Taiwan’s Developmental State:
After the Economic and Political Turmoil

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Abstract

In this paper we start with a discussion of the capitalist developmental state (CDS) model and Taiwan, asserting the latter as a core example of the CDS. We then look into the four constituent elements of the model: state autonomy from society, elite consensus on developmentalism, state penetrative capacity, and world market-conforming industrial policy. We browse over Taiwan’s performance in these four areas from the 1960’s through the 1980’s, making sure that the country did satisfy all the requirements. The impacts from the Asian Financial Crisis (AFC) and the two political shocks that it sandwiched are assessed, again in the four areas that matter most to the sustainability of Taiwan’s CDS structure. We find interest politics replacing regime autonomy, electoral competition leading politicians away from developmentalism, economic dynamism blunting state penetration, and economic bureaucrats making risky forward designating under great pressure. Four key industries are examined to demonstrate the above points: financial reform that witnesses inroads of particular interests, nuclear power that pits environmental nativism against developmental bureaucracy, hi-tech investment on mainland China that defies the state’s will, and risky forward designating of biotechnology as the country’s flagship industry. We find the country’s CDS exists more in the diehard bureaucratic habits, than in the effective functioning of the constituent elements of the model. The intention of the DPP government to revive the CDS model is clear, but it runs against an unfavorable environment, one that is not easy to change even with a change of guard in 2008.
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Taiwan was a classical case of “capitalist developmental state” (CDS) when Chalmers Johnson coined that phrase to characterize Japan and several fast-growing economies in East Asia that followed Japan’s state-led growth strategy. Since that time, new members have been added to the CDS club while some old ones are said to have gradually phased out as they adopted liberal policies and conducted structural reform to converge on the neoliberal “Anglo-American model.” Whether Taiwan remains a developmental state hence becomes controversial. It is clear that democratization softened Taiwan’s erstwhile authoritarian regime, and dampened the power of the economic bureaucracy, the engine of the CDS. Globalization offers opportunities and imposes limitations that are oftentimes inconsistent with the development plans that the state designed for the economy. However, one finds in numerous cases that old habits die hard and the new ruling elite are no less enthusiastic to pursue grand development goals than their predecessors. The fact that Asian Financial Crisis (AFC) dealt a much milder blow to Taiwan’s economy than to most of its neighbors means Taiwan’s old political-economic arrangement was less disrupted, and the system less vulnerable to the dictates of the international financial institutions. In 1997-98, the newly democratized Kuomintang (KMT) regime was able to lead the country through the shockwaves of the financial crisis, and preside over a swift recovery. Of much greater damage to Taiwan’s CDS was the change of guard at the turn of the century. It was under the new Democratic Progressive Party (DPP) government that Taiwan suffered its most serious economic decline. As a “divided government” emerged after 2000, with the president and the parliamentary majority belonging to different political parties, Taiwan began experiencing a protracted period of policy paralysis and internal confusion. In 2007 the country looks worlds apart from the CDS and its single-minded pursuit of economic development in the past. With weakened state and dampened developmentalism, Taiwan  

1 There are other CDSs in which changes in domestic politics producing a more testing environment to the developmental model than changes in the international economy, such as in Japan. See Weiss (2000: 25).
nevertheless attempts to pursue growth in strategic industries through deepening (information technology), conglomeration (finance) and upgrading (biotechnology). This attempted revival of the CDS in an overall hostile environment has proven difficult, if not impossible. In the following pages, we shall discuss the CDS as a concept and as a system, identify its four constituent features, describe how these features were built into Taiwan’s hi-growth structure, and then gradually undermined since democratization set in, look into four key industries as examples of the encroachment (finance, nuclear power, hi-tech electronics, and biotechnology), and finally discuss the relationship among capitalist developmentalism, economic growth, and nascent democracy in Taiwan.

The CDS model and Taiwan

Capitalist developmental state is a concept and a system derived primarily from the post-WWII experience of Japan. It is presented as an “alternative” capitalism, in contrast to the dominant “Anglo-American” model of laissez-faire capitalism (Johnson 1982; 1999). After applying the concept to the Japanese economic miracle, Chalmers Johnson extended its usage to describe the four East Asian “little dragons” of South Korea, Taiwan, Hong Kong, and Singapore (Johnson 1985, 1986). These are the five core examples of the CDS. Later on when some South East Asian countries (most notably Thailand and Malaysia but sometimes also the Philippines and Indonesia) moved onto the fast track of economic growth, they were described as new members to the CDS club, dubbed “tigers.” Their inclusion is controversial, particularly when some of them found themselves in the quagmire of the Asian Financial Crisis right after they were hailed as successful fast growers. Recently whether China should also be treated as a giant CDS arouses academic interest. At this point, China’s CDS status remains highly contentious.

2 That the “dragons” and “tigers” are fast-growing economies in a category distinct from other parts of the world is clear. In the 1990s, for example, the four dragons and two “unmistakable” tigers, i.e. Malaysia and Thailand, grew by an average of 7.4 percent per annum, compared with South Asia’s 5.7 percent, Latin America’s 3.4 percent, Middle East and North America’s 3.0 percent, and sub-Saharan Africa’s 2.4 percent. High growth is the hallmark of the dragons and tigers, although it came not without serious consequences, such as environmental devastation, the subjugation of agriculture to industry, the growing income disparities (particularly in the tigers), and the growing technological dependency on the developed world (Bello and Rosenfeld 1990). The sustainability of the high growth was also questioned even prior to the Asian Financial Crisis (Krugman 1994), and particularly so after the Crisis erupted.

3 Linda Weiss (2000: 24) characterizes the Southeast Asian countries in terms of “inconsistency, weakness or absence of their developmental priorities and arrangements and thus their relatively low transformative capacities,” and “the virtual absence of a strategic policy.”

4 For arguments favoring China’s CDS status, see Baek (2005), Wu (2007). For opposing opinion, see Lee, Hahn, and Lin (2002).
If we stick to Johnson’s original concept and examples of the capitalist developmental model, four constituent factors can be ascertained. They are state autonomy from the society, elite consensus on developmentalism, bureaucratic penetration into the society, and world market-conforming industrial policy. All four are necessary conditions for a CDS to function. Among them state autonomy is needed for economic reason to prevail over particular interests. Developmental consensus is a prerequisite for the economic bureaucracy to receive full support from the political elite, who then use high economic performance to buttress the legitimacy of the regime. State penetration is a precondition for successfully implementing industrial policy, the hallmark of capitalist development. Finally, world market is required for export expansion and high growth. In all, the four CDS conditions provide an environment conducive to state-led rapid development.

From the 1960’s through the 1980’s, Taiwan obviously qualified as a CDS. The authoritarian KMT regime ruled supreme, while the local society was weak and divided. Even though local elections were instituted early in the 1950’s, the parliament was “frozen” as delegates elected on the mainland were virtually given life tenure and the central government was not effectively monitored by the people. Not only was there a ban on the formation of new political parties, intermediate organizations were carefully scrutinized and no genuine opposition was allowed to exist. The influence of the landowning elite was curtailed through a sweeping land reform. Most of the nascent industrialists were co-opted by the party state. Based on the bitter experience on the Chinese mainland, the KMT made sure that no social or political forces could mount any opposition to the regime. One thus witnesses high degree of state autonomy.

There was a consensus among political elite and economic bureaucracy on the priority of economic development. Because the KMT was originally a foreign regime migrating from the Chinese mainland, it lacked legitimacy among the local people. The paramount goal of the ruling elite was then to achieve rapid economic development and through which to buttress regime legitimacy (Wu 1994). Developmentalism was also necessitated by the security threat from mainland China. The pursuit of high growth was balanced by the concern over social stratification and class antagonism, the prime reasons for the downfall of the KMT government on the mainland. The goal was “growth with equity.” In short, material betterment of the people was the overriding goal of the regime. After painful soul searching, the KMT elite realized that if they fail to deliver the economic goodies this time, there would be no place to retreat to. Consensus

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5 Whether there should be a military response or an economic response to such threat was at the core of a major policy debate in the 1950’s. The “economic school” ultimately won the battle. See Pang 1988.
on developmentalism was thus dictated on the regime.

Since the 1950’s, the KMT was successful in instituting a highly penetrating state apparatus that it had never been able to build on the Chinese mainland. The party state took over the networks of the farmers’, fishermen’s, and irrigation associations and established all-powerful networks with local factions. Such clientelist ties went a long way in consolidating the KMT’s dominance at local elections. The peak organizations that represented industry, commerce, and labor were more state transmission belts than autonomous organizations that articulated social interests. Although not totalitarian in nature, the born-again KMT regime in Taiwan developed unprecedented penetration capacity that proved highly useful when the state began pursuing its industrial policy in the decades that followed. Many of the development projects that the KMT envisioned but failed to implement on the mainland for lack of penetration capacity were now put in place, beginning with the land reform. Without the successful state-building process at the early stage of its development, Taiwan would not have implemented the industrial policies that later on transformed the island’s economy.

The CDS is a modern mercantilist state. One major measure of its success is its ability to export to world market and its capacity to accumulate foreign exchange reserves. For this to happen, the CDS needs an amicable international environment and opportunities to capture market niches. Taiwan was able to take advantage of its cheap labor in producing labor-intensive goods at the early stage of its economic development, and gradually shifted to capital- and knowledge-intensive products as its labor costs rose. The world market remained highly competitive but open, lending ample opportunities for Taiwan manufacturers to grasp. The designating of strategic industries is of paramount importance here. The economic bureaucrats need to correctly evaluate the factor endowment of the country and its adjustability, and locate world market niches for the designated industries. Advice from scholars and foreign experts need to be heeded, but not blindly followed. If there is anything gravely wrong with the designating process, the world market appraisal, or the domestic factor evaluation, national resources will be misled to channels that shall bear no fruit of growth. Unlike investment mistakes made by individual firms in a market economy, the mistakes of the economic bureaucrats in a developmental state have national adverse implications. Thanks to generations of able economic bureaucrats (led consecutively by K. Y. Yin, K. T. Li, and Yun-hsuan Sun), Taiwan’s industrial policy proved highly successful in linking domestic advantages to world market niches. One notable example is the computer and microelectronics industry. Since the 1980’s the rapid expansion of this sector has fueled Taiwan’s export drive and provided momentum for continuous growth.
Given the favorable conditions of state autonomy, developmental consensus, bureaucratic penetration, and world market-conforming industrial policy, Taiwan registered impressive growth record in the 1960’s through the 1980’s, making it one of the core examples of “Asian miracle economies.” And yet economic success brought about social and political changes that in turn acted on the developmental structure. As the CDS is essentially an authoritarian institutional arrangement, democratization that began in the late 1980’s was bound to clash with it.

**Impacts from Political Changes**

Unlike most of Asia’s fast-growing economies that suffered tremendously in the 1997-98 Asian Financial Crisis (AFC) Taiwan’s developmentalism was primarily dampened and growth track record tarnished by political turbulence. Such turbulence came in two waves: democratization in the late 1980’s and early 1990’s, and the transfer of power from the KMT to the DPP in 2000. The first political shock, i.e. democratization, brought down Taiwan’s growth from an average of 8.2 percent in the 1980’s to an average of 6.5 percent in the 1990’s, and the second political shock, i.e. transfer of power to the DPP, further drove the growth rate down to an average of 3.7 percent in 2000-2006. At the same time, it raised the unemployment rate to above 4 percent, while the in the pre-2000 period unemployment was just around 2 percent (see figure 1). The AFC that sandwiched the two political shocks caused comparatively milder economic downturn, a mere 2 percent drop in 1998. It is obvious that political changes had a much greater impact on the economy than the external financial crisis.

If one takes a look at Taiwan’s long term economic performance, it can be found that the country’s CDS structure and growth were resilient against external economic shocks, and capable of bringing the economy back to the fast-growing track, as can be seen in the rapid recovery from the two oil crises. The 1997-98 AFC was basically of the same nature, rendering a lower growth rate during the crisis, followed by a swift recovery immediately afterwards. This pattern suggests that political changes, and not external economic shocks, were behind the weakening of Taiwan’s CDS and the downturn of the growth rate. Specifically, democratization and power transfer undermine the four

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6 We shall not go into the debate as to whether it was the liberal policies or the developmental state that could better account for the sustained high growth of Taiwan until the late 1980’s. The assumption of this paper is state-guided capitalism was the main driving force behind Taiwan’s economic miracle.
constituent elements of the developmental state and dampen the momentum for growth. In the following discussion, we shall first broadly dwell on the relationship between the political shocks on the one hand, and the weakening of the CDS structure on the other hand. This general discussion will then be followed by four empirical cases from the 2000-2006 period to shed light on how political changes undermine the developmental state in Taiwan.

The negative impact of democratization on state autonomy is obvious. With the founding elections of 1992 for the Legislative Yuan (parliament), and the presidential election of 1996, Taiwan gradually evolved into an electoral democracy. President Lee Teng-hui of the ruling Kuomintang (KMT) was the architect of the whole process. However, this does not mean that the KMT was able to keep full political control. Liberalization and democratization made it possible for the Opposition DPP (Democratic Progressive Party) to gather electoral strength rapidly, taking advantage of Taiwan's rising nativism, and the popular discontent with the KMT's corruption and its
links with the underworld (the “black and gold” connection). The Legislative Yuan and local governments became the sites for the DPP to lodge criticism and launch attack on the ruling KMT. Lee himself also took advantage of the rising DPP to force his conservative opponents inside the KMT into compliance. The relationship between the KMT and its local factions witnessed sea changes. In exchange for political support from the factions, the KMT had to offer economic and political goodies to a much greater extent than what it did during the martial law period. The Opposition became assertive, sometimes physically and violently so, via-a-via the government. Fist fighting in the parliament between legislators from the ruling and opposition parties became a common scene, and so were clashes between demonstrators and police on the street. The state was no longer immune from social pressure transmitted through the opposition party, and was oftentimes forced to cut deals with powerful local factions for their political support. After 2000, the newly installed DPP government faced an Opposition-dominated parliament. The constraints on the bureaucrats became even greater, as they did not enjoy the support of the Legislative Yuan. It became commonplace that government agencies find their entire budgets frozen by the parliament for not meeting the demands of the legislators. Although there has not been any case of successful vote of no confidence to bring down the government, as the party system, electoral prospects, and campaign cost all forbid such move by the Opposition, most of the policy proposals by the government find great difficulties in getting through the legislative process to become laws (Sheng 2003; Hawang 2003; Wu 2005). There has been a lot of paralysis and indecision, exacerbating the dysfunctioning of the government that had already accompanied democratization in the 1990’s. In short, state autonomy has been seriously undermined with democratization. The government’s policy became more and more a reflection of social interests, instead of being derived from the strategic thinking of the bureaucracy.

One relevant example is the launching of the National Health Insurance (NHI) program that was put in place by the KMT government under electoral competition in 1995, nine months prior to critical parliamentary elections scheduled at the end of the year. Although not fully prepared financially, Prime Minister Lien Chan insisted on its implementation. The NHI rapidly ran into deficit, with a dwindling reserve fund. Once the drawbacks of the system were known to the planners, a second reform package was prepared that proposed prioritized payment scheme and multiple carriers of national insurance. Private sector was to be involved. The purpose was to cut expenditures and improve on efficiency. Although the general direction of the reform was in line with how

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7 For the DPP’s pressure on the KMT government to push ahead the date of implementation of the NHI, see Ku (1997: 238).
many Western countries attempted to restructure their national insurance systems, it was flatly rejected by the Legislative Yuan amidst mounting opposition. The KMT leadership bowed to social pressure in a bidding game with the Opposition DPP. The government could not afford being seen as taking away from the people what it had already promised and delivered. In this typical case one sees how state autonomy fading away in democratizing Taiwan.

Probably the most serious encroachment on the bureaucrats’ privileged position comes from the gradual shift of the legitimacy base of the regime. While in the past the authoritarian KMT had to build its legitimacy on impressive economic performance, thus subjugating all other national goals to development, the mainstream faction in the party led by Lee had an alternative. By playing on his native Taiwanese identity, and the newly installed democratic institutions, Lee was able to appeal to populism and representative legitimacy. Economic development was no longer the sole source of legitimacy of the born-again KMT regime. In order to play this “normal democratic game” well, securing financial support and cultivating patron-client relations became all important. Against the changed political background, the new leadership paid great attention to nurture ties with business conglomerates (the “taijī”) and local factions, and to building a gigantic KMT, Inc., i.e. a huge empire of party enterprises spreading to various sectors of the economy (Fields 1995). The bureaucrats were downgraded in their influence in the government. The interests of the top leadership were becoming more and more in line with the political machine, the business conglomerates, the local factions, and the murky underworld. The developmental consensus between politicians and bureaucrats was broken. The economic bureaucracy was effectively brought under the control of the elected politicians who answered to social pressure under electoral competition.

The way new banks and securities houses came into being offers a vivid example. In the past, the state had a firm control over the financial sector, enjoying virtual monopoly. After Lee came to power, he retired a whole corps of conservative financiers and put in their positions his allies. The background was laid for the passing of the new Banking Law that led to the emergence of 16 private commercial banks in 1992. Many of these new banks were set up by business conglomerates that later on got embroiled in financial scandals. A similar situation happened with the launching of new securities houses. The

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8 For a detailed account of Taiwan health reform, see Wong (2003), Wong (2004). For a general discussion of changed public administration and democratization in Taiwan, see Tang (2004).

9 This situation is a bit different from Korea where the bureaucrats themselves underwent a great transformation. In Taiwan, what changed most was the political environment outside the economic bureaucracy, and the mounting pressure put on it. For a comparison between the two countries, see Weiss (2000).
Securities Transactions Law was modified in 1988, paving the way for the proliferation of securities houses that grew in number by tenfold after the legal change. Many of the legislators at the time had a stake in the new securities houses (Lin 2007). Both the banking and securities reforms were conducted against the will of the conservative Ministry of Finance officials, but highly welcome by the legislators and business conglomerates. After such financial reforms, direct finance grew in importance at the expense of indirect finance. The bureaucrats’ capability to channel capital through state-controlled banking system was seriously curtailed. After 2000, the economic bureaucrats have been further alienated from the political elite who harbor a strong desire to right the wrongdoing of the developmental state under the KMT in the past. The DPP politicians are in general more concerned with environmental protection, and committed to promoting interest of the lower strata that constitute the bulk of the party’s political support. A populist revulsion against economic ties with the Chinese mainland is also prominent in the mind of the new political leaders, hindering a realistic evaluation of policy alternatives in the cross-Strait field. In sum, democratization and transfer of power broke the consensus between the politicians and economic bureaucrats on the primacy of developmentalism.

Democracy is oftentimes characterized by the existence of a civil society, a realm uncontrolled by the state. Constitutionalism consists of laying limitations on the government in protection of citizens’ rights. As Taiwan evolved into a constitutional democracy, it is only natural that the developmental state’s capacity to penetrate into the society is curtailed. The various transmission belts were reformed into genuine grassroots organizations, replaced by spontaneous associations, or simply left to fade into oblivion. State control over goods and capital flows was lessened, thanks to internal and external pressure. Independent mass media, although heavily biased toward either of the two main political camps, took root in Taiwan, evidenced by the dismantling of the “ban on press,” and the proliferation of cable networks. Political surveillance was rejected in public institutions, most notably in universities. Restrictions on traveling and personnel movements were considerably reduced. One prominent consequence of the above development is the state was no longer in a position to control investment activities on the Chinese mainland. Although both the KMT and then the DPP governments were consistently worried about Taiwan’s economic links with the mainland, neither was able to thwart or even slow down the trend. As will be seen in the following discussion, under the weary eyes of the pro-independence DPP government, Taiwan’s export/trade dependence on the Chinese mainland surged. It appeared that political will has little impact on economic flows, and the government simply loses its ability to direct national resources. Here one witnesses the blunting of the state’s penetrative capacity.
One important dimension of the CDS is its success in export expansion. As the income level and labor cost of the fast-growing economies rise, it is necessary for the developmental state to upgrade the industry and to keep export competitive on the world market. But upgrading in which direction? The essence of the developmental state is for the economic bureaucracy to determine the strategic industries and to tilt incentives accordingly. Resource allocation is not to be left in the invisible hands of the market. When the direction of growth is relatively clear from the experience of the preceding developers, designating strategic industries does not pose a serious problem. Most of the dragons and tigers began with textiles and apparels, for example. However, when a successful CDS has reached a certain degree of industrial maturity, the direction of future development becomes murky, and the chances of making mistakes grow much greater. In other words, when catch-up is achieved, the CDS is faced with the same problem as the forerunning economies, and the path ahead is no longer clearly visible (Weiss 2000: 27).

In the case of Taiwan, after reaping hefty benefits from correctly designating electronics as the main strategic industry, the country in the 1990’s began facing the problem of forward designating, i.e. determining the country’s strategic industries when there is no clear guide from preceding countries. The designating has to not only target world market niches, but also take consideration of the advantages and limitations of the country. It turns out that besides deepening of electronics (information and communications, etc.), the state has designated biotechnology as a major strategic industry for Taiwan. Whether the global market conditions, the long gestation period of the industry, the massive capital requirement, the competitive edge of the American and Japanese companies, and a host of other unfavorable conditions would eventually thwart the government’s ambition to pursue industrial growth in this area remains to be seen. Suffice it to say that forward designating is inherently risky, and the development in biotechnology has not borne significant fruit. There is no guarantee that economic bureaucrats who succeeded in the catch-up phase would also succeed in picking up the “right” strategic industries when it comes to forward designating. This is particularly so when the bureaucrats are under pressure from the top political leaders who distrust them and listen to scholars and foreign advisers against the evaluation of planning agencies. Squeezed between the developed economies that have made much headway with high tech industries, and the catching-ups that hold advantage in cheap labor, Taiwan is hard pressed to find the next generation of strategic industries to fuel growth. In view of the ever declining growth rate since democracy set in, one cannot be sure that a right direction has been found, official designation of new strategic industries notwithstanding.
Since the end of the 1980’s, political changes in Taiwan have replaced regime autonomy with interest politics, broke elite consensus on developmentalism, blunted state penetration into society, and forced the economic bureaucrats to engage in risky forward designating under great political pressure. Almost all requirements of a successful CDS have been violated. However, one still hears repeated statements by the government on strategic industry, and on how huge sums of money will be spent to promote economic growth. How this revived state-led development would fare amidst difficult environment remains to be seen. Before we can dwell on that issue we shall first investigate into several typical cases of CDS failure in the post-2000 period, so as to gauge the extent to which policy environment has changed in Taiwan for state-led development.

Taiwan’s CDS undermined: four critical cases

Political changes undermined Taiwan’s developmental state more than any external economic shock. In the following discussion post-2000 development in four key industries are examined to demonstrate this point. They are financial reform, nuclear power dispute, hi-tech investment on mainland China, and forward designation of biotechnology. These four cases are chosen for three reasons. First, they are to demonstrate how the CDS is undermined in regime autonomy, elite consensus, state penetration, and market-conforming industrial policy respectively. Second, the four industries (finance, power, electronics and biotechnology) are the core of Taiwan’s economy, highly indicative of the overall orientation. Third, all the cases are from the most recent past, i.e. after the DPP took over political power from the KMT. As such, they demonstrate the current trend.

A. Financial Reform: the Play of Particular Interests

Taiwan’s financial reform started in the mid 1980’s as part of the drive toward internationalization and liberalization. It moved slowly until democratization set in and social pressure mounted for opening up the financial sector. In 1988 and 1992 respectively, the Securities Transactions Law and the Banking Law were modified and new securities houses and banks were set up in a rush. New channels were opened for Taiwanese firms to raise fund at the expense of the government’s control over credit allocation. However, throughout the 1990’s Taiwan’s Central Bank of China (CBC) kept a
vigilant eye on transnational capital flows and maintained emergency powers of intervention (Weiss 2000: 30). Stringent new conditions were attached to capital opening (such as setting limits to the amount of capital inflows from issuing companies’ bonds overseas and regulating their domestic usage). In this way, reregulation went hand in hand with liberalization. The CBC’s financiers never trusted international monetary and capital markets. As such they were quite different from their Korean and Southeast Asian counterparts who championed financial liberalization in the 1990’s for both ideological and practical reasons (Lu 2004). The cautious attitude of the CBC and the MOF explained to a considerable extent Taiwan’s much better performance during the Asian Financial Crisis. The island economy ranked top among the Asian dragons and tigers when the financial shock ravaged the region.\(^\text{10}\)

The excellent performer soon revealed its weaknesses. Right after the DPP’s electoral victory in March 2000, Taiwan’s domestic investment plummeted, and the stock market went into a tailspin. The situation worsened as the US economy began to slow down considerably toward the end of the year. In 2001 Taiwan registered an unprecedented minus 2.17 percent growth, worse than when the two oil crises struck in the 1970’s. The political cause of this downturn was obvious. As far as financial reform is concerned, there was no rush to liberalize Taiwan’s capital control in the aftermath of the AFC. However, as the island struggled to gain accession into the World Trade Organization, it became clear that it would have to remove most of the remaining restrictions in the financial sector, allow free flow of international capital, and admit foreign financial institutions to move into the domestic market. Great alarm was aroused over the prospect of losing control of the financial sector, and of seeing hitherto well-protected domestic banks and other financial institutions decimated by international hegemons.

In order to prepare Taiwan’s vulnerable financial sector for international competition, two rounds of financial reform were implemented. They were both rearguard actions against the onslaught of international capital, part of adjustment to inevitable opening of domestic market. The logic behind those reforms, however, was quite strategic. It is reasoned that a main defect of Taiwan’s banks was their small size. In order to create financial institutions capable of international competition, the existing banks and lending agencies needed to merge. This had to be done in a rush for the schedule of opening up the financial sector was agreed upon in the accession talks and cannot be delayed. It was under this hectic timetable that President Chen Shui-bian made

\(^{10}\) In 1998, Taiwan’s economy managed to grow at a respectable 4.6 percent. The next best performer was Singapore that stagnated at minus 0.1 percent.
a pledge to consolidate Taiwan's financial market in October 2004 as the main goal of the second-wave financial reform. It was announced that by the end of 2005 at least three financial holding companies should each hold more than 10 percent of market share, that the number of public financial institutions should be reduced from twelve to six, and that the total number of financial holding companies should be halved to seven. Obviously privatization and conglomeration were at the core of this financial reform. There was little respect of market. The plan was made by financial bureaucrats on the advice of prominent consulting firms. It was a top-down approach. All this smacks of good old industrial policy. However, the way it was implemented revealed how much had changed since economic bureaucracy could hold on to its independence from pressure from the politicians and the society.

Serious problems began surfacing as the 2004 plan requested mandatory merges to reach economic size. As privatization was a concurrent goal, the plan boiled down to which of the private financial holding companies can absorb which public banks, and in what terms? Since market was not to be trusted for the job, while officials in public banks followed bureaucratic ordinances more than they raced for corporate profits in merges, the crux of the matter became how to sway top decision-makers to agree on specific merges. Influence peddling, kickbacks, and backdoor deals went amok. The major financial holding companies were on one another's throat for the grab. They mobilized legislators and connections to the high echelon in the presidential office, and even to the first family, to gain the upper hand. As one after another scandal was exposed, the public for the first time had a glimpse of the inner working of the business-government nexus. It appears that the bureaucrats were beholden to the politicians, who were in turn beholden to the top political leaders and private financial interest. In this financial reform, one sees how state autonomy is comprised, replaced by particular interest. As such one cannot justify the reform with economic reason. The CDS requirement of an independent bureaucracy dedicated to public good was lost. Interest politics was in command.

B. Nuclear Power Dispute: Environmental Nativism

Nowhere was the conflict between the newly installed DPP government and Taiwan's economic bureaucracy more pronounced than in the dispute over the controversial fourth nuclear power plant. Right after Chen Shui-bian's inauguration in May 2000, he was faced with a critical decision on whether to scrap the construction of the island's fourth nuclear power plant. The DPP had long held an anti-nuclear position, linking the issue with protection of homeland, a kind of environmental nativism. They
inserted an anti-nuclear clause into the party’s platform, and had several rounds of vehement conflict, sometimes physical, with the ruling KMT. It was widely expected that the project would be terminated once the DPP was elected to power. On the other hand, the business community treated this controversy as a litmus test for the true color of the DPP. It was to reveal whether the new government was anti-business. Squeezed between the two forces, Chen attempted to postpone his decision, but was challenged by the KMT legislators who openly explored the division between the president and his first prime minister, the former defense minister in the former KMT cabinet Tang Fei, who supported the continuation of construction. When Tang was forced out on this nuclear issue, he was replaced by Chang Chun-hsiung, a veteran DPP politician. In October 2000 Chang made an abrupt announcement to scrap the fourth nuclear power plant. It came right after Lien Chan, the KMT chairman, talked with President Chen over a possible compromise solution. The KMT legislators were so furious that they began collecting signatures to impeach the president. The acrimonious relation between the two parties has persisted to this date. Although the KMT ultimately failed to impeach the president, nor did it vote down the government (albeit holding majority in the Legislative Yuan), it formed a “pan-Blue” coalition with James Soong’s People First Party (PFP) and the New Party (NP) that splintered from it as a united Opposition. The pan-Blue camp in the Legislative Yuan effectively stymied the DPP government’s actions. The parliamentary elections of 2001 and 2004 did not change the situation, as the pan-Blue managed to hold a razor-thin majority. One thus witnesses a minority government, one that was imposed on the parliament by President Chen who holds the constitutional power to appoint the prime minister without the consent by the legislators, and yet at the same time boycotted by the parliament. This is a balance of terror, a political stalemate. From the nuclear power conflict on it has been clear to everyone that the two political camps would not work for a compromise solution, but only to exacerbate the situation. The consequences of such sustained confusion is now keenly felt by the people in Taiwan.

The nuclear dispute had a lasting impact on Taiwan’s economy. The response from the stock market to Chang’s October announcement was such that it has never recovered since. The Weighted Index of Taiwan’s stock market stood at 9,500 points in the first quarter of 2000. It fell to 4,500 points prior to the 2001 parliamentary elections. The total market value of the stocks shrank by more than 40 percent. Further hit by an international slowdown, Taiwan’s economy began its tailspin. Growth declined from nearly 8 percent in early 2000 to an unthinkable minus 4 percent at the end of 2001. The

11 Lien proposed to phase out the old nuclear power plants while continue with the construction of the new plant, so as not to disrupt power supply, and increase safety margin of the overall nuclear power system. Lien also agreed on an ultimate non-nuclear solution to the country’s energy needs.
overall growth rate for 2001 was an unprecedented minus 2.17. One did not see minus growth even when the two oil shocks hit Taiwan. At the same time, unemployment shot up to 5.3 percent. Both exports and imports shrunk precipitously by over 20 percent. All those figures were unprecedented in the history of post-World War II Taiwan. This situation was exacerbated by the 911 incident which added international recession to domestic plunge. In order to rescue the economy, the DPP government backtracked on its previous decision to scrap the fourth nuclear power plant and resumed its construction, even though the DPP still maintained its anti-nuclear position. The nuclear project has actually been put in a limbo, waiting to be terminated by the government once it regains political strength to do so.

The preference of the economic bureaucracy over the nuclear issue is crystal clear. Abundant power supply is a sine qua non for economic growth, and nuclear power is considered cleaner and more economic than traditional fossil-burning. It also reduces Taiwan's need for imported energy source. The Ministry of Economic Affairs, the Taiwan Power Company, and the ministerial level Atomic Energy Council (AEC) virtually formed a coalition for advancing nuclear power use. Although the AEC is the country’s nuclear watchdog, in charge of monitoring radiation and regulating radioactive waste management, its mission has effectively bound the agency to nuclear power. The termination of nuclear energy use in Taiwan would amount to the abolition of the AEC itself. In the tug of war between the DPP and the KMT over nuclear power, the economic and energy bureaucrats were firmly on the side of the Opposition. This was but the first of a series of similar, but less publicized conflicts that were almost inevitable between the new ruling party and a bureaucracy built by the KMT in the spirit of state developmentalism. The DPP was used to its role in opposing the KMT’s “growth at the expense of everything else” principle, and found it difficult to shift to a pro-growth stance. It also viewed the KMT-trained bureaucracy with great suspicion. The alienated bureaucracy in its turn treated the new government with distrust. It was in this mutual suspicion and distrust that the erstwhile consensus on developmentalism was undermined.

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12 Officially, the government reinstated the project in February 2001 because the Council of Grand Justices had ruled that the decision to halt construction was flawed for its failure to consult the lawmakers.

13 A recent development seems to point to a new direction as fossil-burning is considered more harmful in its greenhouse effect than nuclear energy, and a looming oil crisis raises the desirability of nuclear power. Both Academia Sinica President Yuan-Tseh Lee and Vice President Annette Lu spoke of the need to finish building Nuclear Four and rethink the DPP’s long term opposition to nuclear energy.

14 The Atomic Energy Council was founded in 1955 to foster peaceful applications of atomic energy, and to coordinate international cooperation on nuclear energy. After the Taiwan Power Company put its nuclear power plants into service, the AEC’s mission has shifted to reactor safety regulation, radiation protection, radwaste administration, environmental monitoring and R&D for technology development.
C. Mainland China Investment: the Limits on State Direction

Mainland China had long been the major outlet of Taiwan's outbound capital. Traditionally, the investment “fever” was most prominent in labor-intensive manufacturing, among small and medium-sized enterprises, and concentrated in coastal China. Hi-tech computer and microelectronics industry was slow to move ashore. The government had been jealously guarding this jewel of Taiwan's economic prowess from following the footsteps of traditional industry by shifting its manufacturing base to the Chinese mainland. Only under tremendous pressure would the government, be it KMT-led or DPP-led, show any willingness to allow hi-tech capital to move across the Taiwan Strait. The reluctance of the two governments in this regard can be found in Lee’s “no haste, go slow” (jieji yongren) policy in September 1996, and in Chen Shui-bian's “active management, effective opening” (jiji guanli, youxiao kaifang) in January 2006.

Since the late 1990's, Taiwan's hi-tech industry has been under great pressure to seek lower manufacturing costs overseas. The constantly rising wage level on Taiwan, the steady improvement of the infrastructure and quality of manpower in mainland China, the emergent local manufacturing capacity in computer and microelectronics there, the rising investment by Taiwan's main international competitors in China, and a host of other factors agitated for Taiwan's hi-tech industry to invest across the Strait. However, the Taiwan government had long nurtured companies in this sector, deemed the flagship industry of the economy. These companies took advantage of tax brakes, science park facilities, soft loans, and numerous other privileges. This in part explains their cautious approach to the mainland initially. And yet momentum was building up for a change. The most hotly debated issue was whether the government should allow Taiwan's major

15 The arguments against over-investing on the Chinese mainland are many-fold. The government emphasizes national security, but detracion from upgrading is at least as serious as the security concern. See Simon (1996), Wu (1997).

16 The “no haste, go slow” policy was announced by President Lee after the 1995-96 missile crisis to restrict investment in mainland China by Taiwanese firms. Hi-tech industry, investment over $50 million, and infrastructure were put on the forbidden list. In August 2001, the Economic Development Advisory Conference sponsored by the DPP government reached a consensus to change Lee's “no haste” policy. The new formula was “active opening, effective management.” Chen initially endorsed the consensus to stress his sincerity in improving cross-Strait economic relations. He soon expressed dissatisfaction with the sequence of the two components, stressing the importance of management. In his 2006 New Year's Day Message, Chen declared “active management, effective opening” as the new governing principle. By reversing the sequence and stating “active management” ahead of “effective opening,” Chen clearly expressed his preference for restricting cross-Strait economic relations. In a following explanatory note, the government states that its role “must be to ‘actively’ take on the responsibility of ‘management,’ in order to ‘effectively’ reduce the risks of ‘opening’” (Mainland Affairs Council 2006). The defensive and reactive note wherein is unmistakable.
semiconductor foundries to build 8-inch wafer fabs in China’s science parks. The failure to preoccupy the mainland market through local investment means loss of tremendous business opportunities, and the emergence of mainland rivals whose growth is fueled by China’s huge and rapidly growing market. This is the story of Taiwan’s TSMC (Taiwan Semiconductor Manufacturing Company), the world’s leading semiconductor foundry, unable to forestall the emergence of its mainland competitor SMIC (Semiconductor Manufacturing International Corporation). On the other hand, the TSMC’s major competitor in Taiwan, the UMC (United Microelectronics Corporation), broke the government regulation by helping set up a mainland foundry Hejian. In February 2005, the DPP government brought legal action against the UMC Chairman Robert Tsao, charging him with breach of trust. The company could face fines of up to $800,000 and its executives could be jailed for up to five years if they were found guilty. The tale of Taiwan’s “two wafer heroes” (jingyuan shuangxiong, TSMC and UMC) paints a dismal picture for the semiconductor industry on the island: either you obey the government’s cautious rules and withhold investment on the mainland, suffering all the economic consequences as a result, like the TSMC, or you break the rules and get punished, like UMC. This is the dilemma facing all the hi-tech companies in Taiwan.

Despite the KMT-DPP consensus on slowing down the mainland fever, particularly on preventing the computer and microelectronics industry from investing in China, there was little that the Taiwan state could do to thwart the trend. Since the beginning of the 1990’s, both Taiwan’s export and total trade dependence on the mainland market have been on the rise. In 1991, the two figures were 9.8 percent and 6.2 percent respectively. They hovered around 17 percent and 11 percent from 1993 to 2000. The most amazing development was since the pro-independence DPP took political power, and the cross-Strait relation became severely tensioned, Taiwan’s export and trade dependence on mainland China have soared up. In 2005, the mainland market accounted for 28.4 percent of Taiwan’s export, and 20.1 percent of the island’s total trade (see figure 2). Mainland China also received a cumulative 53.3 percent of Taiwan’s outbound investment, with the percentage approaching 70 in most recent years. In line with this overall tendency, Taiwan’s computer and microelectronics companies started massive investment in China, particularly in the post-2000 period. Take for example the notebooks of which Taiwan is the world’s largest producer. Taiwan’s companies used to manufacture most of the notebooks domestically. Since 2003, however, more than half of the notebook computers were made in mainland factories. In 2005, 92.8 percent manufacturing was done in China (see figure 3). In 2007, the last assembly line in Taiwan was closed down. Another telling example is the LCD industry, hailed as the most promising among the star industries in Taiwan. In 2000, 97 percent of all LCD products
were made in Taiwan. The manufacturing share of the mainland factories was merely 1 percent. In 2002, the balance was reversed, with the mainland producing 69.2 percent of all the LCD products, while Taiwan taking 22.6 percent. Three years later, only 8.3 of all the LCD products were domestically manufactured. A total of 88.7 percent were made in China (see figure 4). These unmistakable trends show how Taiwan’s hi-tech industry has been shifting its main manufacturing site to the mainland, to the chagrin of the government.  

The surge of investment in the mainland is a clear indication of how little the government could do to alter profit-seeking business decisions. Even the government’s closest allies in hi-tech industry could not resist the temptation to move to China. With all the repeated policy statements against the mainland investment fever, and even with legal actions brought against rule-breaking business tycoons, Taiwan’s hi-tech companies still accelerate their investment activities on the mainland. The state has all but lost control over the investment decisions of Taiwan’s companies in core industries. This is a far cry from the 1960’s through the 1980’s when close cooperation between the government and the business ensured the state’s investment goals always get fulfilled.

17 Among those heavyweights in LCD production that invested in China one finds Chi Mei, a petrochemical and optoelectronics company founded by the legendary business tycoon Hsu Wen-long. Hsu was a good friend of President Lee and later on a political ally of President Chen. He is widely known for his pro-independence political stance. Hsu nevertheless began his investment in China as early as 1996 by setting up a petrochemical factory in Zhejiang. His investment later expanded to Guangdong and Jiangsu.
Figure 2  Taiwan's Rising Export and Trade Dependence on mainland China, 1991 to 2005
Figure 3  Manufacture Share of Notebooks in Taiwan and mainland China, 2002 to 2005

<table>
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<th>Year</th>
<th>Taiwan</th>
<th>Mainland China</th>
<th>Other</th>
</tr>
</thead>
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<td>56.7%</td>
<td>38.3%</td>
<td>5%</td>
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<td>24.7%</td>
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</tr>
<tr>
<td>2004</td>
<td>77.8%</td>
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<td>5.2%</td>
</tr>
<tr>
<td>2005</td>
<td>92.8%</td>
<td>1.7%</td>
<td>5%</td>
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</tbody>
</table>

Taiwan, Mainland China, Other.
D. Biotechnology: Risky Forward Designating

As Taiwan has reached manufacturing maturity in many labor-intensive and capital-intensive industries, it now faces the problem of forward designating, i.e. selecting developmental goals without the benefit of precedents. It will enter a field at a time when the developed countries may have just entered it, taking risk like all the others, but much worse equipped. This is inherently risky. Taiwan did not seriously think of building its biotechnology industry until in the late 1990’s. It was given unprecedented prominence when the DPP government treated it as the flagship industry that would fuel Taiwan’s future economic growth. However, because of the changed international market, the
very nature of biotechnology, and the downgraded status of Taiwan’s developmental state, this forward designating has proven highly problematic. As huge amount of national resources has been channeled into it, one wonders if this revival of state-led development would be a success comparable to the past IT and electronic hardware, or a miserable failure that would seal the fate of Taiwan’s developmentalism.

Biotechnology was first put on the official agenda in 1982, as one of the eight key technologies targeted by the government to develop. Not much happened until in 1995 when the Advisory Committee for Promoting Biotechnology Industry was formed and an action plan was adopted. In the latter half of the 1990’s one saw a proliferation of state-sponsored research institutes in the field. Taking advice from experts on the Science and Technology Advisory Group (STAG), the KMT government made a critical decision to designate biotechnology as a strategic industry and began pumping money into the field. The succeeding DPP government elevated biotechnology to an even higher status, declaring it to be the most important industry to Taiwan’s future economic development growth (Wong 2005: 169). Yuan-Tseh Lee, a Nobel Laureate of 1986 and the President of Academia Sinica (Taiwan’s academy of sciences) from 1994 to 2007, was a fervent advocate of biotechnological research. He was instrumental in the rapid expansion of the Institute of Biomedical Sciences and the creation of the Genomics Research Center, both at Academia Sinica. Lee recruited top scientists from American universities and research institutions to lead the life sciences branch in his academy. By wielding great influence in the government and in the Taiwanese society Lee added to the biotech fever. Life sciences rose to prominence at universities on the island and became top choice for many entering students. This was at a time when Taiwan’s biotech industry was at its infant stage, and a miniscule percentage of venture capital went into the business. To realize the great risk the country has plunged itself into, one needs to look at the nature of biotechnology.

Unlike strategic industries that the state previously designated, biotechnology is an innovation-driven, knowledge-intensive industry that relies heavily on original research. The CDS countries in East Asia have been extremely successful in borrowing technologies and perfecting manufacturing, not in creating technology. This is

18 They include the National Health Research Institute (NHRI, 1996), the Center for Drug Evaluation (CDE, 1998), and the Biomedical Engineering Research Center (BMEC, 1999) at the Industrial Technology Research Institute (ITRI). The Genomics Research Center (GRC) at Academia Sinica was added to this array in 2003.

19 Such as Yuan-Tsong Chen, Chief of Division of Medical Genetics at Duke University Medical Center, who was recruited by Lee to head the prestigious Institute of Biomedical Sciences at Academia Sinica.

20 According to the STAG, only 5 percent of Taiwan’s venture capital went into biotechnology, and most of it targeted mature technology, not at early research that had a long value chain.
particularly true for Taiwan that relies on small and medium-sized enterprises that can ill afford investing in R&D. Furthermore, the gestation period is extremely long in biotechnology. In the biopharmaceutical sector, for example, new drug takes a total of some 12-15 years to develop, spanning from basic research to clinical trials to commercialization (Wong 2005: 172). Only a tiny percentage of new drug compounds make it to the market, and not all of them earn enough to cover the sunk investment. The procedure to get US FDA approval is extremely cumbersome, but without which the government dare not approve the drug for domestic market. In order to thrive in this business, Taiwan needs to significantly upgrade its research ability, provide long-term financial support for new drug development, establish trust in domestic clinical tests and approve drugs accordingly, and secure collaboration with internationally renowned pharmaceutical companies. None of which is assured.

Despite all the obvious problems, the government nevertheless pushed for the expansion of the biotech industry. It charged government agencies with industrial promotion, offered a familiar package of incentives to motivate potential investors (such as tax reduction, grants and loans), established biotech research institutions, coordinated laboratories in Academia Sinica and universities for joint projects, provided funds through the National Science Council, and developed mechanisms to encourage technology transfers. The agencies and units involved are so numerous and diverse that a serious coordination problem has emerged. The research institutes and firms are not effectively linked, nor are the science community and the ministries and agencies (Wong 2005: 179-180). Up to this point, however, all the effort has led to but 1,000 plus small-scaled biotech companies, producing a miniscule percentage of Taiwan’s GDP and world biotech production. Only in areas where biotechnology and microelectronics overlap can one find some prospect of success. Whether the biotech enterprise in Taiwan is a bubble about to burst is on the mind of all those concerned. The highly fragile status of the biotechnology industry demonstrates the difficulty of forward designating. It also shows how a weakened developmental state struggling to revive its legacy.

21 In 2005, the industry (new biotechnology, pharmaceuticals, and medical devices) has 1,156 companies, hiring a workforce of 38,085, exporting a total of US$1.63 billion, and earning revenue at US$6.65 billion.

22 These are the areas where Taiwan can rely on its solid background in microelectronics. The Biomedical Engineering Research Center at the Industrial Technology Research Institute specifically targets these areas.

23 For a more optimistic evaluation, see Wong (2005). According to Yuan-Tsong Chen (Chen 2007), Director of the Institute of Biomedical Sciences at Academia Sinica, Taiwan still has a ten-year window to develop its biotechnology. However the industry is currently under-funded and overregulated. For a rosy scenario painted by government official, see Chen (2005).
Conclusion

We start with a discussion of the capitalist development state model and Taiwan, asserting the latter as a core example of the CDS. We then look into the four constituent elements of the model: state autonomy from society, elite consensus on developmentalism, state penetrative capacity, and world market-conforming industrial policy. We browse over Taiwan’s performance in these four areas from the 1960’s through the 1980’s, making sure that the country did satisfy all the requirements. The impacts from the Asian Financial Crisis (AFC) and the two political shocks that it sandwiched are assessed, again in the four areas that matter most to the sustainability of Taiwan’s CDS structure. We find interest politics replacing regime autonomy, electoral competition leading politicians away from developmentalism, economic dynamism blunting state penetration, and bureaucrats making risky forward designating under great pressure. Four key industries are examined to demonstrate the above points: financial reform that witnesses inroads of particular interests, nuclear power that pits environmental nativism against developmental bureaucracy, hi-tech investment on mainland China that defies the state’s will, and risky forward designating of biotechnology as the country’s flagship industry. We find the country’s CDS exists more in the diehard bureaucratic habits, than in the effective functioning of the constituent elements of the model. The intention of the DPP government to revive the CDS model is clear, as in the designation of biotechnology as a leading strategic industry, but it runs against an unfavorable environment, one that is not easy to change even with a change of guard in 2008.

If democracy tends to undermine state developmentalism, which in turn dampens growth, what then does that mean to democracy? For people in CDS countries high growth and incessant improvement of living standards are more or less taken for granted. Dampened economic performance may fuel popular dissatisfaction with the incumbent party, and cause change of government. In the case of Taiwan, democratization impacted negatively on its CDS structure, but not to the extent of dismantling it, for there was undisrupted KMT rule until 2000. The resilience of the old system was put to the most severe test since then, with regime autonomy, elite consensus, state penetration, and industrial policy all under tremendous pressure. It is interesting to note that given the undermined CDS structure, and worst ever economic performance, the DPP government is attempting to defeat the logic mentioned above, i.e. to prevent being swept off power, by substituting nativism for economic performance, and by reviving state developmentalism in the hope of regaining growth. It is a difficult task indeed. In the long term, the challenge to any government of Taiwan would be to combine those elements from their old developmental model that are conducive to growth and democratic governance. Neither democracy with dampened growth nor authoritarian
developmentalism will be considered as a success by a people so used to high economic performance and so committed to their newly acquired democracy.
References


