro-independence acts. However, at the same time, economic exchanges did not stop. Although Chen's government claimed to restrict outward investment in China, he did not have the ability or the will to do so. For example, under market pressure and at the prodding of the US government, the Ministry of Economic Affairs (MOEA) finally allowed Taiwan's notebook computer firms to move production to the Mainland at the end of 2001. Under the prevailing economic trend, this decision seemed unavoidable, and had immediate effects. The share of ICT products manufactured in Taiwan was 72% in 1995, then 47% in 2001, but dropped to 6.8% in 2005. At the same time, the share of Taiwan's notebook producers in global output rose from 27% in 1995, to 56.5% in 2001, and 82.5% in 2005, finally reaching around 95% in the late 2010s. That is, moving production to China allowed Taiwan's ICT firms to gain significant global market share.

Trade agreement

After Ma Ying-jeou was elected president in 2008, he changed the direction of Cross-Strait policies, advocating peace and re-opening while maintaining the political status quo. As a result, economic and cultural exchanges were greatly improved. The Mainland side was highly responsive and accommodating to these initiatives. The two sides signed the Cross-Strait Economic Cooperation Framework Agreement (ECFA) in 2010. The signing of this agreement allowed Taiwan to begin negotiating FTA with other countries to lessen its isolation. Although the Ma government claimed that the new policy had brought economic peace dividends, it had yet to provide an overall discourse to appease local unease. In the meantime, the DPP had been fiercely opposing the policy. Within the ECFA framework, the two sides further signed an agreement covering the service industry in 2013. In March of the following year, when the Legislative Yuan reviewed this Agreement on Trade in Services, the Sunflower student movement broke out, which was mainly anti-China and had a profound impact. Riding on this wave of protest, the DPP won the presidential election and obtained a majority of seats in the Legislative Yuan in 2016. After that, official exchanges between the two sides of the Strait came to nearly a complete stop.

Regarding WTO trade talks, due to the difficulty of reaching consensus in the DOHA round of trade talks, countries around the world have been actively signing bilateral and regional FTAs. Therefore, “FTA coverage rate” (percentage of trade in goods that can enjoy FTA preferential tariff in total trade) has become an important indicator in the competitiveness of an economy. So far, Taiwan has only signed FTA with seven countries,

besides the ECFA early harvest list. The overall FTA coverage ratio is only 9.7% of the total trade volume, and the main part of it is the ECFA early harvest list.²²

With the ECFA early harvest list, from 2011 to June 2019, Taiwan's exports enjoyed about US\$ 6.8 billion tariff reduction, while China's exports to Taiwan only had US\$ 600 million tariff reduction. In 2018, the export value of Taiwan's early harvest products reached US\$ 23.6 billion.

In comparison, by 2017, Singapore's FTA coverage rate was 87%, and South Korea's 64.4%, both far exceeding that of Taiwan.²³ So far, negotiations of Cross-Strait goods and service trade agreements have stalled, and it is unclear how long the ECFA early harvest list will last. At the same time, without China's blessings, the chances of signing FTA with other countries are slim. In other words, Cross-Strait relations affect not only Cross-Strait trade, which accounts for 40% of Taiwan's exports, but also whether Taiwan can sign FTA with others. Antagonistic Cross-Strait relations imply Taiwan's marginalization.

Industrial upgrading

In addition, Cross-Strait relations and the corresponding adaptive policy have critical impact on Taiwan's key industries. As mentioned above, Taiwan's high-tech industry grew quickly in the 1990s, and became the world's leading subcontractors, and the backbone of Taiwan's manufacturing sector. After the new century, China began planning to develop its own high-tech industry, and hoped that Taiwan's firms could help. However, Taiwan's official

²² Lin (2018).

²³ Lin (2018).

policy has been a defensive one, that is, requiring firms investing in China to use technology with a few years' lag time.

It is hard to know whether, if Taiwan had adopted a more cooperative strategy at the time, it would have been a win-win outcome for both sides. Nonetheless, it is clear that, with very few exceptions (like semiconductors), this defensive strategy has not been successful. Since the new century, the Mainland Chinese manufacturers have made impressive progress and caught up with Taiwanese firms in many areas. The defensive strategy only brought a buffer time of a few years, but failed to allow the Taiwanese firms to participate in the local development. It can be said to be a "lost opportunity". For example, Taiwan's flat panel industry was invited to participate in the development of the local industry in the Mainland, but did not take up the opportunity. The Chinese display industry has since made striking progress, so much so that one manufacturer, BOE, has been considered for the Apple's supply chain.

At the same time, the global high-tech industry continues to evolve. The prices of existing products continue to decline, and the profit rates of Taiwanese high-tech firms have been declining. The pressure to upgrade has been intense. And to upgrade, supportive resources are needed. On the one hand, however, Taiwan's officials no longer have the ability and the will to implement effective industrial policies. On the other hand, it is difficult to find alternatives if the industry cannot utilize the huge resources of the neighboring Mainland. So far, among Taiwan's high-tech firms, Hon Hai is a successful example of using Chinese resources to become a global leader. Most of the other ICT firms, however, are still struggling to upgrade.

To date, TSMC is arguably the most successful and important company based in Taiwan. It has made only a limited amount of investment on the Mainland, and mainly produces locally. It is already a world-class firm, competing with Samsung and Intel for leadership in the global semiconductor industry. This is an area where Mainland China has yet to catch up, though China will certainly continue to invest and try to catch up. Although TSMC's performance is outstanding, it is not representative; at the same time, it is extremely important to Taiwan's economy. In 2019, it accounted for over 20% of Taiwan's stock market valuation. The huge amount of investment it made in setting up new fabs every year is a major component of Taiwan's total investment.

In other words, TSMC's excellent performance actually attests to the relative lack of it in other high-tech fields, and a lack of diversification in the total economy. It must be noted again that TSMC was established in 1987 by the government, thanks to a successful round of industrial policy. Its position in today's Taiwan shows what industrial policy can achieve. However, there has been no effective follow-up attempt after this one.

Conclusion

In short, in the first thirty years after the war, Taiwan had successfully industrialized under a developmentalist model, based on the conditions present at that time. The success itself has brought pressure for the old development model to be transformed, both politically and economically, since the 1980s. This chapter explores the important question of

whether democratization has led to the disintegration of Taiwan's developmental state model?

Regarding the impact of democratization on the economic policy model, this chapter examines it from four perspectives: Firstly, whether policy goals could be expanded to accommodate factors other than economic development. Although various social movements emerged along with the democratization movement, strong partisan influence made it difficult for the society to form a consensus on how to revise development policy priority, and to successfully coordinate different policy goals. Secondly, whether state policies continue to pursue overall economic development. Taiwan's new political competition model, driven by frequent elections, has become increasingly intense, divisive and partisan. Therefore, economic policies become more short-term and slogan oriented, often based on the populist logic of winning votes. Thirdly, neoliberalism has become the guiding principle. Because the democratic movement denies the previous achievements of the KMT government, it also denies the role of the developmental state model and industrial policy. This has made neoliberalism the dominant concept, even though the principle of laissez-faire does not help Taiwan to respond to the challenges brought by globalization.

Fourthly, there is the issue of the lack of economic positioning and future vision. The dominant discourse formed in the democratic transformation emphasizes the creation of a new nationality in Taiwan, but in reality it cannot find itself a global economic position independent of Mainland China. It hence makes it difficult to form a vision for Taiwan's future development, let alone implement it. In general, for latecomer nationalism to be effective, it must be able to mobilize locals not only to resist foreign aggression, but also to build a national economy. Taiwan's independence movement first regards the KMT in

Taiwan as an enemy, and then regards Mainland China, which has not yet set foot on Taiwan, as an enemy. Such a characterization may have helped Taiwan's democratization process, but it cannot be used as a basis to form actual plans to promote Taiwan's overall economic development, and cannot put forward economic goals with specific content, let alone a vision for the future.

If compared with the situation in the early post-war period, the elites at that time took "developing modern national industry in Taiwan" as their economic goal to achieve their political goal of "saving China". In contrast, the difference between the two is significant, that is, the motivation of the Nationalist ruling elites in the early post-war period was derived from the response of generations of Chinese to the actual aggression of the West. Their economic goals were also very specific and forward-looking. The model was called a "developmental state" model, but the driving force actually came from Chinese patriotism or nationalism, not developmentalism. On the other hand, the current dominant discourse in Taiwan is lacking in both aspects. This should be the biggest challenge that the democratic transformation has brought to Taiwan's economic development.

Comparing the experience of South Korea's democratic transformation with Taiwan's can provide further support for the above argument. The democratization process in South Korea has been far more intense and the political struggle much fiercer than that in Taiwan. However, despite their intense rivalry in various policy areas, the two main opposing political parties do not differ in their national identity. Therefore, successive presidents have continued to implement ambitious industrial policies, although possibly each with his/her own focus, but they share the goal of promoting economic development. Therefore, starting

when the political transformation began in both places in the 1990s, South Korea has clearly outperformed Taiwan in terms of industrial upgrading and economic growth, and has a clearly defined and forward-looking vision. At the same time, because the progressive wing of South Korean society is more capable of providing checks and balances, it can better foster society's reflection and regeneration to pursue social progress. South Korea has faced similar challenges as Taiwan, in that it has had to transform the original economic development model. Nonetheless, with the help of a shared national identity, the accompanying consensus to advance economic development, and the checks and balances brought by more balanced left and right forces, South Korean society has been able to respond to the new challenges, so as to move forward together. In Taiwan, there is a lack of development consensus due to the split of national identity, so it is more difficult to adapt and move forward.

In short, Taiwan's past developmental state model faced pressure to transform itself starting in the late 1980s, but the transformation has been less than successful. To revive the economy, we need a view of development that "transcends" rather than "negates" the traditional economic development in the past, and we need to make the society more balanced, realistic and forward-looking. Moreover, Cross-Strait relations have become the most urgent and critical challenge. The unresolved policy conundrum has become the key obstacle to Taiwan's economic development. If Taiwan cannot directly face this reality and seek Cross-Strait reconciliation and cope with it, it will not be able to have practical development plans and visions.

Table 1 East Asia's economic growth rate and investment ratio, 1961-2017 (%)

	Taiwan	South Korea	Singapore	Hong Kong	China
Annual growth rate of GDP (%)					
1961-1990	9.7	9.6	8.7	8.3	6.9
1991-2000	6.7	7.0	7.2	4.0	10.5
2001-2010	4.2	4.4	5.9	4.1	10.6
2011-2017	2.5	3.0	4.0	3.0	7.6
2001-2017	3.5	3.8	5.1	3.6	9.3
Gross fixed capital formation as a percentage of GDP (%)					
2017/2018	21	30	27	21	43

Source: World Bank data bank, DGBAS data bank.

Table 2 East Asian Tigers' per capita GDP and as a percentage of that of U.S., 1981-2018

	South				
	Hong Kong	Korea	Singapore	Taiwan	U.S.
Per capita GDP (US dollars)					
1991	15,466	7,523	14,502	9,136	24,303
2018	48,717	31,363	64,582	25,026	62,606

Per capita GDP relative to that of U.S. (%)

1981	43	13	41	19	100
1991	63	31	60	37	100
1995	80	43	87	46	100
2000	70	33	66	41	100
2010	67	46	96	40	100
2018	77	50	102	40	100

Source: World Bank data bank, DGBAS data bank.

Table 3 Growth rate of gross fixed capital formation, gross and net fixed capital formation as a ratio of GDP, 1971- 2017, (%)

	Annual growth rate of gross fixed capital formation (%)	Gross fixed capital formation/GDP (%)	Net fixed capital formation/GDP (%)
1971-1980	13.9	27.0	22.1
1981-1990	7.9	23.7	15.6
1991-2000	8.2	26.3	16.5
2001-2017	0.7	22.5	7.2

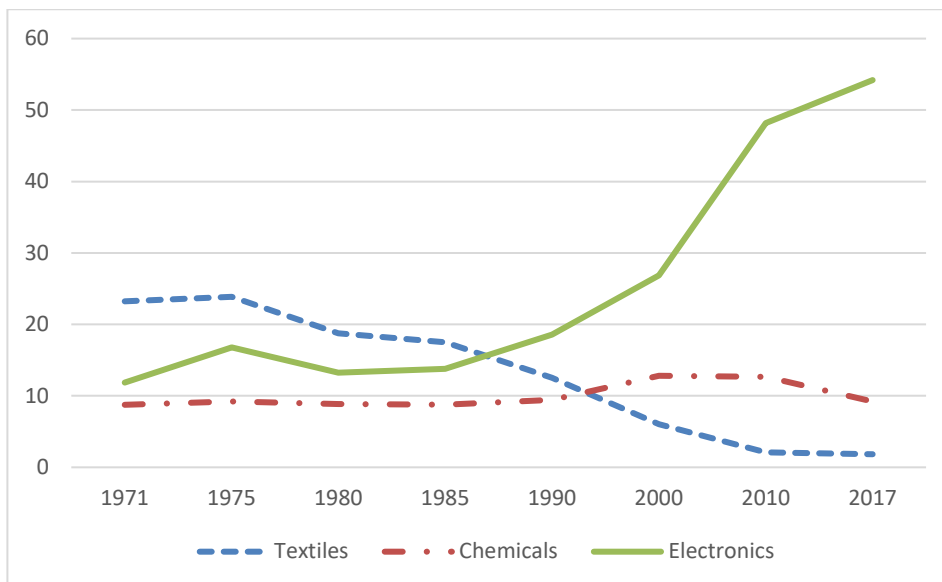
Source: DGBAS data bank.

Table 4 Amount of accumulated savings of the top and bottom quintiles of national income,
2000-2018 (NT\$)

	Savings of the bottom quintile	Savings of the top quintile
2000-2004 total	41	46,275
2005-2009 total	-604	49,256
2010-2014 total	-1,884	51,004
2015-2018 total	-1,262	47,943
2000-2018 total	-3,709	194,478

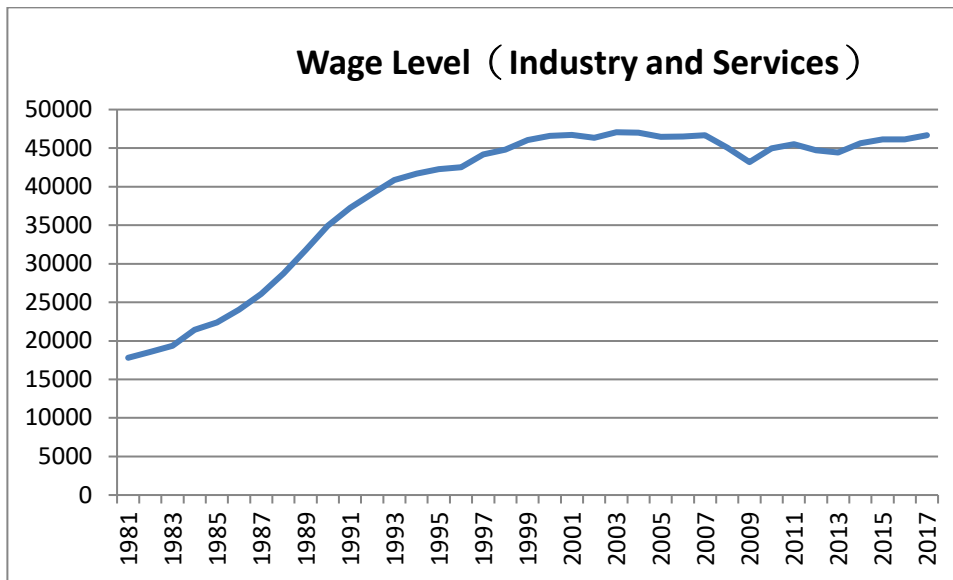
Source: DGBAS data bank.

Figure 1 Distribution of manufacturing value-added, 1971-2017 (%)



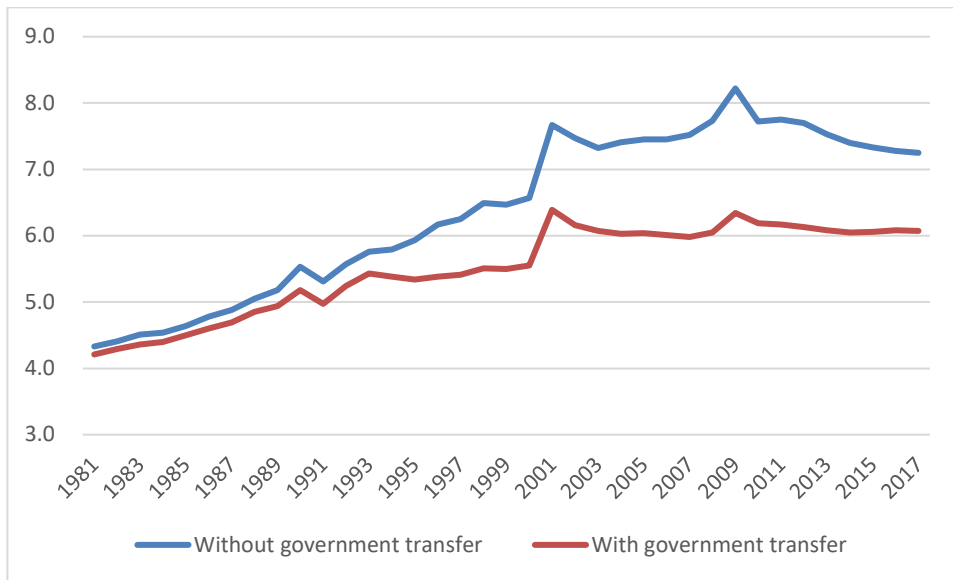
Source: *Industrial Production Statistics Monthly, Taiwan Area, the Republic of China*, various issues.

Figure 2 The real wage level, industry and services, 1981-2017, (NT\$)



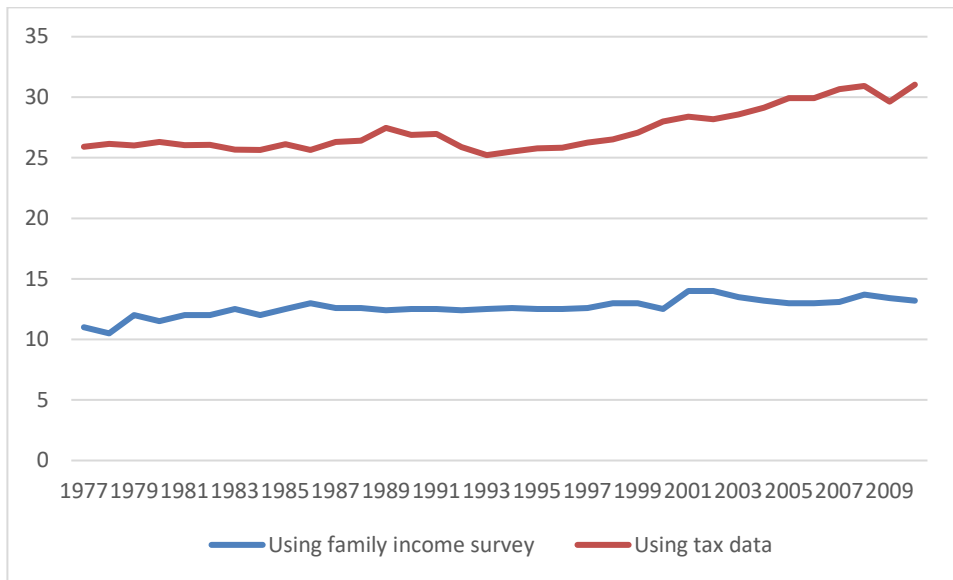
Source: DGBAS data bank; used the consumer price index to deflate the nominal wage.

Figure 3 Ratio of income share of top quintile to that of bottom quintile, 1981-2017



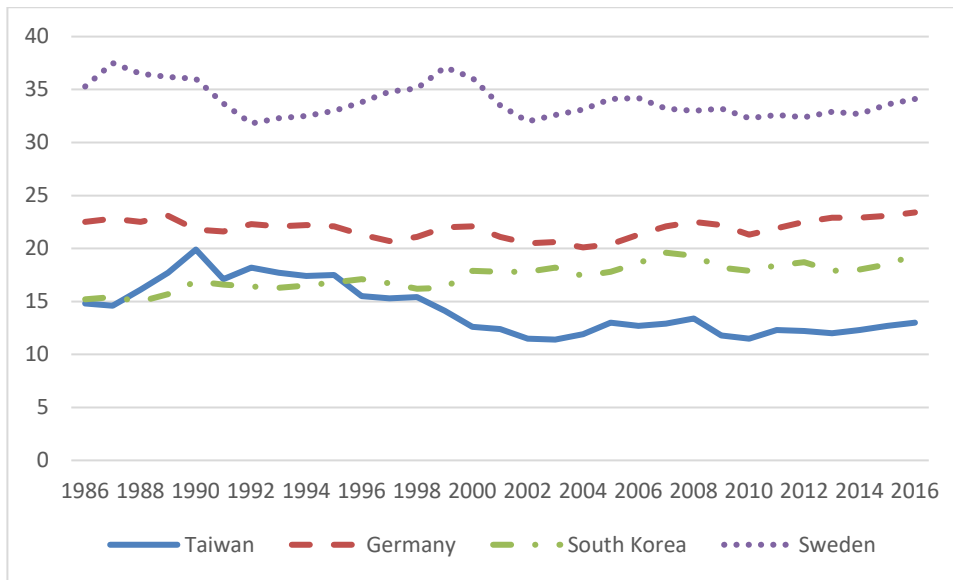
Source: DGBAS data bank.

Figure 4 Income share of top 5%, using two different methods, 1981-2017 (%)



Source: Hong and Cheng (2013: Figure 2).

Figure 5 Tax revenue as a ratio of GDP, various countries, 1986-2016 (%)

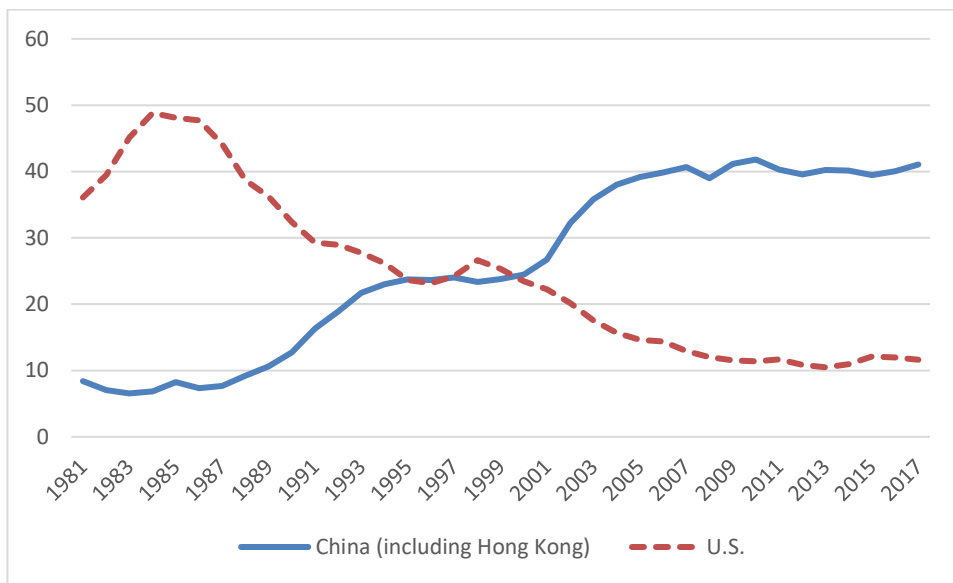


Source: Ministry of Finance, excluding social security payment;

<http://web02.mof.gov.tw/njswww/WebProxy.aspx?sys=220&ym=7500&ytm=10600&kind=21&type=1&funid=i2801&cycle=4&outmode=1&compmode=00&outkind=11&fldlst=100000010001100001001&rdm=mhy4pLiY>

OECD, 2017, Revenue Statistics, <https://stats.oecd.org/index.aspx?DataSetCode=REV>.

Figure 6 Exports to the U.S. and Mainland China, as a percentage of Taiwan's total exports
(%)



Source: *Taiwan Statistical Data Book*, 2018.

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